

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				2 *****
				3 *
				4 * Zvector E6 instruction tests for VRI-f encoded:
				5 *
				6 * E671 VAP - VECTOR ADD DECIMAL
				7 * E673 VSP - VECTOR SUBTRACT DECIMAL
				8 * E678 VMP - VECTOR MULTIPLY DECIMAL
				9 * E679 VSDP - VECTOR MULTIPLY AND SHIFT DECIMAL
				10 * E67A VDP - VECTOR DIVIDE DECIMAL
				11 * E67B VRP - VECTOR REMAINDER DECIMAL
				12 * E67E VSDP - VECTOR SHIFT AND DIVIDE DECIMAL
				13 *
				14 * James Wekel June 2024
				15 *****
				16
				17 *****
				18 *
				19 * basic instruction tests
				20 *
				21 *****
				22 * This program tests proper functioning of the z/arch E6 VRI-f vector
				23 * packed decimal arithmetic instructions. Exceptions are not tested.
				24 *
				25 * PLEASE NOTE that the tests are very SIMPLE TESTS designed to catch
				26 * obvious coding errors. None of the tests are thorough. They are
				27 * NOT designed to test all aspects of any of the instructions.
				28 *
				29 *****
				30 *
				31 * *Testcase VECTOR E6 VRI-f packed arithmetic instructions
				32 * *
				33 * * Zvector E6 tests for VRI-f encoded packed decimal
				34 * * arithmetic instructions:
				35 * *
				36 * * E671 VAP - VECTOR ADD DECIMAL
				37 * * E673 VSP - VECTOR SUBTRACT DECIMAL
				38 * * E678 VMP - VECTOR MULTIPLY DECIMAL
				39 * * E679 VMSP - VECTOR MULTIPLY AND SHIFT DECIMAL
				40 * * E67A VDP - VECTOR DIVIDE DECIMAL
				41 * * E67B VRP - VECTOR REMAINDER DECIMAL
				42 * * E67E VSDP - VECTOR SHIFT AND DIVIDE DECIMAL
				43 * *
				44 * * # -----
				45 * * # This tests only the basic function of the instruction.
				46 * * # Exceptions are NOT tested.
				47 * * # -----
				48 * *
				49 * main size 2
				50 * numcpu 1
				51 * sysclear
				52 * archlvl z/Arch
				53 * *
				54 * loadcore "\$(testpath)/zvector-e6-05-packarith.core" 0x0
				55 * *
				56 * diag8cmd enable # (needed for messages to Hercules console)
				57 * runtest 2

```

58 *   diag8cmd      disable    # (reset back to default)
59 *
60 *   *Done
61 *   ****

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				63 *****
				64 * FCHECK Macro - Is a Facility Bit set?
				65 *
				66 * If the facility bit is NOT set, an message is issued and
				67 * the test is skipped.
				68 *
				69 * Fcheck uses R0, R1 and R2
				70 *
				71 * eg. FCHECK 134, 'vector-packed-decimal'
				72 *****
				73 MACRO
				74 FCHECK &BITNO, &NOTSETMSG
				75 . * &BITNO : facility bit number to check
				76 . * &NOTSETMSG : 'facility name'
				77 LCLA &FBBYTE Facility bit in Byte
				78 LCLA &FBBIT Facility bit within Byte
				79
				80 LCLA &L(8)
				81 &L(1) SetA 128, 64, 32, 16, 8, 4, 2, 1 bit positions within byte
				82
				83 &FBBYTE SETA &BITNO/8
				84 &FBBIT SETA &L((&BITNO-(&FBBYTE*8))+1)
				85 . * MNOTE 0, 'checking Bit=&BITNO: FBBYTE=&FBBYTE, FBBIT=&FBBIT'
				86
				87 B X&SYSNDX
				88 * Fcheck data area
				89 * skip messgae
				90 SKT&SYSNDX DC C' Skipping tests: '
				91 DC C&NOTSETMSG
				92 DC C' facility (bit &BITNO) is not installed.'
				93 SKL&SYSNDX EQU *-SKT&SYSNDX
				94 * facility bits
				95 DS FD gap
				96 FB&SYSNDX DS 4FD
				97 DS FD gap
				98 *
				99 X&SYSNDX EQU *
				100 LA R0, ((X&SYSNDX- FB&SYSNDX)/8)-1
				101 STFLE FB&SYSNDX get facility bits
				102
				103 XGR R0, R0
				104 IC R0, FB&SYSNDX+&FBBYTE get fbit byte
				105 N R0, =F' &FBBIT' is bit set?
				106 BNZ XC&SYSNDX
				107 *
				108 * facility bit not set, issue message and exit
				109 *
				110 LA R0, SKL&SYSNDX message length
				111 LA R1, SKT&SYSNDX message address
				112 BAL R2, MSG
				113
				114 B EOJ
				115 XC&SYSNDX EQU *
				116 MEND

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				138 *****
				139 * The actual "ZVE6TST" program itself...
				140 *****
				141 *
				142 * Architecture Mode: z/Arch
				143 * Register Usage:
				144 *
				145 * R0 (work)
				146 * R1-4 (work)
				147 * R5 Testing control table - current test base
				148 * R6- R7 (work)
				149 * R8 First base register
				150 * R9 Second base register
				151 * R10 Third base register
				152 * R11 E6TEST call return
				153 * R12 E6TESTS register
				154 * R13 (work)
				155 * R14 Subroutine call
				156 * R15 Secondary Subroutine call or work
				157 *
				158 *****
00000200		00000200		160 USING BEGIN, R8 FIRST Base Register
00000200		00001200		161 USING BEGIN+4096, R9 SECOND Base Register
00000200		00002200		162 USING BEGIN+8192, R10 THIRD Base Register
				163
00000200	0580			164 BEGIN BALR R8, 0 Initalize FIRST base register
00000202	0680			165 BCTR R8, 0 Initalize FIRST base register
00000204	0680			166 BCTR R8, 0 Initalize FIRST base register
00000206	4190 8800		00000800	168 LA R9, 2048(, R8) Initalize SECOND base register
0000020A	4190 9800		00000800	169 LA R9, 2048(, R9) Initalize SECOND base register
0000020E	41A0 9800		00000800	171 LA R10, 2048(, R9) Initalize THIRD base register
00000212	41A0 A800		00000800	172 LA R10, 2048(, R10) Initalize THIRD base register
				173
00000216	B600 835C		0000055C	174 STCTL R0, R0, CTLR0 Store CRO to enable AFP
0000021A	9604 835D		0000055D	175 OI CTLR0+1, X' 04' Turn on AFP bit
0000021E	9602 835D		0000055D	176 OI CTLR0+1, X' 02' Turn on Vector bit
00000222	B700 835C		0000055C	177 LCTL R0, R0, CTLR0 Reload updated CRO
				178
				179 *****
				180 * Is Vector packed-decimal facility installed (bit 134)
				181 *****
				182
00000226	47F0 80B0		000002B0	183 FCHECK 134, ' vector-packed- decimal '
				184+ B X0001
				185+ * Fcheck data area
				186+ * skip messgae
0000022A	40404040 40404040			187+SKT0001 DC C' Skipping tests: '
00000244	A58583A3 96996097			188+ DC C' vector-packed-decimal '
00000259	40868183 899389A3			189+ DC C' facility (bit 134) is not installed. '
		00000054 00000001		190+SKL0001 EQU *- SKT0001
				191+ * facility bits
00000280	00000000 00000000			192+ DS FD gap
00000288	00000000 00000000			193+FB0001 DS 4FD

[illegible]

LOC	OBJECT CODE			ADDR1	ADDR2	STMT	
						248	*****
						249	* cc was not as expected
						250	*****
00000328	E310	0001	0082	00000328	00000001	251	CCMSG EQU *
0000032E	E310	5008	0076		00000001	252	XG R1, R1
00000334	5410	836C			00000008	253	LB R1, M5 M5 has CS bit
00000338	4780	810C			0000056C	254	N R1, =F' 1' get CS (CC set) bit
					0000030C	255	BZ TESTREST ignore if not set
						256	*
						257	* extract CC extracted PSW
						258	*
0000033C	5810	8EE8			000010E8	259	L R1, CCPSW
00000340	8810	000C			0000000C	260	SRL R1, 12
00000344	5410	8370			00000570	261	N R1, =XL4' 3'
00000348	4210	8EF0			000010F0	262	STC R1, CCFOUND save cc
						263	*
						264	* FILL IN MESSAGE
						265	*
0000034C	4820	5004			00000004	266	LH R2, TNUM get test number and convert
00000350	4E20	8ED5			000010D5	267	CVD R2, DECNUM
00000354	D211	8EBF	8EA9	000010BF	000010A9	268	MVC PRT3, EDIT
0000035A	DE11	8EBF	8ED5	000010BF	000010D5	269	ED PRT3, DECNUM
00000360	D202	8E64	8ECC	00001064	000010CC	270	MVC CCPRTNUM(3), PRT3+13 fill in message with test #
						271	
00000366	D207	8E81	5020	00001081	00000020	272	MVC CCPRTNAME, OPNAME fill in message with instruction
						273	
0000036C	B982	0022				274	XGR R2, R2 get CC as U8
00000370	4320	5009			00000009	275	IC R2, CC
00000374	4E20	8ED5			000010D5	276	CVD R2, DECNUM and convert
00000378	D211	8EBF	8EA9	000010BF	000010A9	277	MVC PRT3, EDIT
0000037E	DE11	8EBF	8ED5	000010BF	000010D5	278	ED PRT3, DECNUM
00000384	D200	8E97	8ECE	00001097	000010CE	279	MVC CCPRTEXP(1), PRT3+15 fill in message with CC field
						280	
0000038A	B982	0022				281	XGR R2, R2 get CCFOUND as U8
0000038E	4320	8EF0			000010F0	282	IC R2, CCFOUND
00000392	4E20	8ED5			000010D5	283	CVD R2, DECNUM and convert
00000396	D211	8EBF	8EA9	000010BF	000010A9	284	MVC PRT3, EDIT
0000039C	DE11	8EBF	8ED5	000010BF	000010D5	285	ED PRT3, DECNUM
000003A2	D200	8EA7	8ECE	000010A7	000010CE	286	MVC CCPRTGOT(1), PRT3+15 fill in message with ccfound
						287	
000003A8	4100	0055			00000055	288	LA R0, CCPRTLNG message length
000003AC	4110	8E54			00001054	289	LA R1, CCPRTLNE messagfe address
000003B0	45F0	823E			0000043E	290	BAL R15, RPTERROR
						291	
000003B4	47F0	8220			00000420	292	B FAILCONT

LOC	OBJECT CODE			ADDR1	ADDR2	STMT	
						294	*****
						295	* result not as expected:
						296	* issue message with test number, instruction under test
						297	* and instruction m3
						298	*****
				000003B8	00000001	299	FAILMSG EQU *
000003B8	4820	5004			00000004	300	LH R2, TNUM get test number and convert
000003BC	4E20	8ED5			000010D5	301	CVD R2, DECNUM
000003C0	D211	8EBF 8EA9		000010BF	000010A9	302	MVC PRT3, EDIT
000003C6	DE11	8EBF 8ED5		000010BF	000010D5	303	ED PRT3, DECNUM
000003CC	D202	8E18 8ECC		00001018	000010CC	304	MVC PRTNUM(3), PRT3+13 fill in message with test #
						305	
000003D2	D207	8E33 5020		00001033	00000020	306	MVC PRTNAME, OPNAME fill in message with instruction
						307	
000003D8	B982	0022				308	XGR R2, R2 get i4 as U8
000003DC	4320	5007			00000007	309	IC R2, I4
000003E0	4E20	8ED5			000010D5	310	CVD R2, DECNUM and convert
000003E4	D211	8EBF 8EA9		000010BF	000010A9	311	MVC PRT3, EDIT
000003EA	DE11	8EBF 8ED5		000010BF	000010D5	312	ED PRT3, DECNUM
000003F0	D202	8E44 8ECC		00001044	000010CC	313	MVC PRTI4(3), PRT3+13 fill in message with i4 field
						314	
000003F6	B982	0022				315	XGR R2, R2 get m5 as U8
000003FA	4320	5008			00000008	316	IC R2, M5 and convert
000003FE	4E20	8ED5			000010D5	317	CVD R2, DECNUM
00000402	D211	8EBF 8EA9		000010BF	000010A9	318	MVC PRT3, EDIT
00000408	DE11	8EBF 8ED5		000010BF	000010D5	319	ED PRT3, DECNUM
0000040E	D201	8E51 8ECD		00001051	000010CD	320	MVC PRTM5(2), PRT3+14 fill in message with m5 field
						321	
00000414	4100	004C			0000004C	322	LA R0, PRTLNG message length
00000418	4110	8E08			00001008	323	LA R1, PRTLNE messagfe address
0000041C	45F0	823E			0000043E	324	BAL R15, RPTERROR
						326	*****
						327	* continue after a failed test
						328	*****
				00000420	00000001	329	FAILCONT EQU *
00000420	5800	836C			0000056C	330	L R0, =F' 1' set GLOBAL failed test indicator
00000424	5000	8E00			00001000	331	ST R0, FAILED
						332	
00000428	41C0	C004			00000004	333	LA R12, 4(0, R12) next test address
0000042C	47F0	80DC			000002DC	334	B NEXTE6
						336	*****
						337	* end of testing; set ending psw
						338	*****
				00000430	00000001	339	ENDTEST EQU *
00000430	5810	8E00			00001000	340	L R1, FAILED did a test fail?
00000434	1211					341	LTR R1, R1
00000436	4780	8340			00000540	342	BZ EOJ No, exit
0000043A	47F0	8358			00000558	343	B FAILTEST Yes, exit with BAD PSW
						344	

[illegible]

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				409 *****
				410 * Normal completion or Abnormal termination PSWs
				411 *****
00000530	00020001 80000000			413 E0JPSW DC OD' 0' , X' 0002000180000000' , AD(0)
00000540	B2B2 8330		00000530	415 E0J LPSWE E0JPSW Normal completion
00000548	00020001 80000000			417 FAILPSW DC OD' 0' , X' 0002000180000000' , AD(X' BAD')
00000558	B2B2 8348		00000548	419 FAILTEST LPSWE FAILPSW Abnormal termination
				421 *****
				422 * Working Storage
				423 *****
0000055C	00000000			425 CTLR0 DS F CRO
00000560	00000000			426 DS F
00000564				428 LTORG , Literals pool
00000564	00000002			429 =F' 2'
00000568	00004D0C			430 =A(E6TESTS)
0000056C	00000001			431 =F' 1'
00000570	00000003			432 =XL4' 3'
00000574	0000			433 =H' 0'
00000576	005F			434 =AL2(L' MSGMSG)
				435
				436 * some constants
				437
	00000400	00000001		438 K EQU 1024 One KB
	00001000	00000001		439 PAGE EQU (4*K) Size of one page
	00010000	00000001		440 K64 EQU (64*K) 64 KB
	00100000	00000001		441 MB EQU (K*K) 1 MB
				442
	AABBCCDD	00000001		443 REG2PATT EQU X' AABBCCDD' Polluted Register pattern
	000000DD	00000001		444 REG2LOW EQU X' DD' (last byte above)

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				446 *=====
				447 *
				448 * NOTE: start data on an address that is easy to display
				449 * within Hercules
				450 *
				451 *=====
				452
00000578		00000578	00001000	453 ORG ZVE6TST+X' 1000'
00001000	00000000			454 FAILED DC F' 0' some test failed?
00001004	00000000			455 TESTING DC F' 0' current test number
				457 *****
				458 * TEST failed : result messgae
				459 *****
				460 *
				461 * failed message and associated editting
				462 *
00001008	40404040	40404040		463 PRTLIN DC C' Test # '
00001018	A7A7A7			464 PRTNUM DC C' xxx'
0000101B	40868189	93858440		465 DC C' failed for instruction '
00001033	A7A7A7A7	A7A7A7A7		466 PRTNAME DC CL8' xxxxxxxx'
0000103B	40A689A3	884089F4		467 DC C' with i4=
00001044	A7A7A7			468 PRTI4 DC C' xxx'
00001047	6B			469 DC C' ,'
00001048	40A689A3	884094F5		470 DC C' with m5=
00001051	A7A7			471 PRTM5 DC C' xx'
00001053	4B			472 DC C' .'
		0000004C	00000001	473 PRTLNG EQU *- PRTLIN
				475 *****
				476 * TEST failed : CC message
				477 *****
				478 *
				479 * failed message and associated editting
				480 *
00001054	40404040	40404040		481 CCPRTLIN DC C' Test # '
00001064	A7A7A7			482 CCPRTNUM DC C' xxx'
00001067	40A69996	95874083		483 DC c' wrong cc for instruction '
00001081	A7A7A7A7	A7A7A7A7		484 CCPRTNAME DC CL8' xxxxxxxx'
00001089	4085A797	8583A385		485 DC C' expected: cc=
00001097	A7			486 CCPRTEXP DC C' x'
00001098	6B			487 DC C' ,'
00001099	40998583	8589A585		488 DC C' received: cc=
000010A7	A7			489 CCPRTGOT DC C' x'
000010A8	4B			490 DC C' .'
		00000055	00000001	491 CCPRTLNG EQU *- CCPRTLIN

[illegible]

[illegible]

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				549 *****
				550 * Macros to help build test tables
				551 * -----
				552 * VRI_F Macro to help build test tables
				553 *****
				554 MACRO
				555 VRI_F &INST, &V2, &V3, &I4, &M5, &CC
				556 . * &INST - VRI-f instruction under test
				557 . * &v2 - binary DW value for V2
				558 . * &v3 - binary DW value for V3
				559 . * &i4 - i4 field
				560 . * &m5 - m5 field
				561 . * &CC - expected CC
				562 . *
				563 LCLA &XCC(4) &CC has mask values for FAILED condition codes
				564 &XCC(1) SETA 7 CC != 0
				565 &XCC(2) SETA 11 CC != 1
				566 &XCC(3) SETA 13 CC != 2
				567 &XCC(4) SETA 14 CC != 3
				568
				569 GBLA &TNUM
				570 &TNUM SETA &TNUM+1
				571
				572 DS 0FD
				573 USING *, R5 base for test data and test routine
				574
				575 T&TNUM DC A(X&TNUM) address of test routine
				576 DC H' &TNUM test number
				577 DC X' 00'
				578 DC HL1' &I4' i4
				579 DC HL1' &M5' m5
				580 DC HL1' &CC' cc
				581 DC HL1' &XCC(&CC+1)' cc failed mask
				582 V2_&TNUM DC FD' &V2' binary value for v2 packed decimal
				583 V3_&TNUM DC FD' &V3' binary value for v3 packed decimal
				584 DC CL8' &INST' instruction name
				585 DC A(16) result length
				586 REA&TNUM DC A(RE&TNUM) result address
				587 . *
				588 * INSTRUCTION UNDER TEST ROUTINE
				589 X&TNUM DS 0F
				590 LG R2, V2_&TNUM convert v2
				591 CVDG R2, V2PACKED
				592 VL V2, V2PACKED
				593
				594 LG R2, V3_&TNUM convert v3
				595 CVDG R2, V3PACKED
				596 VL V3, V3PACKED
				597
				598 &INST V1, V2, V3, &I4, &M5 test instruction
				599
				600 VST V1, V10OUTPUT save result
				601 EPSW R2, R0 exptract psw
				602 ST R2, CCPSW to save CC
				603 BR R11 return
				604

610	*****		
611	*	PTTABLE Macro to generate table of pointers to individual tests	
612	*****		
613			
614		MACRO	
615		PTTABLE	
616		GBLA	&TNUM
617		LCLA	&CUR
618	&CUR	SETA	1
619	. *		
620	TTABLE	DS	OF
621	. LOOP	ANOP	
622	. *		
623		DC	A(T&CUR) address of test
624	. *		
625	&CUR	SETA	&CUR+1
626		AIF	(&CUR LE &TNUM) . LOOP
627	*		
628		DC	A(0) END OF TABLE
629		DC	A(0)
630	. *		
631		MEND	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				633 *****	
				634 * E6 VRI_F tests	
				635 *****	
00001188		00000000	00004EF7	636 ZVE6TST CSECT ,	
				637 DS OF	
				639 PRINT DATA	
				640 *	
				641 * E671 VAP - VECTOR ADD DECIMAL	
				642 * E673 VSP - VECTOR SUBTRACT DECIMAL	
				643 * E678 VMP - VECTOR MULTIPLY DECIMAL	
				644 * E679 VMSP - VECTOR MULTIPLY AND SHIFT DECIMAL	
				645 * E67A VDP - VECTOR DIVIDE DECIMAL	
				646 * E67B VRP - VECTOR REMAINDER DECIMAL	
				647 * E67E VSDP - VECTOR SHIFT AND DIVIDE DECIMAL	
				648	
				649 * VRI_F instr, v2, v3, i4, m5, cc	
				650 * followed by 16 byte expected result	
				651	
				652 * -----	
				653 * VAP - VECTOR ADD DECIMAL	
				654 * -----	
				655 * VAP simple + CC checks	
				656 VRI_F VAP, +10, +12, 7, 1, 2	
00001188				657+ DS OFD	
00001188		00001188		658+ USING *, R5	base for test data and test routine
00001188	000011B8			659+T1 DC A(X1)	address of test routine
0000118C	0001			660+ DC H' 1'	test number
0000118E	00			661+ DC X' 00'	
0000118F	07			662+ DC HL1' 7'	i4
00001190	01			663+ DC HL1' 1'	m5
00001191	02			664+ DC HL1' 2'	cc
00001192	0D			665+ DC HL1' 13'	cc failed mask
00001198	00000000	0000000A		666+V2_1 DC FD' +10'	binary value for v2 packed decimal
000011A0	00000000	0000000C		667+V3_1 DC FD' +12'	binary value for v3 packed decimal
000011A8	E5C1D740	40404040		668+ DC CL8' VAP'	instruction name
000011B0	00000010			669+ DC A(16)	result length
000011B4	000011F4			670+REA1 DC A(RE1)	result address
				671+*	INSTRUCTION UNDER TEST ROUTINE
000011B8				672+X1 DS OF	
000011B8	E320 5010 0004		00001198	673+ LG R2, V2_1	convert v2
000011BE	E320 8F57 002E		00001157	674+ CVDG R2, V2PACKED	
000011C4	E720 8F57 0006		00001157	675+ VL V2, V2PACKED	
000011CA	E320 5018 0004		000011A0	676+ LG R2, V3_1	convert v3
000011D0	E320 8F67 002E		00001167	677+ CVDG R2, V3PACKED	
000011D6	E730 8F67 0006		00001167	678+ VL V3, V3PACKED	
000011DC	E612 3010 7071			679+ VAP V1, V2, V3, 7, 1	test instruction
000011E2	E710 8F08 000E		00001108	680+ VST V1, V10UTPUT	save result
000011E8	B98D 0020			681+ EPSW R2, R0	extract psw
000011EC	5020 8EE8		000010E8	682+ ST R2, CCPSW	to save CC
000011F0	07FB			683+ BR R11	return
000011F4				684+RE1 DC OF	
000011F4				685+ DROP R5	
000011F4	00000000	00000000		686 DC XL16' 000000000000000000000000000022C'	
000011FC	00000000	0000022C			

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
				687		
				688	VRI_F VAP, - 10, +12, 7, 1, 2	
00001208				689+	DS OFD	
00001208		00001208		690+	USING *, R5	base for test data and test routine
00001208	00001238			691+T2	DC A(X2)	address of test routine
0000120C	0002			692+	DC H' 2'	test number
0000120E	00			693+	DC X' 00'	
0000120F	07			694+	DC HL1' 7'	i4
00001210	01			695+	DC HL1' 1'	m5
00001211	02			696+	DC HL1' 2'	cc
00001212	0D			697+	DC HL1' 13'	cc failed mask
00001218	FFFFFFFF FFFFFFFF6			698+V2_2	DC FD' - 10'	binary value for v2 packed decimal
00001220	00000000 0000000C			699+V3_2	DC FD' +12'	binary value for v3 packed decimal
00001228	E5C1D740 40404040			700+	DC CL8' VAP'	instruction name
00001230	00000010			701+	DC A(16)	result length
00001234	00001274			702+REA2	DC A(RE2)	result address
				703+*		INSTRUCTION UNDER TEST ROUTINE
00001238				704+X2	DS OF	
00001238	E320 5010 0004		00001218	705+	LG R2, V2_2	convert v2
0000123E	E320 8F57 002E		00001157	706+	CVDG R2, V2PACKED	
00001244	E720 8F57 0006		00001157	707+	VL V2, V2PACKED	
0000124A	E320 5018 0004		00001220	708+	LG R2, V3_2	convert v3
00001250	E320 8F67 002E		00001167	709+	CVDG R2, V3PACKED	
00001256	E730 8F67 0006		00001167	710+	VL V3, V3PACKED	
0000125C	E612 3010 7071			711+	VAP V1, V2, V3, 7, 1	test instruction
00001262	E710 8F08 000E		00001108	712+	VST V1, V10UTPUT	save result
00001268	B98D 0020			713+	EPSW R2, R0	exptract psw
0000126C	5020 8EE8		000010E8	714+	ST R2, CCPSW	to save CC
00001270	07FB			715+	BR R11	return
00001274				716+RE2	DC OF	
00001274				717+	DROP R5	
00001274	00000000 00000000			718	DC XL16' 0000000000000000000000000000000002C'	
0000127C	00000000 0000002C					
				719		
				720	VRI_F VAP, +10, - 12, 7, 1, 1	
00001288				721+	DS OFD	
00001288		00001288		722+	USING *, R5	base for test data and test routine
00001288	000012B8			723+T3	DC A(X3)	address of test routine
0000128C	0003			724+	DC H' 3'	test number
0000128E	00			725+	DC X' 00'	
0000128F	07			726+	DC HL1' 7'	i4
00001290	01			727+	DC HL1' 1'	m5
00001291	01			728+	DC HL1' 1'	cc
00001292	0B			729+	DC HL1' 11'	cc failed mask
00001298	00000000 0000000A			730+V2_3	DC FD' +10'	binary value for v2 packed decimal
000012A0	FFFFFFFF FFFFFFFF4			731+V3_3	DC FD' - 12'	binary value for v3 packed decimal
000012A8	E5C1D740 40404040			732+	DC CL8' VAP'	instruction name
000012B0	00000010			733+	DC A(16)	result length
000012B4	000012F4			734+REA3	DC A(RE3)	result address
				735+*		INSTRUCTION UNDER TEST ROUTINE
000012B8				736+X3	DS OF	
000012B8	E320 5010 0004		00001298	737+	LG R2, V2_3	convert v2
000012BE	E320 8F57 002E		00001157	738+	CVDG R2, V2PACKED	
000012C4	E720 8F57 0006		00001157	739+	VL V2, V2PACKED	
000012CA	E320 5018 0004		000012A0	740+	LG R2, V3_3	convert v3
000012D0	E320 8F67 002E		00001167	741+	CVDG R2, V3PACKED	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000012D6	E730 8F67 0006		00001167	742+	VL	V3, V3PACKED	
000012DC	E612 3010 7071			743+	VAP	V1, V2, V3, 7, 1	test instruction
000012E2	E710 8F08 000E		00001108	744+	VST	V1, V10UTPUT	save result
000012E8	B98D 0020			745+	EPSW	R2, R0	exptract psw
000012EC	5020 8EE8		000010E8	746+	ST	R2, CCPSW	to save CC
000012F0	07FB			747+	BR	R11	return
000012F4				748+RE3	DC	0F	
000012F4				749+	DROP	R5	
000012F4	00000000 00000000			750	DC	XL16' 000000000000000000000000000000002D'	
000012FC	00000000 0000002D						
				751			
				752	VRI_F	VAP, - 10, - 12, 7, 1, 1	
00001308				753+	DS	0FD	
00001308		00001308		754+	USING	*, R5	base for test data and test routine
00001308	00001338			755+T4	DC	A(X4)	address of test routine
0000130C	0004			756+	DC	H' 4'	test number
0000130E	00			757+	DC	X' 00'	
0000130F	07			758+	DC	HL1' 7'	i4
00001310	01			759+	DC	HL1' 1'	m5
00001311	01			760+	DC	HL1' 1'	cc
00001312	0B			761+	DC	HL1' 11'	cc failed mask
00001318	FFFFFFFF FFFFFFFF6			762+V2_4	DC	FD' - 10'	binary value for v2 packed decimal
00001320	FFFFFFFF FFFFFFFF4			763+V3_4	DC	FD' - 12'	binary value for v3 packed decimal
00001328	E5C1D740 40404040			764+	DC	CL8' VAP'	instruction name
00001330	00000010			765+	DC	A(16)	result length
00001334	00001374			766+REA4	DC	A(RE4)	result address
				767+*			INSTRUCTION UNDER TEST ROUTINE
00001338				768+X4	DS	0F	
00001338	E320 5010 0004		00001318	769+	LG	R2, V2_4	convert v2
0000133E	E320 8F57 002E		00001157	770+	CVDG	R2, V2PACKED	
00001344	E720 8F57 0006		00001157	771+	VL	V2, V2PACKED	
0000134A	E320 5018 0004		00001320	772+	LG	R2, V3_4	convert v3
00001350	E320 8F67 002E		00001167	773+	CVDG	R2, V3PACKED	
00001356	E730 8F67 0006		00001167	774+	VL	V3, V3PACKED	
0000135C	E612 3010 7071			775+	VAP	V1, V2, V3, 7, 1	test instruction
00001362	E710 8F08 000E		00001108	776+	VST	V1, V10UTPUT	save result
00001368	B98D 0020			777+	EPSW	R2, R0	exptract psw
0000136C	5020 8EE8		000010E8	778+	ST	R2, CCPSW	to save CC
00001370	07FB			779+	BR	R11	return
00001374				780+RE4	DC	0F	
00001374				781+	DROP	R5	
00001374	00000000 00000000			782	DC	XL16' 000000000000000000000000000000002D'	
0000137C	00000000 0000022D						
				783			
				784	VRI_F	VAP, - 10, +10, 7, 1, 0	
00001388				785+	DS	0FD	
00001388		00001388		786+	USING	*, R5	base for test data and test routine
00001388	000013B8			787+T5	DC	A(X5)	address of test routine
0000138C	0005			788+	DC	H' 5'	test number
0000138E	00			789+	DC	X' 00'	
0000138F	07			790+	DC	HL1' 7'	i4
00001390	01			791+	DC	HL1' 1'	m5
00001391	00			792+	DC	HL1' 0'	cc
00001392	07			793+	DC	HL1' 7'	cc failed mask
00001398	FFFFFFFF FFFFFFFF6			794+V2_5	DC	FD' - 10'	binary value for v2 packed decimal
000013A0	00000000 0000000A			795+V3_5	DC	FD' +10'	binary value for v3 packed decimal

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000013A8	E5C1D740 40404040			796+	DC	CL8' VAP'	instruction name
000013B0	00000010			797+	DC	A(16)	result length
000013B4	000013F4			798+REA5	DC	A(RE5)	result address
				799+*			INSTRUCTION UNDER TEST ROUTINE
000013B8				800+X5	DS	0F	
000013B8	E320 5010 0004		00001398	801+	LG	R2, V2_5	convert v2
000013BE	E320 8F57 002E		00001157	802+	CVDG	R2, V2PACKED	
000013C4	E720 8F57 0006		00001157	803+	VL	V2, V2PACKED	
000013CA	E320 5018 0004		000013A0	804+	LG	R2, V3_5	convert v3
000013D0	E320 8F67 002E		00001167	805+	CVDG	R2, V3PACKED	
000013D6	E730 8F67 0006		00001167	806+	VL	V3, V3PACKED	
000013DC	E612 3010 7071			807+	VAP	V1, V2, V3, 7, 1	test instruction
000013E2	E710 8F08 000E		00001108	808+	VST	V1, V10UTPUT	save result
000013E8	B98D 0020			809+	EPSW	R2, R0	exptract psw
000013EC	5020 8EE8		000010E8	810+	ST	R2, CCPSW	to save CC
000013F0	07FB			811+	BR	R11	return
000013F4				812+RE5	DC	0F	
000013F4				813+	DROP	R5	
000013F4	00000000 00000000			814	DC	XL16' 00000000000000000000000000000000C'	
000013FC	00000000 0000000C						
				815			
				816	VRI_F	VAP, +100000000000, +10, 135, 1, 3	i4=135(iom=1 & rdc=7)
00001408				817+	DS	0FD	
00001408		00001408		818+	USING	*, R5	base for test data and test routine
00001408	00001438			819+T6	DC	A(X6)	address of test routine
0000140C	0006			820+	DC	H' 6'	test number
0000140E	00			821+	DC	X' 00'	
0000140F	87			822+	DC	HL1' 135'	i4
00001410	01			823+	DC	HL1' 1'	m5
00001411	03			824+	DC	HL1' 3'	cc
00001412	0E			825+	DC	HL1' 14'	cc failed mask
00001418	00000002 540BE400			826+V2_6	DC	FD' +100000000000'	binary value for v2 packed decimal
00001420	00000000 0000000A			827+V3_6	DC	FD' +10'	binary value for v3 packed decimal
00001428	E5C1D740 40404040			828+	DC	CL8' VAP'	instruction name
00001430	00000010			829+	DC	A(16)	result length
00001434	00001474			830+REA6	DC	A(RE6)	result address
				831+*			INSTRUCTION UNDER TEST ROUTINE
00001438				832+X6	DS	0F	
00001438	E320 5010 0004		00001418	833+	LG	R2, V2_6	convert v2
0000143E	E320 8F57 002E		00001157	834+	CVDG	R2, V2PACKED	
00001444	E720 8F57 0006		00001157	835+	VL	V2, V2PACKED	
0000144A	E320 5018 0004		00001420	836+	LG	R2, V3_6	convert v3
00001450	E320 8F67 002E		00001167	837+	CVDG	R2, V3PACKED	
00001456	E730 8F67 0006		00001167	838+	VL	V3, V3PACKED	
0000145C	E612 3018 7071			839+	VAP	V1, V2, V3, 135, 1	test instruction
00001462	E710 8F08 000E		00001108	840+	VST	V1, V10UTPUT	save result
00001468	B98D 0020			841+	EPSW	R2, R0	exptract psw
0000146C	5020 8EE8		000010E8	842+	ST	R2, CCPSW	to save CC
00001470	07FB			843+	BR	R11	return
00001474				844+RE6	DC	0F	
00001474				845+	DROP	R5	
00001474	00000000 00000000			846	DC	XL16' 000000000000000000000000000010C'	
0000147C	00000000 0000010C						
				847			
				848	*	VAP larger #'s , i4=159(iom=1 & rdc=31)	
				849	VRI_F	VAP, +9999999999999999, +1, 159, 1, 2	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00001488				850+	DS	OFD
00001488		00001488		851+	USING	*, R5
00001488	000014B8			852+T7	DC	A(X7)
0000148C	0007			853+	DC	H' 7'
0000148E	00			854+	DC	X' 00'
0000148F	9F			855+	DC	HL1' 159'
00001490	01			856+	DC	HL1' 1'
00001491	02			857+	DC	HL1' 2'
00001492	0D			858+	DC	HL1' 13'
				859+V2_7	DC	FD' +9999999999999999' \
00001498	01634578 5D89FFFF			+		binary value for v2 packed decimal
000014A0	00000000 00000001			860+V3_7	DC	FD' +1'
000014A8	E5C1D740 40404040			861+	DC	CL8' VAP'
000014B0	00000010			862+	DC	A(16)
000014B4	000014F4			863+REA7	DC	A(RE7)
				864+*		INSTRUCTION UNDER TEST ROUTINE
000014B8				865+X7	DS	OF
000014B8	E320 5010 0004		00001498	866+	LG	R2, V2_7
000014BE	E320 8F57 002E		00001157	867+	CVDG	R2, V2PACKED
000014C4	E720 8F57 0006		00001157	868+	VL	V2, V2PACKED
000014CA	E320 5018 0004		000014A0	869+	LG	R2, V3_7
000014D0	E320 8F67 002E		00001167	870+	CVDG	R2, V3PACKED
000014D6	E730 8F67 0006		00001167	871+	VL	V3, V3PACKED
000014DC	E612 3019 F071			872+	VAP	V1, V2, V3, 159, 1
000014E2	E710 8F08 000E		00001108	873+	VST	V1, V10UTPUT
000014E8	B98D 0020			874+	EPSW	R2, R0
000014EC	5020 8EE8		000010E8	875+	ST	R2, CCPSW
000014F0	07FB			876+	BR	R11
000014F4				877+RE7	DC	OF
000014F4				878+	DROP	R5
000014F4	00000000 00000100			879	DC	XL16' 000000000000010000000000000000C'
000014FC	00000000 0000000C					
				880		
00001508				881	VRI_F	VAP, +9999999999999999, +1000000000000000, 159, 1, 2
00001508		00001508		882+	DS	OFD
00001508	00001538			883+	USING	*, R5
0000150C	0008			884+T8	DC	A(X8)
0000150E	00			885+	DC	H' 8'
0000150F	9F			886+	DC	X' 00'
00001510	01			887+	DC	HL1' 159'
00001511	02			888+	DC	HL1' 1'
00001512	0D			889+	DC	HL1' 2'
				890+	DC	HL1' 13'
				891+V2_8	DC	FD' +9999999999999999' \
00001518	01634578 5D89FFFF			+		binary value for v2 packed decimal
				892+V3_8	DC	FD' +1000000000000000' \
00001520	002386F2 6FC10000			+		binary value for v3 packed decimal
00001528	E5C1D740 40404040			893+	DC	CL8' VAP'
00001530	00000010			894+	DC	A(16)
00001534	00001574			895+REA8	DC	A(RE8)
				896+*		INSTRUCTION UNDER TEST ROUTINE
00001538				897+X8	DS	OF
00001538	E320 5010 0004		00001518	898+	LG	R2, V2_8
0000153E	E320 8F57 002E		00001157	899+	CVDG	R2, V2PACKED
00001544	E720 8F57 0006		00001157	900+	VL	V2, V2PACKED
0000154A	E320 5018 0004		00001520	901+	LG	R2, V3_8

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001550	E320 8F67 002E		00001167	902+	CVDG	R2, V3PACKED	
00001556	E730 8F67 0006		00001167	903+	VL	V3, V3PACKED	
0000155C	E612 3019 F071			904+	VAP	V1, V2, V3, 159, 1	test instruction
00001562	E710 8F08 000E		00001108	905+	VST	V1, V10UTPUT	save result
00001568	B98D 0020			906+	EPSW	R2, R0	exptract psw
0000156C	5020 8EE8		000010E8	907+	ST	R2, CCPSW	to save CC
00001570	07FB			908+	BR	R11	return
00001574				909+RE8	DC	0F	
00001574				910+	DROP	R5	
00001574	00000000 00000109			911	DC	XL16' 0000000000000010999999999999999C'	
0000157C	99999999 9999999C						
				912			
				913	VRI_F	VAP, - 9999999999999999, - 1, 159, 1, 1	
00001588				914+	DS	0FD	
00001588		00001588		915+	USING	*, R5	base for test data and test routine
00001588	000015B8			916+T9	DC	A(X9)	address of test routine
0000158C	0009			917+	DC	H' 9'	test number
0000158E	00			918+	DC	X' 00'	
0000158F	9F			919+	DC	HL1' 159'	i4
00001590	01			920+	DC	HL1' 1'	m5
00001591	01			921+	DC	HL1' 1'	cc
00001592	0B			922+	DC	HL1' 11'	cc failed mask
				923+V2_9	DC	FD' - 9999999999999999' \	
00001598	FFDC790D 903F0001			+			binary value for v2 packed decimal
000015A0	FFFFFFFF FFFFFFFF			924+V3_9	DC	FD' - 1'	binary value for v3 packed decimal
000015A8	E5C1D740 40404040			925+	DC	CL8' VAP'	instruction name
000015B0	00000010			926+	DC	A(16)	result length
000015B4	000015F4			927+REA9	DC	A(RE9)	result address
				928+*			INSTRUCTION UNDER TEST ROUTINE
000015B8				929+X9	DS	0F	
000015B8	E320 5010 0004		00001598	930+	LG	R2, V2_9	convert v2
000015BE	E320 8F57 002E		00001157	931+	CVDG	R2, V2PACKED	
000015C4	E720 8F57 0006		00001157	932+	VL	V2, V2PACKED	
000015CA	E320 5018 0004		000015A0	933+	LG	R2, V3_9	convert v3
000015D0	E320 8F67 002E		00001167	934+	CVDG	R2, V3PACKED	
000015D6	E730 8F67 0006		00001167	935+	VL	V3, V3PACKED	
000015DC	E612 3019 F071			936+	VAP	V1, V2, V3, 159, 1	test instruction
000015E2	E710 8F08 000E		00001108	937+	VST	V1, V10UTPUT	save result
000015E8	B98D 0020			938+	EPSW	R2, R0	exptract psw
000015EC	5020 8EE8		000010E8	939+	ST	R2, CCPSW	to save CC
000015F0	07FB			940+	BR	R11	return
000015F4				941+RE9	DC	0F	
000015F4				942+	DROP	R5	
000015F4	00000000 00000010			943	DC	XL16' 000000000000001000000000000000D'	
000015FC	00000000 0000000D						
				944			
				945	* VAP larger #'s , i4=159(iom=1 & rdc=31)		CS=1 for all m5
				946	* check forced positive		
				947	VRI_F	VAP, - 9999999999999999, +1, 159, 9, 2	m5=9(P2=1)
00001608				948+	DS	0FD	
00001608		00001608		949+	USING	*, R5	base for test data and test routine
00001608	00001638			950+T10	DC	A(X10)	address of test routine
0000160C	000A			951+	DC	H' 10'	test number
0000160E	00			952+	DC	X' 00'	
0000160F	9F			953+	DC	HL1' 159'	i4
00001610	09			954+	DC	HL1' 9'	m5

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001611	02			955+	DC	HL1' 2'	cc
00001612	0D			956+	DC	HL1' 13'	cc failed mask
				957+V2_10	DC	FD' - 9999999999999999'	\
00001618	FE9CBA87 A2760001			+			binary value for v2 packed decimal
00001620	00000000 00000001			958+V3_10	DC	FD' +1'	binary value for v3 packed decimal
00001628	E5C1D740 40404040			959+	DC	CL8' VAP'	instruction name
00001630	00000010			960+	DC	A(16)	result length
00001634	00001674			961+REA10	DC	A(RE10)	result address
				962+*			INSTRUCTION UNDER TEST ROUTINE
00001638				963+X10	DS	0F	
00001638	E320 5010 0004		00001618	964+	LG	R2, V2_10	convert v2
0000163E	E320 8F57 002E		00001157	965+	CVDG	R2, V2PACKED	
00001644	E720 8F57 0006		00001157	966+	VL	V2, V2PACKED	
0000164A	E320 5018 0004		00001620	967+	LG	R2, V3_10	convert v3
00001650	E320 8F67 002E		00001167	968+	CVDG	R2, V3PACKED	
00001656	E730 8F67 0006		00001167	969+	VL	V3, V3PACKED	
0000165C	E612 3099 F071			970+	VAP	V1, V2, V3, 159, 9	test instruction
00001662	E710 8F08 000E		00001108	971+	VST	V1, V10OUTPUT	save result
00001668	B98D 0020			972+	EPSW	R2, R0	exptract psw
0000166C	5020 8EE8		000010E8	973+	ST	R2, CCPSW	to save CC
00001670	07FB			974+	BR	R11	return
00001674				975+RE10	DC	0F	
00001674				976+	DROP	R5	
00001674	00000000 00000100			977	DC	XL16' 000000000000010000000000000000C'	
0000167C	00000000 0000000C						
				978			
				979	VRI_F	VAP, - 9999999999999999, - 1000000000000000, 159, 13, 2	
00001688				980+	DS	0FD	
00001688		00001688		981+	USING	*, R5	base for test data and test routine
00001688	000016B8			982+T11	DC	A(X11)	address of test routine
0000168C	000B			983+	DC	H' 11'	test number
0000168E	00			984+	DC	X' 00'	
0000168F	9F			985+	DC	HL1' 159'	i4
00001690	0D			986+	DC	HL1' 13'	m5
00001691	02			987+	DC	HL1' 2'	cc
00001692	0D			988+	DC	HL1' 13'	cc failed mask
				989+V2_11	DC	FD' - 9999999999999999'	\
00001698	FE9CBA87 A2760001			+			binary value for v2 packed decimal
				990+V3_11	DC	FD' - 1000000000000000'	\
				+			binary value for v3 packed decimal
000016A0	FFDC790D 903F0000						
000016A8	E5C1D740 40404040			991+	DC	CL8' VAP'	instruction name
000016B0	00000010			992+	DC	A(16)	result length
000016B4	000016F4			993+REA11	DC	A(RE11)	result address
				994+*			INSTRUCTION UNDER TEST ROUTINE
000016B8				995+X11	DS	0F	
000016B8	E320 5010 0004		00001698	996+	LG	R2, V2_11	convert v2
000016BE	E320 8F57 002E		00001157	997+	CVDG	R2, V2PACKED	
000016C4	E720 8F57 0006		00001157	998+	VL	V2, V2PACKED	
000016CA	E320 5018 0004		000016A0	999+	LG	R2, V3_11	convert v3
000016D0	E320 8F67 002E		00001167	1000+	CVDG	R2, V3PACKED	
000016D6	E730 8F67 0006		00001167	1001+	VL	V3, V3PACKED	
000016DC	E612 30D9 F071			1002+	VAP	V1, V2, V3, 159, 13	test instruction
000016E2	E710 8F08 000E		00001108	1003+	VST	V1, V10OUTPUT	save result
000016E8	B98D 0020			1004+	EPSW	R2, R0	exptract psw
000016EC	5020 8EE8		000010E8	1005+	ST	R2, CCPSW	to save CC
000016F0	07FB			1006+	BR	R11	return

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
000016F4				1007+RE11	DC	0F
000016F4				1008+	DROP	R5
000016F4	00000000 00000109			1009	DC	XL16' 0000000000000010999999999999999C' m5=13(P2=1, P3=1)
000016FC	99999999 9999999C					
				1010		
				1011	VRI_F	VAP, - 9999999999999999, - 1, 159, 3, 2 m5=3(P1=1)
00001708				1012+	DS	0FD
00001708		00001708		1013+	USING	*, R5 base for test data and test routine
00001708	00001738			1014+T12	DC	A(X12) address of test routine
0000170C	000C			1015+	DC	H' 12' test number
0000170E	00			1016+	DC	X' 00'
0000170F	9F			1017+	DC	HL1' 159' i4
00001710	03			1018+	DC	HL1' 3' m5
00001711	02			1019+	DC	HL1' 2' cc
00001712	0D			1020+	DC	HL1' 13' cc failed mask
				1021+V2_12	DC	FD' - 9999999999999999' \
00001718	FFDC790D 903F0001			+		binary value for v2 packed decimal
00001720	FFFFFFFF FFFFFFFF			1022+V3_12	DC	FD' - 1' binary value for v3 packed decimal
00001728	E5C1D740 40404040			1023+	DC	CL8' VAP' instruction name
00001730	00000010			1024+	DC	A(16) result length
00001734	00001774			1025+REA12	DC	A(RE12) result address
				1026+*		INSTRUCTION UNDER TEST ROUTINE
00001738				1027+X12	DS	0F
00001738	E320 5010 0004		00001718	1028+	LG	R2, V2_12 convert v2
0000173E	E320 8F57 002E		00001157	1029+	CVDG	R2, V2PACKED
00001744	E720 8F57 0006		00001157	1030+	VL	V2, V2PACKED
0000174A	E320 5018 0004		00001720	1031+	LG	R2, V3_12 convert v3
00001750	E320 8F67 002E		00001167	1032+	CVDG	R2, V3PACKED
00001756	E730 8F67 0006		00001167	1033+	VL	V3, V3PACKED
0000175C	E612 3039 F071			1034+	VAP	V1, V2, V3, 159, 3 test instruction
00001762	E710 8F08 000E		00001108	1035+	VST	V1, V10UTPUT save result
00001768	B98D 0020			1036+	EPSW	R2, R0 exptract psw
0000176C	5020 8EE8		000010E8	1037+	ST	R2, CCPSW to save CC
00001770	07FB			1038+	BR	R11 return
00001774				1039+RE12	DC	0F
00001774				1040+	DROP	R5
00001774	00000000 00000010			1041	DC	XL16' 000000000000001000000000000000F'
0000177C	00000000 0000000F					
				1042		
				1043 *		-----
				1044 * VSP		- VECTOR SUBTRACT DECIMAL
				1045 *		-----
				1046 * VSP simple + CC checks		
				1047	VRI_F	VSP, +10, +12, 7, 1, 1
00001788				1048+	DS	0FD
00001788		00001788		1049+	USING	*, R5 base for test data and test routine
00001788	000017B8			1050+T13	DC	A(X13) address of test routine
0000178C	000D			1051+	DC	H' 13' test number
0000178E	00			1052+	DC	X' 00'
0000178F	07			1053+	DC	HL1' 7' i4
00001790	01			1054+	DC	HL1' 1' m5
00001791	01			1055+	DC	HL1' 1' cc
00001792	0B			1056+	DC	HL1' 11' cc failed mask
00001798	00000000 0000000A			1057+V2_13	DC	FD' +10' binary value for v2 packed decimal
000017A0	00000000 0000000C			1058+V3_13	DC	FD' +12' binary value for v3 packed decimal
000017A8	E5E2D740 40404040			1059+	DC	CL8' VSP' instruction name

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
000017B0	00000010			1060+	DC	A(16)
000017B4	000017F4			1061+REA13	DC	A(RE13)
				1062+*		result length
				1063+X13	DS	OF
000017B8				1064+	LG	R2, V2_13
000017B8	E320 5010 0004		00001798	1065+	CVDG	R2, V2PACKED
000017BE	E320 8F57 002E		00001157	1066+	VL	V2, V2PACKED
000017C4	E720 8F57 0006		00001157	1067+	LG	R2, V3_13
000017CA	E320 5018 0004		000017A0	1068+	CVDG	R2, V3PACKED
000017D0	E320 8F67 002E		00001167	1069+	VL	V3, V3PACKED
000017D6	E730 8F67 0006		00001167	1070+	VSP	V1, V2, V3, 7, 1
000017DC	E612 3010 7073			1071+	VST	V1, V10UTPUT
000017E2	E710 8F08 000E		00001108	1072+	EPSW	R2, R0
000017E8	B98D 0020			1073+	ST	R2, CCPSW
000017EC	5020 8EE8		000010E8	1074+	BR	R11
000017F0	07FB			1075+RE13	DC	OF
000017F4				1076+	DROP	R5
000017F4				1077	DC	XL16' 00000000000000000000000000000002D'
000017F4	00000000 00000000					
000017FC	00000000 0000002D					
				1078		
				1079	VRI_F	VSP, - 10, +12, 7, 1, 1
00001808				1080+	DS	OFD
00001808		00001808		1081+	USING	*, R5
00001808	00001838			1082+T14	DC	A(X14)
0000180C	000E			1083+	DC	H' 14'
0000180E	00			1084+	DC	X' 00'
0000180F	07			1085+	DC	HL1' 7'
00001810	01			1086+	DC	HL1' 1'
00001811	01			1087+	DC	HL1' 1'
00001812	0B			1088+	DC	HL1' 11'
00001818	FFFFFFFF FFFFFFFF6			1089+V2_14	DC	FD' - 10'
00001820	00000000 0000000C			1090+V3_14	DC	FD' +12'
00001828	E5E2D740 40404040			1091+	DC	CL8' VSP'
00001830	00000010			1092+	DC	A(16)
00001834	00001874			1093+REA14	DC	A(RE14)
				1094+*		INSTRUCTION UNDER TEST ROUTINE
00001838				1095+X14	DS	OF
00001838	E320 5010 0004		00001818	1096+	LG	R2, V2_14
0000183E	E320 8F57 002E		00001157	1097+	CVDG	R2, V2PACKED
00001844	E720 8F57 0006		00001157	1098+	VL	V2, V2PACKED
0000184A	E320 5018 0004		00001820	1099+	LG	R2, V3_14
00001850	E320 8F67 002E		00001167	1100+	CVDG	R2, V3PACKED
00001856	E730 8F67 0006		00001167	1101+	VL	V3, V3PACKED
0000185C	E612 3010 7073			1102+	VSP	V1, V2, V3, 7, 1
00001862	E710 8F08 000E		00001108	1103+	VST	V1, V10UTPUT
00001868	B98D 0020			1104+	EPSW	R2, R0
0000186C	5020 8EE8		000010E8	1105+	ST	R2, CCPSW
00001870	07FB			1106+	BR	R11
00001874				1107+RE14	DC	OF
00001874				1108+	DROP	R5
00001874	00000000 00000000			1109	DC	XL16' 00000000000000000000000000000022D'
0000187C	00000000 0000022D					
				1110		
				1111	VRI_F	VSP, +10, - 12, 1, 1, 3
00001888				1112+	DS	OFD
00001888		00001888		1113+	USING	*, R5
						base for test data and test routine

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00001888	000018B8			1114+T15	DC	A(X15)
0000188C	000F			1115+	DC	H' 15'
0000188E	00			1116+	DC	X' 00'
0000188F	01			1117+	DC	HL1' 1'
00001890	01			1118+	DC	HL1' 1'
00001891	03			1119+	DC	HL1' 3'
00001892	0E			1120+	DC	HL1' 14'
00001898	00000000 0000000A			1121+V2_15	DC	FD' +10'
000018A0	FFFFFFFF FFFFFFFF4			1122+V3_15	DC	FD' - 12'
000018A8	E5E2D740 40404040			1123+	DC	CL8' VSP'
000018B0	00000010			1124+	DC	A(16)
000018B4	000018F4			1125+REA15	DC	A(RE15)
				1126+*		
000018B8				1127+X15	DS	0F
000018B8	E320 5010 0004		00001898	1128+	LG	R2, V2_15
000018BE	E320 8F57 002E		00001157	1129+	CVDG	R2, V2PACKED
000018C4	E720 8F57 0006		00001157	1130+	VL	V2, V2PACKED
000018CA	E320 5018 0004		000018A0	1131+	LG	R2, V3_15
000018D0	E320 8F67 002E		00001167	1132+	CVDG	R2, V3PACKED
000018D6	E730 8F67 0006		00001167	1133+	VL	V3, V3PACKED
000018DC	E612 3010 1073			1134+	VSP	V1, V2, V3, 1, 1
000018E2	E710 8F08 000E		00001108	1135+	VST	V1, V10OUTPUT
000018E8	B98D 0020			1136+	EPSW	R2, R0
000018EC	5020 8EE8		000010E8	1137+	ST	R2, CCPSW
000018F0	07FB			1138+	BR	R11
000018F4				1139+RE15	DC	0F
000018F4				1140+	DROP	R5
000018F4	00000000 00000000			1141	DC	XL16' 000000000000000000000000000000002C'
000018FC	00000000 0000002C					
				1142		
				1143	VRI_F	VSP, +10, - 12, 7, 1, 2
00001908				1144+	DS	0FD
00001908		00001908		1145+	USING	*, R5
00001908	00001938			1146+T16	DC	A(X16)
0000190C	0010			1147+	DC	H' 16'
0000190E	00			1148+	DC	X' 00'
0000190F	07			1149+	DC	HL1' 7'
00001910	01			1150+	DC	HL1' 1'
00001911	02			1151+	DC	HL1' 2'
00001912	0D			1152+	DC	HL1' 13'
00001918	00000000 0000000A			1153+V2_16	DC	FD' +10'
00001920	FFFFFFFF FFFFFFFF4			1154+V3_16	DC	FD' - 12'
00001928	E5E2D740 40404040			1155+	DC	CL8' VSP'
00001930	00000010			1156+	DC	A(16)
00001934	00001974			1157+REA16	DC	A(RE16)
				1158+*		
00001938				1159+X16	DS	0F
00001938	E320 5010 0004		00001918	1160+	LG	R2, V2_16
0000193E	E320 8F57 002E		00001157	1161+	CVDG	R2, V2PACKED
00001944	E720 8F57 0006		00001157	1162+	VL	V2, V2PACKED
0000194A	E320 5018 0004		00001920	1163+	LG	R2, V3_16
00001950	E320 8F67 002E		00001167	1164+	CVDG	R2, V3PACKED
00001956	E730 8F67 0006		00001167	1165+	VL	V3, V3PACKED
0000195C	E612 3010 7073			1166+	VSP	V1, V2, V3, 7, 1
00001962	E710 8F08 000E		00001108	1167+	VST	V1, V10OUTPUT
00001968	B98D 0020			1168+	EPSW	R2, R0

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
0000196C	5020 8EE8		000010E8	1169+	ST	R2, CCPSW	to save CC
00001970	07FB			1170+	BR	R11	return
00001974				1171+RE16	DC	0F	
00001974				1172+	DROP	R5	
00001974	00000000 00000000			1173	DC	XL16' 0000000000000000000000000000000022C'	
0000197C	00000000 0000022C						
				1174			
				1175	VRI_F	VSP, - 10, - 12, 7, 1, 2	
00001988				1176+	DS	0FD	
00001988		00001988		1177+	USING	*, R5	base for test data and test routine
00001988	000019B8			1178+T17	DC	A(X17)	address of test routine
0000198C	0011			1179+	DC	H' 17'	test number
0000198E	00			1180+	DC	X' 00'	
0000198F	07			1181+	DC	HL1' 7'	i4
00001990	01			1182+	DC	HL1' 1'	m5
00001991	02			1183+	DC	HL1' 2'	cc
00001992	0D			1184+	DC	HL1' 13'	cc failed mask
00001998	FFFFFFFF FFFFFFFF6			1185+V2_17	DC	FD' - 10'	binary value for v2 packed decimal
000019A0	FFFFFFFF FFFFFFFF4			1186+V3_17	DC	FD' - 12'	binary value for v3 packed decimal
000019A8	E5E2D740 40404040			1187+	DC	CL8' VSP'	instruction name
000019B0	00000010			1188+	DC	A(16)	result length
000019B4	000019F4			1189+REA17	DC	A(RE17)	result address
				1190+*			INSTRUCTION UNDER TEST ROUTINE
000019B8				1191+X17	DS	0F	
000019B8	E320 5010 0004		00001998	1192+	LG	R2, V2_17	convert v2
000019BE	E320 8F57 002E		00001157	1193+	CVDG	R2, V2PACKED	
000019C4	E720 8F57 0006		00001157	1194+	VL	V2, V2PACKED	
000019CA	E320 5018 0004		000019A0	1195+	LG	R2, V3_17	convert v3
000019D0	E320 8F67 002E		00001167	1196+	CVDG	R2, V3PACKED	
000019D6	E730 8F67 0006		00001167	1197+	VL	V3, V3PACKED	
000019DC	E612 3010 7073			1198+	VSP	V1, V2, V3, 7, 1	test instruction
000019E2	E710 8F08 000E		00001108	1199+	VST	V1, V10UTPUT	save result
000019E8	B98D 0020			1200+	EPSW	R2, R0	exptract psw
000019EC	5020 8EE8		000010E8	1201+	ST	R2, CCPSW	to save CC
000019F0	07FB			1202+	BR	R11	return
000019F4				1203+RE17	DC	0F	
000019F4				1204+	DROP	R5	
000019F4	00000000 00000000			1205	DC	XL16' 000000000000000000000000000000002C'	
000019FC	00000000 0000002C						
				1206			
				1207	VRI_F	VSP, - 10, - 10, 7, 1, 0	
00001A08				1208+	DS	0FD	
00001A08		00001A08		1209+	USING	*, R5	base for test data and test routine
00001A08	00001A38			1210+T18	DC	A(X18)	address of test routine
00001A0C	0012			1211+	DC	H' 18'	test number
00001A0E	00			1212+	DC	X' 00'	
00001A0F	07			1213+	DC	HL1' 7'	i4
00001A10	01			1214+	DC	HL1' 1'	m5
00001A11	00			1215+	DC	HL1' 0'	cc
00001A12	07			1216+	DC	HL1' 7'	cc failed mask
00001A18	FFFFFFFF FFFFFFFF6			1217+V2_18	DC	FD' - 10'	binary value for v2 packed decimal
00001A20	FFFFFFFF FFFFFFFF6			1218+V3_18	DC	FD' - 10'	binary value for v3 packed decimal
00001A28	E5E2D740 40404040			1219+	DC	CL8' VSP'	instruction name
00001A30	00000010			1220+	DC	A(16)	result length
00001A34	00001A74			1221+REA18	DC	A(RE18)	result address
				1222+*			INSTRUCTION UNDER TEST ROUTINE

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001A38				1223+X18	DS	0F	
00001A38	E320 5010 0004		00001A18	1224+	LG	R2, V2_18	convert v2
00001A3E	E320 8F57 002E		00001157	1225+	CVDG	R2, V2PACKED	
00001A44	E720 8F57 0006		00001157	1226+	VL	V2, V2PACKED	
00001A4A	E320 5018 0004		00001A20	1227+	LG	R2, V3_18	convert v3
00001A50	E320 8F67 002E		00001167	1228+	CVDG	R2, V3PACKED	
00001A56	E730 8F67 0006		00001167	1229+	VL	V3, V3PACKED	
00001A5C	E612 3010 7073			1230+	VSP	V1, V2, V3, 7, 1	test instruction
00001A62	E710 8F08 000E		00001108	1231+	VST	V1, V10UTPUT	save result
00001A68	B98D 0020			1232+	EPSW	R2, R0	exptract psw
00001A6C	5020 8EE8		000010E8	1233+	ST	R2, CCPSW	to save CC
00001A70	07FB			1234+	BR	R11	return
00001A74				1235+RE18	DC	0F	
00001A74				1236+	DROP	R5	
00001A74	00000000 00000000			1237	DC	XL16' 00000000000000000000000000000000C'	
00001A7C	00000000 0000000C						
				1238			
00001A88				1239	VRI_F	VSP, +10000000000, +10, 135, 1, 3	i4=135(iom=1 & rdc=7)
00001A88		00001A88		1240+	DS	0FD	
00001A88	00001AB8			1241+	USING	*, R5	base for test data and test routine
00001A8C	0013			1242+T19	DC	A(X19)	address of test routine
00001A8E	00			1243+	DC	H' 19'	test number
00001A8E	00			1244+	DC	X' 00'	
00001A8F	87			1245+	DC	HL1' 135'	i4
00001A90	01			1246+	DC	HL1' 1'	m5
00001A91	03			1247+	DC	HL1' 3'	cc
00001A92	0E			1248+	DC	HL1' 14'	cc failed mask
00001A98	00000002 540BE400			1249+V2_19	DC	FD' +10000000000'	binary value for v2 packed decimal
00001AA0	00000000 0000000A			1250+V3_19	DC	FD' +10'	binary value for v3 packed decimal
00001AA8	E5E2D740 40404040			1251+	DC	CL8' VSP'	instruction name
00001AB0	00000010			1252+	DC	A(16)	result length
00001AB4	00001AF4			1253+REA19	DC	A(RE19)	result address
				1254+*			INSTRUCTION UNDER TEST ROUTINE
00001AB8				1255+X19	DS	0F	
00001AB8	E320 5010 0004		00001A98	1256+	LG	R2, V2_19	convert v2
00001ABE	E320 8F57 002E		00001157	1257+	CVDG	R2, V2PACKED	
00001AC4	E720 8F57 0006		00001157	1258+	VL	V2, V2PACKED	
00001ACA	E320 5018 0004		00001AA0	1259+	LG	R2, V3_19	convert v3
00001AD0	E320 8F67 002E		00001167	1260+	CVDG	R2, V3PACKED	
00001AD6	E730 8F67 0006		00001167	1261+	VL	V3, V3PACKED	
00001ADC	E612 3018 7073			1262+	VSP	V1, V2, V3, 135, 1	test instruction
00001AE2	E710 8F08 000E		00001108	1263+	VST	V1, V10UTPUT	save result
00001AE8	B98D 0020			1264+	EPSW	R2, R0	exptract psw
00001AEC	5020 8EE8		000010E8	1265+	ST	R2, CCPSW	to save CC
00001AF0	07FB			1266+	BR	R11	return
00001AF4				1267+RE19	DC	0F	
00001AF4				1268+	DROP	R5	
00001AF4	00000000 00000000			1269	DC	XL16' 00000000000000000000000009999990C'	note RDC
00001AFC	00000000 9999990C						
				1270			
				1271	* VSP larger #'s , i4=159(iom=1 & rdc=31)		
00001B08				1272	VRI_F	VSP, +9999999999999999, +1, 159, 1, 2	
00001B08		00001B08		1273+	DS	0FD	
00001B08	00001B38			1274+	USING	*, R5	base for test data and test routine
00001B08	0014			1275+T20	DC	A(X20)	address of test routine
00001B0C				1276+	DC	H' 20'	test number

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001B0E	00			1277+	DC	X' 00'	
00001B0F	9F			1278+	DC	HL1' 159'	i4
00001B10	01			1279+	DC	HL1' 1'	m5
00001B11	02			1280+	DC	HL1' 2'	cc
00001B12	0D			1281+	DC	HL1' 13'	cc failed mask
				1282+V2_20	DC	FD' +9999999999999999' \	
00001B18	01634578 5D89FFFF			+			binary value for v2 packed decimal
00001B20	00000000 00000001			1283+V3_20	DC	FD' +1'	binary value for v3 packed decimal
00001B28	E5E2D740 40404040			1284+	DC	CL8' VSP'	instruction name
00001B30	00000010			1285+	DC	A(16)	result length
00001B34	00001B74			1286+REA20	DC	A(RE20)	result address
				1287+*			INSTRUCTION UNDER TEST ROUTINE
00001B38				1288+X20	DS	0F	
00001B38	E320 5010 0004		00001B18	1289+	LG	R2, V2_20	convert v2
00001B3E	E320 8F57 002E		00001157	1290+	CVDG	R2, V2PACKED	
00001B44	E720 8F57 0006		00001157	1291+	VL	V2, V2PACKED	
00001B4A	E320 5018 0004		00001B20	1292+	LG	R2, V3_20	convert v3
00001B50	E320 8F67 002E		00001167	1293+	CVDG	R2, V3PACKED	
00001B56	E730 8F67 0006		00001167	1294+	VL	V3, V3PACKED	
00001B5C	E612 3019 F073			1295+	VSP	V1, V2, V3, 159, 1	test instruction
00001B62	E710 8F08 000E		00001108	1296+	VST	V1, V10OUTPUT	save result
00001B68	B98D 0020			1297+	EPSW	R2, R0	exptract psw
00001B6C	5020 8EE8		000010E8	1298+	ST	R2, CCPSW	to save CC
00001B70	07FB			1299+	BR	R11	return
00001B74				1300+RE20	DC	0F	
00001B74				1301+	DROP	R5	
00001B74	00000000 00000099			1302	DC	XL16' 00000000000000009999999999999998C'	
00001B7C	99999999 9999998C						
				1303			
00001B88				1304	VRI_F	VSP, +9999999999999999, +1000000000000000, 159, 1, 2	
00001B88		00001B88		1305+	DS	0FD	
00001B88	00001BB8			1306+	USING	*, R5	base for test data and test routine
00001B8C	0015			1307+T21	DC	A(X21)	address of test routine
00001B8E	00			1308+	DC	H' 21'	test number
00001B8E	00			1309+	DC	X' 00'	
00001B8F	9F			1310+	DC	HL1' 159'	i4
00001B90	01			1311+	DC	HL1' 1'	m5
00001B91	02			1312+	DC	HL1' 2'	cc
00001B92	0D			1313+	DC	HL1' 13'	cc failed mask
				1314+V2_21	DC	FD' +9999999999999999' \	
00001B98	01634578 5D89FFFF			+			binary value for v2 packed decimal
				1315+V3_21	DC	FD' +1000000000000000' \	
00001BA0	002386F2 6FC10000			+			binary value for v3 packed decimal
00001BA8	E5E2D740 40404040			1316+	DC	CL8' VSP'	instruction name
00001BB0	00000010			1317+	DC	A(16)	result length
00001BB4	00001BF4			1318+REA21	DC	A(RE21)	result address
				1319+*			INSTRUCTION UNDER TEST ROUTINE
00001BB8				1320+X21	DS	0F	
00001BB8	E320 5010 0004		00001B98	1321+	LG	R2, V2_21	convert v2
00001BBE	E320 8F57 002E		00001157	1322+	CVDG	R2, V2PACKED	
00001BC4	E720 8F57 0006		00001157	1323+	VL	V2, V2PACKED	
00001BCA	E320 5018 0004		00001BA0	1324+	LG	R2, V3_21	convert v3
00001BD0	E320 8F67 002E		00001167	1325+	CVDG	R2, V3PACKED	
00001BD6	E730 8F67 0006		00001167	1326+	VL	V3, V3PACKED	
00001BDC	E612 3019 F073			1327+	VSP	V1, V2, V3, 159, 1	test instruction
00001BE2	E710 8F08 000E		00001108	1328+	VST	V1, V10OUTPUT	save result

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001BE8	B98D 0020			1329+	EPSW	R2, R0	exptract psw
00001BEC	5020 8EE8		000010E8	1330+	ST	R2, CCPSW	to save CC
00001BF0	07FB			1331+	BR	R11	return
00001BF4				1332+RE21	DC	0F	
00001BF4				1333+	DROP	R5	
00001BF4	00000000 00000089			1334	DC	XL16' 0000000000000000899999999999999C'	
00001BFC	99999999 9999999C						
				1335			
				1336	VRI_F	VSP, - 9999999999999999, - 1, 159, 1, 1	
00001C08				1337+	DS	0FD	
00001C08		00001C08		1338+	USING	*, R5	base for test data and test routine
00001C08	00001C38			1339+T22	DC	A(X22)	address of test routine
00001C0C	0016			1340+	DC	H' 22'	test number
00001C0E	00			1341+	DC	X' 00'	
00001C0F	9F			1342+	DC	HL1' 159'	i4
00001C10	01			1343+	DC	HL1' 1'	m5
00001C11	01			1344+	DC	HL1' 1'	cc
00001C12	0B			1345+	DC	HL1' 11'	cc failed mask
				1346+V2_22	DC	FD' - 9999999999999999' \	
00001C18	FFDC790D 903F0001			+			binary value for v2 packed decimal
00001C20	FFFFFFFF FFFFFFFF			1347+V3_22	DC	FD' - 1'	binary value for v3 packed decimal
00001C28	E5E2D740 40404040			1348+	DC	CL8' VSP'	instruction name
00001C30	00000010			1349+	DC	A(16)	result length
00001C34	00001C74			1350+REA22	DC	A(RE22)	result address
				1351+*			INSTRUCTION UNDER TEST ROUTINE
00001C38				1352+X22	DS	0F	
00001C38	E320 5010 0004		00001C18	1353+	LG	R2, V2_22	convert v2
00001C3E	E320 8F57 002E		00001157	1354+	CVDG	R2, V2PACKED	
00001C44	E720 8F57 0006		00001157	1355+	VL	V2, V2PACKED	
00001C4A	E320 5018 0004		00001C20	1356+	LG	R2, V3_22	convert v3
00001C50	E320 8F67 002E		00001167	1357+	CVDG	R2, V3PACKED	
00001C56	E730 8F67 0006		00001167	1358+	VL	V3, V3PACKED	
00001C5C	E612 3019 F073			1359+	VSP	V1, V2, V3, 159, 1	test instruction
00001C62	E710 8F08 000E		00001108	1360+	VST	V1, V10UTPUT	save result
00001C68	B98D 0020			1361+	EPSW	R2, R0	exptract psw
00001C6C	5020 8EE8		000010E8	1362+	ST	R2, CCPSW	to save CC
00001C70	07FB			1363+	BR	R11	return
00001C74				1364+RE22	DC	0F	
00001C74				1365+	DROP	R5	
00001C74	00000000 00000009			1366	DC	XL16' 0000000000000000999999999999998D'	
00001C7C	99999999 9999998D						
				1367			
				1368	VRI_F	VSP, - 9999999999999999, - 1, 135, 1, 3 i4=135(iom=1 & rdc=7)	
00001C88				1369+	DS	0FD	
00001C88		00001C88		1370+	USING	*, R5	base for test data and test routine
00001C88	00001CB8			1371+T23	DC	A(X23)	address of test routine
00001C8C	0017			1372+	DC	H' 23'	test number
00001C8E	00			1373+	DC	X' 00'	
00001C8F	87			1374+	DC	HL1' 135'	i4
00001C90	01			1375+	DC	HL1' 1'	m5
00001C91	03			1376+	DC	HL1' 3'	cc
00001C92	0E			1377+	DC	HL1' 14'	cc failed mask
				1378+V2_23	DC	FD' - 9999999999999999' \	
00001C98	FFDC790D 903F0001			+			binary value for v2 packed decimal
00001CA0	FFFFFFFF FFFFFFFF			1379+V3_23	DC	FD' - 1'	binary value for v3 packed decimal
00001CA8	E5E2D740 40404040			1380+	DC	CL8' VSP'	instruction name

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001CB0	00000010			1381+	DC	A(16)	result length
00001CB4	00001CF4			1382+REA23	DC	A(RE23)	result address
				1383+*			INSTRUCTION UNDER TEST ROUTINE
00001CB8				1384+X23	DS	0F	
00001CB8	E320 5010 0004		00001C98	1385+	LG	R2, V2_23	convert v2
00001CBE	E320 8F57 002E		00001157	1386+	CVDG	R2, V2PACKED	
00001CC4	E720 8F57 0006		00001157	1387+	VL	V2, V2PACKED	
00001CCA	E320 5018 0004		00001CA0	1388+	LG	R2, V3_23	convert v3
00001CD0	E320 8F67 002E		00001167	1389+	CVDG	R2, V3PACKED	
00001CD6	E730 8F67 0006		00001167	1390+	VL	V3, V3PACKED	
00001CDC	E612 3018 7073			1391+	VSP	V1, V2, V3, 135, 1	test instruction
00001CE2	E710 8F08 000E		00001108	1392+	VST	V1, V10UTPUT	save result
00001CE8	B98D 0020			1393+	EPSW	R2, R0	exptract psw
00001CEC	5020 8EE8		000010E8	1394+	ST	R2, CCPSW	to save CC
00001CF0	07FB			1395+	BR	R11	return
00001CF4				1396+RE23	DC	0F	
00001CF4				1397+	DROP	R5	
00001CF4	00000000 00000000			1398	DC	XL16' 00000000000000000000000009999998D'	
00001CFC	00000000 9999998D						
				1399			
				1400 * VSP larger #'s , i4=159(iom=1 & rdc=31)			CS=1 for all m5
				1401 * check forced positive			
				1402 VRI_F VSP, - 9999999999999999, +1, 159, 9, 2			m5=9(P2=1)
00001D08				1403+	DS	0FD	
00001D08		00001D08		1404+	USING	*, R5	base for test data and test routine
00001D08	00001D38			1405+T24	DC	A(X24)	address of test routine
00001D0C	0018			1406+	DC	H' 24'	test number
00001D0E	00			1407+	DC	X' 00'	
00001D0F	9F			1408+	DC	HL1' 159'	i4
00001D10	09			1409+	DC	HL1' 9'	m5
00001D11	02			1410+	DC	HL1' 2'	cc
00001D12	0D			1411+	DC	HL1' 13'	cc failed mask
				1412+V2_24	DC	FD' - 9999999999999999' \	
00001D18	FE9CBA87 A2760001			+			binary value for v2 packed decimal
00001D20	00000000 00000001			1413+V3_24	DC	FD' +1'	binary value for v3 packed decimal
00001D28	E5E2D740 40404040			1414+	DC	CL8' VSP'	instruction name
00001D30	00000010			1415+	DC	A(16)	result length
00001D34	00001D74			1416+REA24	DC	A(RE24)	result address
				1417+*			INSTRUCTION UNDER TEST ROUTINE
00001D38				1418+X24	DS	0F	
00001D38	E320 5010 0004		00001D18	1419+	LG	R2, V2_24	convert v2
00001D3E	E320 8F57 002E		00001157	1420+	CVDG	R2, V2PACKED	
00001D44	E720 8F57 0006		00001157	1421+	VL	V2, V2PACKED	
00001D4A	E320 5018 0004		00001D20	1422+	LG	R2, V3_24	convert v3
00001D50	E320 8F67 002E		00001167	1423+	CVDG	R2, V3PACKED	
00001D56	E730 8F67 0006		00001167	1424+	VL	V3, V3PACKED	
00001D5C	E612 3099 F073			1425+	VSP	V1, V2, V3, 159, 9	test instruction
00001D62	E710 8F08 000E		00001108	1426+	VST	V1, V10UTPUT	save result
00001D68	B98D 0020			1427+	EPSW	R2, R0	exptract psw
00001D6C	5020 8EE8		000010E8	1428+	ST	R2, CCPSW	to save CC
00001D70	07FB			1429+	BR	R11	return
00001D74				1430+RE24	DC	0F	
00001D74				1431+	DROP	R5	
00001D74	00000000 00000099			1432	DC	XL16' 00000000000000000999999999999998C'	
00001D7C	99999999 9999998C						
				1433			

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00001D88				1434	VRI_F VSP, - 9999999999999999, - 1000000000000000, 159, 13, 2	
00001D88		00001D88		1435+	DS OFD	
00001D88	00001DB8			1436+	USING *, R5	base for test data and test routine
00001D8C	0019			1437+T25	DC A(X25)	address of test routine
00001D8E	00			1438+	DC H' 25'	test number
00001D8F	9F			1439+	DC X' 00'	
00001D90	0D			1440+	DC HL1' 159'	i4
00001D91	02			1441+	DC HL1' 13'	m5
00001D92	0D			1442+	DC HL1' 2'	cc
				1443+	DC HL1' 13'	cc failed mask
00001D98	FE9CBA87 A2760001			1444+V2_25	DC FD' - 9999999999999999' \	
				+		binary value for v2 packed decimal
00001DA0	FFDC790D 903F0000			1445+V3_25	DC FD' - 1000000000000000' \	
00001DA8	E5E2D740 40404040			+		binary value for v3 packed decimal
00001DB0	00000010			1446+	DC CL8' VSP'	instruction name
00001DB4	00001DF4			1447+	DC A(16)	result length
				1448+REA25	DC A(RE25)	result address
				1449+*		INSTRUCTION UNDER TEST ROUTINE
00001DB8				1450+X25	DS OF	
00001DB8	E320 5010 0004		00001D98	1451+	LG R2, V2_25	convert v2
00001DBE	E320 8F57 002E		00001157	1452+	CVDG R2, V2PACKED	
00001DC4	E720 8F57 0006		00001157	1453+	VL V2, V2PACKED	
00001DCA	E320 5018 0004		00001DA0	1454+	LG R2, V3_25	convert v3
00001DD0	E320 8F67 002E		00001167	1455+	CVDG R2, V3PACKED	
00001DD6	E730 8F67 0006		00001167	1456+	VL V3, V3PACKED	
00001DDC	E612 30D9 F073			1457+	VSP V1, V2, V3, 159, 13	test instruction
00001DE2	E710 8F08 000E		00001108	1458+	VST V1, V10UTPUT	save result
00001DE8	B98D 0020			1459+	EPSW R2, R0	exptract psw
00001DEC	5020 8EE8		000010E8	1460+	ST R2, CCPSW	to save CC
00001DF0	07FB			1461+	BR R11	return
00001DF4				1462+RE25	DC OF	
00001DF4				1463+	DROP R5	
00001DF4	00000000 00000089			1464	DC XL16' 00000000000000008999999999999999C' m5=13(P2=1, P3=1)	
00001DFC	99999999 9999999C					
				1465		
00001E08				1466	VRI_F VSP, - 9999999999999999, - 1, 159, 3, 2	m5=3(P1=1)
00001E08		00001E08		1467+	DS OFD	
00001E08	00001E38			1468+	USING *, R5	base for test data and test routine
00001E0C	001A			1469+T26	DC A(X26)	address of test routine
00001E0E	00			1470+	DC H' 26'	test number
00001E0F	9F			1471+	DC X' 00'	
00001E10	03			1472+	DC HL1' 159'	i4
00001E11	02			1473+	DC HL1' 3'	m5
00001E12	0D			1474+	DC HL1' 2'	cc
				1475+	DC HL1' 13'	cc failed mask
00001E18	FFDC790D 903F0001			1476+V2_26	DC FD' - 9999999999999999' \	
				+		binary value for v2 packed decimal
00001E20	FFFFFFFF FFFFFFFF			1477+V3_26	DC FD' - 1'	binary value for v3 packed decimal
00001E28	E5E2D740 40404040			1478+	DC CL8' VSP'	instruction name
00001E30	00000010			1479+	DC A(16)	result length
00001E34	00001E74			1480+REA26	DC A(RE26)	result address
				1481+*		INSTRUCTION UNDER TEST ROUTINE
00001E38				1482+X26	DS OF	
00001E38	E320 5010 0004		00001E18	1483+	LG R2, V2_26	convert v2
00001E3E	E320 8F57 002E		00001157	1484+	CVDG R2, V2PACKED	
00001E44	E720 8F57 0006		00001157	1485+	VL V2, V2PACKED	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001E4A	E320 5018 0004		00001E20	1486+	LG	R2, V3_26	convert v3
00001E50	E320 8F67 002E		00001167	1487+	CVDG	R2, V3PACKED	
00001E56	E730 8F67 0006		00001167	1488+	VL	V3, V3PACKED	
00001E5C	E612 3039 F073			1489+	VSP	V1, V2, V3, 159, 3	test instruction
00001E62	E710 8F08 000E		00001108	1490+	VST	V1, V10UTPUT	save result
00001E68	B98D 0020			1491+	EPSW	R2, R0	exptract psw
00001E6C	5020 8EE8		000010E8	1492+	ST	R2, CCPSW	to save CC
00001E70	07FB			1493+	BR	R11	return
00001E74				1494+RE26	DC	0F	
00001E74				1495+	DROP	R5	
00001E74	00000000 00000009			1496	DC	XL16' 0000000000000000099999999999998F'	
00001E7C	99999999 9999998F						
				1497			
				1498	VRI_F	VSP, - 9999999999999999, - 1, 135, 3, 3	i4=135(iom=1 & rdc=7)
00001E88				1499+	DS	0FD	
00001E88		00001E88		1500+	USING	*, R5	base for test data and test routine
00001E88	00001EB8			1501+T27	DC	A(X27)	address of test routine
00001E8C	001B			1502+	DC	H' 27'	test number
00001E8E	00			1503+	DC	X' 00'	
00001E8F	87			1504+	DC	HL1' 135'	i4
00001E90	03			1505+	DC	HL1' 3'	m5
00001E91	03			1506+	DC	HL1' 3'	cc
00001E92	0E			1507+	DC	HL1' 14'	cc failed mask
				1508+V2_27	DC	FD' - 9999999999999999' \	
00001E98	FFDC790D 903F0001			+			binary value for v2 packed decimal
00001EA0	FFFFFFFF FFFFFFFF			1509+V3_27	DC	FD' - 1'	binary value for v3 packed decimal
00001EA8	E5E2D740 40404040			1510+	DC	CL8' VSP'	instruction name
00001EB0	00000010			1511+	DC	A(16)	result length
00001EB4	00001EF4			1512+REA27	DC	A(RE27)	result address
				1513+*			INSTRUCTION UNDER TEST ROUTINE
00001EB8				1514+X27	DS	0F	
00001EB8	E320 5010 0004		00001E98	1515+	LG	R2, V2_27	convert v2
00001EBE	E320 8F57 002E		00001157	1516+	CVDG	R2, V2PACKED	
00001EC4	E720 8F57 0006		00001157	1517+	VL	V2, V2PACKED	
00001ECA	E320 5018 0004		00001EA0	1518+	LG	R2, V3_27	convert v3
00001ED0	E320 8F67 002E		00001167	1519+	CVDG	R2, V3PACKED	
00001ED6	E730 8F67 0006		00001167	1520+	VL	V3, V3PACKED	
00001EDC	E612 3038 7073			1521+	VSP	V1, V2, V3, 135, 3	test instruction
00001EE2	E710 8F08 000E		00001108	1522+	VST	V1, V10UTPUT	save result
00001EE8	B98D 0020			1523+	EPSW	R2, R0	exptract psw
00001EEC	5020 8EE8		000010E8	1524+	ST	R2, CCPSW	to save CC
00001EF0	07FB			1525+	BR	R11	return
00001EF4				1526+RE27	DC	0F	
00001EF4				1527+	DROP	R5	
00001EF4	00000000 00000000			1528	DC	XL16' 000000000000000000000009999998F'	m5=3(P1=1)
00001EFC	00000000 9999998F						
				1529			
				1530 *			
				1531 * VMP		- VECTOR MULTIPLY DECIMAL	
				1532 *			
				1533 * VMP simple		+ CC checks	
00001F08				1534	VRI_F	VMP, +10, +12, 7, 1, 2	
00001F08		00001F08		1535+	DS	0FD	
00001F08	00001F38			1536+	USING	*, R5	base for test data and test routine
00001F08	001C			1537+T28	DC	A(X28)	address of test routine
00001F0C				1538+	DC	H' 28'	test number

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00001FF4				1594+RE29	DC	OF
00001FF4				1595+	DROP	R5
00001FF4	00000000	00000000		1596	DC	XL16' 0000000000000000000000000000120D'
00001FFC	00000000	0000120D				
				1597		
				1598	VRI_F	VMP, +10, - 12, 1, 1, 3 note rdc=1
00002008				1599+	DS	OFD
00002008		00002008		1600+	USING	*, R5 base for test data and test routine
00002008	00002038			1601+T30	DC	A(X30) address of test routine
0000200C	001E			1602+	DC	H' 30' test number
0000200E	00			1603+	DC	X' 00'
0000200F	01			1604+	DC	HL1' 1' i4
00002010	01			1605+	DC	HL1' 1' m5
00002011	03			1606+	DC	HL1' 3' cc
00002012	0E			1607+	DC	HL1' 14' cc failed mask
00002018	00000000	0000000A		1608+V2_30	DC	FD' +10' binary value for v2 packed decimal
00002020	FFFFFFFF	FFFFFFF4		1609+V3_30	DC	FD' - 12' binary value for v3 packed decimal
00002028	E5D4D740	40404040		1610+	DC	CL8' VMP' instruction name
00002030	00000010			1611+	DC	A(16) result length
00002034	00002074			1612+REA30	DC	A(RE30) result address
				1613+*		INSTRUCTION UNDER TEST ROUTINE
00002038				1614+X30	DS	OF
00002038	E320 5010 0004		00002018	1615+	LG	R2, V2_30 convert v2
0000203E	E320 8F57 002E		00001157	1616+	CVDG	R2, V2PACKED
00002044	E720 8F57 0006		00001157	1617+	VL	V2, V2PACKED
0000204A	E320 5018 0004		00002020	1618+	LG	R2, V3_30 convert v3
00002050	E320 8F67 002E		00001167	1619+	CVDG	R2, V3PACKED
00002056	E730 8F67 0006		00001167	1620+	VL	V3, V3PACKED
0000205C	E612 3010 1078			1621+	VMP	V1, V2, V3, 1, 1 test instruction
00002062	E710 8F08 000E		00001108	1622+	VST	V1, V1OUTPUT save result
00002068	B98D 0020			1623+	EPSW	R2, R0 exptract psw
0000206C	5020 8EE8		000010E8	1624+	ST	R2, CCPSW to save CC
00002070	07FB			1625+	BR	R11 return
00002074				1626+RE30	DC	OF
00002074				1627+	DROP	R5
00002074	00000000	00000000		1628	DC	XL16' 00000000000000000000000000000C'
0000207C	00000000	0000000C				
				1629		
				1630	VRI_F	VMP, +10, - 12, 7, 1, 1
00002088				1631+	DS	OFD
00002088		00002088		1632+	USING	*, R5 base for test data and test routine
00002088	000020B8			1633+T31	DC	A(X31) address of test routine
0000208C	001F			1634+	DC	H' 31' test number
0000208E	00			1635+	DC	X' 00'
0000208F	07			1636+	DC	HL1' 7' i4
00002090	01			1637+	DC	HL1' 1' m5
00002091	01			1638+	DC	HL1' 1' cc
00002092	0B			1639+	DC	HL1' 11' cc failed mask
00002098	00000000	0000000A		1640+V2_31	DC	FD' +10' binary value for v2 packed decimal
000020A0	FFFFFFFF	FFFFFFF4		1641+V3_31	DC	FD' - 12' binary value for v3 packed decimal
000020A8	E5D4D740	40404040		1642+	DC	CL8' VMP' instruction name
000020B0	00000010			1643+	DC	A(16) result length
000020B4	000020F4			1644+REA31	DC	A(RE31) result address
				1645+*		INSTRUCTION UNDER TEST ROUTINE
000020B8				1646+X31	DS	OF
000020B8	E320 5010 0004		00002098	1647+	LG	R2, V2_31 convert v2

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
000020BE	E320 8F57 002E		00001157	1648+	CVDG	R2, V2PACKED
000020C4	E720 8F57 0006		00001157	1649+	VL	V2, V2PACKED
000020CA	E320 5018 0004		000020A0	1650+	LG	R2, V3_31
000020D0	E320 8F67 002E		00001167	1651+	CVDG	R2, V3PACKED
000020D6	E730 8F67 0006		00001167	1652+	VL	V3, V3PACKED
000020DC	E612 3010 7078			1653+	VMP	V1, V2, V3, 7, 1
000020E2	E710 8F08 000E		00001108	1654+	VST	V1, V10OUTPUT
000020E8	B98D 0020			1655+	EPSW	R2, R0
000020EC	5020 8EE8		000010E8	1656+	ST	R2, CCPSW
000020F0	07FB			1657+	BR	R11
000020F4				1658+RE31	DC	0F
000020F4				1659+	DROP	R5
000020F4	00000000 00000000			1660	DC	XL16' 0000000000000000000000000000120D'
000020FC	00000000 0000120D					
				1661		
				1662	VRI_F	VMP, - 10, - 12, 7, 1, 2
00002108				1663+	DS	0FD
00002108		00002108		1664+	USING	*, R5
00002108	00002138			1665+T32	DC	A(X32)
0000210C	0020			1666+	DC	H' 32'
0000210E	00			1667+	DC	X' 00'
0000210F	07			1668+	DC	HL1' 7'
00002110	01			1669+	DC	HL1' 1'
00002111	02			1670+	DC	HL1' 2'
00002112	0D			1671+	DC	HL1' 13'
00002118	FFFFFFFF FFFFFFFF6			1672+V2_32	DC	FD' - 10'
00002120	FFFFFFFF FFFFFFFF4			1673+V3_32	DC	FD' - 12'
00002128	E5D4D740 40404040			1674+	DC	CL8' VMP'
00002130	00000010			1675+	DC	A(16)
00002134	00002174			1676+REA32	DC	A(RE32)
				1677+*		INSTRUCTION UNDER TEST ROUTINE
00002138				1678+X32	DS	0F
00002138	E320 5010 0004		00002118	1679+	LG	R2, V2_32
0000213E	E320 8F57 002E		00001157	1680+	CVDG	R2, V2PACKED
00002144	E720 8F57 0006		00001157	1681+	VL	V2, V2PACKED
0000214A	E320 5018 0004		00002120	1682+	LG	R2, V3_32
00002150	E320 8F67 002E		00001167	1683+	CVDG	R2, V3PACKED
00002156	E730 8F67 0006		00001167	1684+	VL	V3, V3PACKED
0000215C	E612 3010 7078			1685+	VMP	V1, V2, V3, 7, 1
00002162	E710 8F08 000E		00001108	1686+	VST	V1, V10OUTPUT
00002168	B98D 0020			1687+	EPSW	R2, R0
0000216C	5020 8EE8		000010E8	1688+	ST	R2, CCPSW
00002170	07FB			1689+	BR	R11
00002174				1690+RE32	DC	0F
00002174				1691+	DROP	R5
00002174	00000000 00000000			1692	DC	XL16' 0000000000000000000000000000120C'
0000217C	00000000 0000120C					
				1693		
				1694	VRI_F	VMP, - 10, - 10, 7, 1, 2
00002188				1695+	DS	0FD
00002188		00002188		1696+	USING	*, R5
00002188	000021B8			1697+T33	DC	A(X33)
0000218C	0021			1698+	DC	H' 33'
0000218E	00			1699+	DC	X' 00'
0000218F	07			1700+	DC	HL1' 7'
00002190	01			1701+	DC	HL1' 1'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
0000227C	00000000 0000100C			1757	
				1758 * VMP larger #'s , i4=159(iom=1 & rdc=31)	
00002288				1759 VRI_F VMP, +9999999999999999, +1, 159, 1, 2	
00002288		00002288		1760+ DS OFD	
00002288	000022B8			1761+ USING *, R5	base for test data and test routine
0000228C	0023			1762+T35 DC A(X35)	address of test routine
0000228E	00			1763+ DC H' 35'	test number
0000228F	9F			1764+ DC X' 00'	
00002290	01			1765+ DC HL1' 159'	i4
00002291	02			1766+ DC HL1' 1'	m5
00002292	0D			1767+ DC HL1' 2'	cc
				1768+ DC HL1' 13'	cc failed mask
00002298	01634578 5D89FFFF			1769+V2_35 DC FD' +9999999999999999' \	binary value for v2 packed decimal
000022A0	00000000 00000001			+ DC FD' +1'	binary value for v3 packed decimal
000022A8	E5D4D740 40404040			1770+V3_35 DC CL8' VMP'	instruction name
000022B0	00000010			1771+ DC CL8' VMP'	instruction name
000022B4	000022F4			1772+ DC A(16)	result length
				1773+REA35 DC A(RE35)	result address
				1774+*	INSTRUCTION UNDER TEST ROUTINE
000022B8				1775+X35 DS OF	
000022B8	E320 5010 0004		00002298	1776+ LG R2, V2_35	convert v2
000022BE	E320 8F57 002E		00001157	1777+ CVDG R2, V2PACKED	
000022C4	E720 8F57 0006		00001157	1778+ VL V2, V2PACKED	
000022CA	E320 5018 0004		000022A0	1779+ LG R2, V3_35	convert v3
000022D0	E320 8F67 002E		00001167	1780+ CVDG R2, V3PACKED	
000022D6	E730 8F67 0006		00001167	1781+ VL V3, V3PACKED	
000022DC	E612 3019 F078			1782+ VMP V1, V2, V3, 159, 1	test instruction
000022E2	E710 8F08 000E		00001108	1783+ VST V1, V10UTPUT	save result
000022E8	B98D 0020			1784+ EPSW R2, R0	exptract psw
000022EC	5020 8EE8		000010E8	1785+ ST R2, CCPSW	to save CC
000022F0	07FB			1786+ BR R11	return
000022F4				1787+RE35 DC OF	
000022F4				1788+ DROP R5	
000022F4	00000000 00000099			1789 DC XL16' 00000000000000009999999999999999C'	
000022FC	99999999 9999999C				
				1790	
00002308				1791 VRI_F VMP, +9999999999999999, +1000000000000000, 159, 1, 3	
00002308		00002308		1792+ DS OFD	
00002308	00002338			1793+ USING *, R5	base for test data and test routine
0000230C	0024			1794+T36 DC A(X36)	address of test routine
0000230E	00			1795+ DC H' 36'	test number
0000230F	9F			1796+ DC X' 00'	
00002310	01			1797+ DC HL1' 159'	i4
00002311	03			1798+ DC HL1' 1'	m5
00002312	0E			1799+ DC HL1' 3'	cc
				1800+ DC HL1' 14'	cc failed mask
00002318	01634578 5D89FFFF			1801+V2_36 DC FD' +9999999999999999' \	binary value for v2 packed decimal
				+ DC FD' +1000000000000000' \	binary value for v3 packed decimal
00002320	002386F2 6FC10000			1802+V3_36 DC CL8' VMP'	instruction name
00002328	E5D4D740 40404040			1803+ DC CL8' VMP'	instruction name
00002330	00000010			1804+ DC A(16)	result length
00002334	00002374			1805+REA36 DC A(RE36)	result address
				1806+*	INSTRUCTION UNDER TEST ROUTINE
00002338				1807+X36 DS OF	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00002338	E320 5010 0004		00002318	1808+	LG	R2, V2_36	convert v2
0000233E	E320 8F57 002E		00001157	1809+	CVDG	R2, V2PACKED	
00002344	E720 8F57 0006		00001157	1810+	VL	V2, V2PACKED	
0000234A	E320 5018 0004		00002320	1811+	LG	R2, V3_36	convert v3
00002350	E320 8F67 002E		00001167	1812+	CVDG	R2, V3PACKED	
00002356	E730 8F67 0006		00001167	1813+	VL	V3, V3PACKED	
0000235C	E612 3019 F078			1814+	VMP	V1, V2, V3, 159, 1	test instruction
00002362	E710 8F08 000E		00001108	1815+	VST	V1, V10OUTPUT	save result
00002368	B98D 0020			1816+	EPSW	R2, R0	exptract psw
0000236C	5020 8EE8		000010E8	1817+	ST	R2, CCPSW	to save CC
00002370	07FB			1818+	BR	R11	return
00002374				1819+RE36	DC	0F	
00002374				1820+	DROP	R5	
00002374	99999999 99999990			1821	DC	XL16' 99999999999999990000000000000000C'	overflowed
0000237C	00000000 0000000C						
				1822			
				1823	VRI_F	VMP, - 9999999999999999, - 1, 159, 1, 2	
00002388				1824+	DS	0FD	
00002388		00002388		1825+	USING	*, R5	base for test data and test routine
00002388	000023B8			1826+T37	DC	A(X37)	address of test routine
0000238C	0025			1827+	DC	H' 37'	test number
0000238E	00			1828+	DC	X' 00'	
0000238F	9F			1829+	DC	HL1' 159'	i4
00002390	01			1830+	DC	HL1' 1'	m5
00002391	02			1831+	DC	HL1' 2'	cc
00002392	0D			1832+	DC	HL1' 13'	cc failed mask
				1833+V2_37	DC	FD' - 9999999999999999' \	
00002398	FFDC790D 903F0001			+			binary value for v2 packed decimal
000023A0	FFFFFFFF FFFFFFFF			1834+V3_37	DC	FD' - 1'	binary value for v3 packed decimal
000023A8	E5D4D740 40404040			1835+	DC	CL8' VMP'	instruction name
000023B0	00000010			1836+	DC	A(16)	result length
000023B4	000023F4			1837+REA37	DC	A(RE37)	result address
				1838+*			INSTRUCTION UNDER TEST ROUTINE
000023B8				1839+X37	DS	0F	
000023B8	E320 5010 0004		00002398	1840+	LG	R2, V2_37	convert v2
000023BE	E320 8F57 002E		00001157	1841+	CVDG	R2, V2PACKED	
000023C4	E720 8F57 0006		00001157	1842+	VL	V2, V2PACKED	
000023CA	E320 5018 0004		000023A0	1843+	LG	R2, V3_37	convert v3
000023D0	E320 8F67 002E		00001167	1844+	CVDG	R2, V3PACKED	
000023D6	E730 8F67 0006		00001167	1845+	VL	V3, V3PACKED	
000023DC	E612 3019 F078			1846+	VMP	V1, V2, V3, 159, 1	test instruction
000023E2	E710 8F08 000E		00001108	1847+	VST	V1, V10OUTPUT	save result
000023E8	B98D 0020			1848+	EPSW	R2, R0	exptract psw
000023EC	5020 8EE8		000010E8	1849+	ST	R2, CCPSW	to save CC
000023F0	07FB			1850+	BR	R11	return
000023F4				1851+RE37	DC	0F	
000023F4				1852+	DROP	R5	
000023F4	00000000 00000009			1853	DC	XL16' 0000000000000000999999999999999C'	
000023FC	99999999 9999999C						
				1854			
				1855	VRI_F	VMP, - 9999999999999999, - 1, 135, 1, 3	i4=135(iom=1 & rdc=7)
00002408				1856+	DS	0FD	
00002408		00002408		1857+	USING	*, R5	base for test data and test routine
00002408	00002438			1858+T38	DC	A(X38)	address of test routine
0000240C	0026			1859+	DC	H' 38'	test number
0000240E	00			1860+	DC	X' 00'	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
0000240F	87			1861+	DC	HL1' 135'	i4
00002410	01			1862+	DC	HL1' 1'	m5
00002411	03			1863+	DC	HL1' 3'	cc
00002412	0E			1864+	DC	HL1' 14'	cc failed mask
				1865+V2_38	DC	FD' - 9999999999999999' \	
00002418	FFDC790D 903F0001			+			binary value for v2 packed decimal
00002420	FFFFFFFF FFFFFFFF			1866+V3_38	DC	FD' - 1'	binary value for v3 packed decimal
00002428	E5D4D740 40404040			1867+	DC	CL8' VMP'	instruction name
00002430	00000010			1868+	DC	A(16)	result length
00002434	00002474			1869+REA38	DC	A(RE38)	result address
				1870+*			INSTRUCTION UNDER TEST ROUTINE
00002438				1871+X38	DS	0F	
00002438	E320 5010 0004		00002418	1872+	LG	R2, V2_38	convert v2
0000243E	E320 8F57 002E		00001157	1873+	CVDG	R2, V2PACKED	
00002444	E720 8F57 0006		00001157	1874+	VL	V2, V2PACKED	
0000244A	E320 5018 0004		00002420	1875+	LG	R2, V3_38	convert v3
00002450	E320 8F67 002E		00001167	1876+	CVDG	R2, V3PACKED	
00002456	E730 8F67 0006		00001167	1877+	VL	V3, V3PACKED	
0000245C	E612 3018 7078			1878+	VMP	V1, V2, V3, 135, 1	test instruction
00002462	E710 8F08 000E		00001108	1879+	VST	V1, V10UTPUT	save result
00002468	B98D 0020			1880+	EPSW	R2, R0	exptract psw
0000246C	5020 8EE8		000010E8	1881+	ST	R2, CCPSW	to save CC
00002470	07FB			1882+	BR	R11	return
00002474				1883+RE38	DC	0F	
00002474				1884+	DROP	R5	
00002474	00000000 00000000			1885	DC	XL16' 00000000000000000000000009999999C'	overflow RDC
0000247C	00000000 9999999C						
				1886			
				1887	VRI_F	VMP, +9999999999999999, +10000000000000, 159, 1, 2	
00002488				1888+	DS	0FD	
00002488		00002488		1889+	USING	*, R5	base for test data and test routine
00002488	000024B8			1890+T39	DC	A(X39)	address of test routine
0000248C	0027			1891+	DC	H' 39'	test number
0000248E	00			1892+	DC	X' 00'	
0000248F	9F			1893+	DC	HL1' 159'	i4
00002490	01			1894+	DC	HL1' 1'	m5
00002491	02			1895+	DC	HL1' 2'	cc
00002492	0D			1896+	DC	HL1' 13'	cc failed mask
				1897+V2_39	DC	FD' +9999999999999999' \	
00002498	00000918 4E729FFF			+			binary value for v2 packed decimal
				1898+V3_39	DC	FD' +100000000000000' \	
000024A0	00000918 4E72A000			+			binary value for v3 packed decimal
000024A8	E5D4D740 40404040			1899+	DC	CL8' VMP'	instruction name
000024B0	00000010			1900+	DC	A(16)	result length
000024B4	000024F4			1901+REA39	DC	A(RE39)	result address
				1902+*			INSTRUCTION UNDER TEST ROUTINE
000024B8				1903+X39	DS	0F	
000024B8	E320 5010 0004		00002498	1904+	LG	R2, V2_39	convert v2
000024BE	E320 8F57 002E		00001157	1905+	CVDG	R2, V2PACKED	
000024C4	E720 8F57 0006		00001157	1906+	VL	V2, V2PACKED	
000024CA	E320 5018 0004		000024A0	1907+	LG	R2, V3_39	convert v3
000024D0	E320 8F67 002E		00001167	1908+	CVDG	R2, V3PACKED	
000024D6	E730 8F67 0006		00001167	1909+	VL	V3, V3PACKED	
000024DC	E612 3019 F078			1910+	VMP	V1, V2, V3, 159, 1	test instruction
000024E2	E710 8F08 000E		00001108	1911+	VST	V1, V10UTPUT	save result
000024E8	B98D 0020			1912+	EPSW	R2, R0	exptract psw

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000024EC	5020 8EE8		000010E8	1913+	ST	R2, CCPSW	to save CC
000024F0	07FB			1914+	BR	R11	return
000024F4				1915+RE39	DC	0F	
000024F4				1916+	DROP	R5	
000024F4	00000999 99999999			1917	DC	XL16' 0000099999999999999900000000000000C'	
000024FC	99000000 0000000C						
				1918			
				1919 *	VMP	larger #'s , i4=159(iom=1 & rdc=31)	CS=1 for all m5
				1920 *	check	forced positive	
				1921	VRI_F	VMP, - 9999999999999999, +1, 159, 9, 2	m5=9(P2=1)
00002508				1922+	DS	0FD	
00002508		00002508		1923+	USING	*, R5	base for test data and test routine
00002508	00002538			1924+T40	DC	A(X40)	address of test routine
0000250C	0028			1925+	DC	H' 40'	test number
0000250E	00			1926+	DC	X' 00'	
0000250F	9F			1927+	DC	HL1' 159'	i4
00002510	09			1928+	DC	HL1' 9'	m5
00002511	02			1929+	DC	HL1' 2'	cc
00002512	0D			1930+	DC	HL1' 13'	cc failed mask
				1931+V2_40	DC	FD' - 9999999999999999' \	
00002518	FE9CBA87 A2760001			+			binary value for v2 packed decimal
00002520	00000000 00000001			1932+V3_40	DC	FD' +1'	binary value for v3 packed decimal
00002528	E5D4D740 40404040			1933+	DC	CL8' VMP'	instruction name
00002530	00000010			1934+	DC	A(16)	result length
00002534	00002574			1935+REA40	DC	A(RE40)	result address
				1936+*			INSTRUCTION UNDER TEST ROUTINE
00002538				1937+X40	DS	0F	
00002538	E320 5010 0004		00002518	1938+	LG	R2, V2_40	convert v2
0000253E	E320 8F57 002E		00001157	1939+	CVDG	R2, V2PACKED	
00002544	E720 8F57 0006		00001157	1940+	VL	V2, V2PACKED	
0000254A	E320 5018 0004		00002520	1941+	LG	R2, V3_40	convert v3
00002550	E320 8F67 002E		00001167	1942+	CVDG	R2, V3PACKED	
00002556	E730 8F67 0006		00001167	1943+	VL	V3, V3PACKED	
0000255C	E612 3099 F078			1944+	VMP	V1, V2, V3, 159, 9	test instruction
00002562	E710 8F08 000E		00001108	1945+	VST	V1, V10UTPUT	save result
00002568	B98D 0020			1946+	EPSW	R2, R0	exptract psw
0000256C	5020 8EE8		000010E8	1947+	ST	R2, CCPSW	to save CC
00002570	07FB			1948+	BR	R11	return
00002574				1949+RE40	DC	0F	
00002574				1950+	DROP	R5	
00002574	00000000 00000099			1951	DC	XL16' 00000000000000099999999999999999C'	
0000257C	99999999 9999999C						
				1952			
				1953 *			m5=13(P2=1, P3=1)
				1954	VRI_F	VMP, - 9999999999999999, - 1000000000000000, 159, 13, 3	
00002588				1955+	DS	0FD	
00002588		00002588		1956+	USING	*, R5	base for test data and test routine
00002588	000025B8			1957+T41	DC	A(X41)	address of test routine
0000258C	0029			1958+	DC	H' 41'	test number
0000258E	00			1959+	DC	X' 00'	
0000258F	9F			1960+	DC	HL1' 159'	i4
00002590	0D			1961+	DC	HL1' 13'	m5
00002591	03			1962+	DC	HL1' 3'	cc
00002592	0E			1963+	DC	HL1' 14'	cc failed mask
				1964+V2_41	DC	FD' - 9999999999999999' \	
00002598	FE9CBA87 A2760001			+			binary value for v2 packed decimal

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
000025A0	FFDC790D 903F0000			1965+V3_41	DC	FD' - 10000000000000000' \
000025A8	E5D4D740 40404040			+		binary value for v3 packed decimal
000025B0	00000010			1966+	DC	CL8' VMP'
000025B4	000025F4			1967+	DC	A(16)
				1968+REA41	DC	A(RE41)
				1969+*		result length
000025B8				1970+X41	DS	0F
000025B8	E320 5010 0004		00002598	1971+	LG	R2, V2_41
000025BE	E320 8F57 002E		00001157	1972+	CVDG	R2, V2PACKED
000025C4	E720 8F57 0006		00001157	1973+	VL	V2, V2PACKED
000025CA	E320 5018 0004		000025A0	1974+	LG	R2, V3_41
000025D0	E320 8F67 002E		00001167	1975+	CVDG	R2, V3PACKED
000025D6	E730 8F67 0006		00001167	1976+	VL	V3, V3PACKED
000025DC	E612 30D9 F078			1977+	VMP	V1, V2, V3, 159, 13
000025E2	E710 8F08 000E		00001108	1978+	VST	V1, V10UTPUT
000025E8	B98D 0020			1979+	EPSW	R2, R0
000025EC	5020 8EE8		000010E8	1980+	ST	R2, CCPSW
000025F0	07FB			1981+	BR	R11
000025F4				1982+RE41	DC	0F
000025F4				1983+	DROP	R5
000025F4	99999999 99999990			1984	DC	XL16' 99999999999999990000000000000000C'
000025FC	00000000 0000000C					overflowed
				1985		
00002608				1986	VRI_F	VMP, - 9999999999999999, - 1, 159, 3, 2
00002608		00002608		1987+	DS	0FD
00002608	00002638			1988+	USING	*, R5
0000260C	002A			1989+T42	DC	A(X42)
0000260E	00			1990+	DC	H' 42'
0000260F	9F			1991+	DC	X' 00'
00002610	03			1992+	DC	HL1' 159'
00002611	02			1993+	DC	HL1' 3'
00002612	0D			1994+	DC	HL1' 2'
				1995+	DC	HL1' 13'
00002618	FFDC790D 903F0001			1996+V2_42	DC	FD' - 9999999999999999' \
00002620	FFFFFFFF FFFFFFFF			+		binary value for v2 packed decimal
00002628	E5D4D740 40404040			1997+V3_42	DC	FD' - 1'
00002630	00000010			1998+	DC	CL8' VMP'
00002634	00002674			1999+	DC	A(16)
				2000+REA42	DC	A(RE42)
				2001+*		result address
00002638				2002+X42	DS	0F
00002638	E320 5010 0004		00002618	2003+	LG	R2, V2_42
0000263E	E320 8F57 002E		00001157	2004+	CVDG	R2, V2PACKED
00002644	E720 8F57 0006		00001157	2005+	VL	V2, V2PACKED
0000264A	E320 5018 0004		00002620	2006+	LG	R2, V3_42
00002650	E320 8F67 002E		00001167	2007+	CVDG	R2, V3PACKED
00002656	E730 8F67 0006		00001167	2008+	VL	V3, V3PACKED
0000265C	E612 3039 F078			2009+	VMP	V1, V2, V3, 159, 3
00002662	E710 8F08 000E		00001108	2010+	VST	V1, V10UTPUT
00002668	B98D 0020			2011+	EPSW	R2, R0
0000266C	5020 8EE8		000010E8	2012+	ST	R2, CCPSW
00002670	07FB			2013+	BR	R11
00002674				2014+RE42	DC	0F
00002674				2015+	DROP	R5
00002674	00000000 00000009			2016	DC	XL16' 0000000000000000999999999999999F'
0000267C	99999999 9999999F					

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				2017	
				2018	VRI_F VMP, - 9999999999999999, - 1, 135, 13, 3 i4=135(iom=1 & rdc=7)
00002688				2019+	DS OFD
00002688		00002688		2020+	USING *, R5 base for test data and test routine
00002688	000026B8			2021+T43	DC A(X43) address of test routine
0000268C	002B			2022+	DC H' 43' test number
0000268E	00			2023+	DC X' 00'
0000268F	87			2024+	DC HL1' 135' i4
00002690	0D			2025+	DC HL1' 13' m5
00002691	03			2026+	DC HL1' 3' cc
00002692	0E			2027+	DC HL1' 14' cc failed mask
				2028+V2_43	DC FD' - 9999999999999999' \
00002698	FFDC790D 903F0001			+	binary value for v2 packed decimal
000026A0	FFFFFFFF FFFFFFFF			2029+V3_43	DC FD' - 1' binary value for v3 packed decimal
000026A8	E5D4D740 40404040			2030+	DC CL8' VMP' instruction name
000026B0	00000010			2031+	DC A(16) result length
000026B4	000026F4			2032+REA43	DC A(RE43) result address
				2033+*	INSTRUCTION UNDER TEST ROUTINE
000026B8				2034+X43	DS OF
000026B8	E320 5010 0004		00002698	2035+	LG R2, V2_43 convert v2
000026BE	E320 8F57 002E		00001157	2036+	CVDG R2, V2PACKED
000026C4	E720 8F57 0006		00001157	2037+	VL V2, V2PACKED
000026CA	E320 5018 0004		000026A0	2038+	LG R2, V3_43 convert v3
000026D0	E320 8F67 002E		00001167	2039+	CVDG R2, V3PACKED
000026D6	E730 8F67 0006		00001167	2040+	VL V3, V3PACKED
000026DC	E612 30D8 7078			2041+	VMP V1, V2, V3, 135, 13 test instruction
000026E2	E710 8F08 000E		00001108	2042+	VST V1, V10UTPUT save result
000026E8	B98D 0020			2043+	EPSW R2, R0 exptrect psw
000026EC	5020 8EE8		000010E8	2044+	ST R2, CCPSW to save CC
000026F0	07FB			2045+	BR R11 return
000026F4				2046+RE43	DC OF
000026F4				2047+	DROP R5
				2048 *	m5=13(P2=1, P3=1)
000026F4	00000000 00000000			2049	DC XL16' 00000000000000000000000009999999C' overflow RDC
000026FC	00000000 9999999C				
				2050	
				2051	VRI_F VMP, +9999999999999999, +10000000000000, 159, 3, 2 m5=3(P1=1)
00002708				2052+	DS OFD
00002708		00002708		2053+	USING *, R5 base for test data and test routine
00002708	00002738			2054+T44	DC A(X44) address of test routine
0000270C	002C			2055+	DC H' 44' test number
0000270E	00			2056+	DC X' 00'
0000270F	9F			2057+	DC HL1' 159' i4
00002710	03			2058+	DC HL1' 3' m5
00002711	02			2059+	DC HL1' 2' cc
00002712	0D			2060+	DC HL1' 13' cc failed mask
				2061+V2_44	DC FD' +9999999999999999' \
00002718	00000918 4E729FFF			+	binary value for v2 packed decimal
				2062+V3_44	DC FD' +1000000000000000' \
00002720	00000918 4E72A000			+	binary value for v3 packed decimal
00002728	E5D4D740 40404040			2063+	DC CL8' VMP' instruction name
00002730	00000010			2064+	DC A(16) result length
00002734	00002774			2065+REA44	DC A(RE44) result address
				2066+*	INSTRUCTION UNDER TEST ROUTINE
00002738				2067+X44	DS OF
00002738	E320 5010 0004		00002718	2068+	LG R2, V2_44 convert v2

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000028F0	07FB			2178+	BR	R11	return
000028F4				2179+RE47	DC	0F	
000028F4				2180+	DROP	R5	
000028F4	00000000 00000000			2181	DC	XL16'	000000000000000000000000000008D'
000028FC	00000000 0000008D						
				2182			
				2183	VRI_F	VDP, +100, -12, 7, 1, 1	
00002908				2184+	DS	0FD	
00002908		00002908		2185+	USING	*, R5	base for test data and test routine
00002908	00002938			2186+T48	DC	A(X48)	address of test routine
0000290C	0030			2187+	DC	H' 48'	test number
0000290E	00			2188+	DC	X' 00'	
0000290F	07			2189+	DC	HL1' 7'	i4
00002910	01			2190+	DC	HL1' 1'	m5
00002911	01			2191+	DC	HL1' 1'	cc
00002912	0B			2192+	DC	HL1' 11'	cc failed mask
00002918	00000000 00000064			2193+V2_48	DC	FD' +100'	binary value for v2 packed decimal
00002920	FFFFFFFF FFFFFFFF4			2194+V3_48	DC	FD' -12'	binary value for v3 packed decimal
00002928	E5C4D740 40404040			2195+	DC	CL8' VDP'	instruction name
00002930	00000010			2196+	DC	A(16)	result length
00002934	00002974			2197+REA48	DC	A(RE48)	result address
				2198+*			INSTRUCTION UNDER TEST ROUTINE
00002938				2199+X48	DS	0F	
00002938	E320 5010 0004		00002918	2200+	LG	R2, V2_48	convert v2
0000293E	E320 8F57 002E		00001157	2201+	CVDG	R2, V2PACKED	
00002944	E720 8F57 0006		00001157	2202+	VL	V2, V2PACKED	
0000294A	E320 5018 0004		00002920	2203+	LG	R2, V3_48	convert v3
00002950	E320 8F67 002E		00001167	2204+	CVDG	R2, V3PACKED	
00002956	E730 8F67 0006		00001167	2205+	VL	V3, V3PACKED	
0000295C	E612 3010 707A			2206+	VDP	V1, V2, V3, 7, 1	test instruction
00002962	E710 8F08 000E		00001108	2207+	VST	V1, V10UTPUT	save result
00002968	B98D 0020			2208+	EPSW	R2, R0	exptract psw
0000296C	5020 8EE8		000010E8	2209+	ST	R2, CCPSW	to save CC
00002970	07FB			2210+	BR	R11	return
00002974				2211+RE48	DC	0F	
00002974				2212+	DROP	R5	
00002974	00000000 00000000			2213	DC	XL16'	000000000000000000000000000008D'
0000297C	00000000 0000008D						
				2214			
				2215	VRI_F	VDP, -100, -12, 7, 1, 2	
00002988				2216+	DS	0FD	
00002988		00002988		2217+	USING	*, R5	base for test data and test routine
00002988	000029B8			2218+T49	DC	A(X49)	address of test routine
0000298C	0031			2219+	DC	H' 49'	test number
0000298E	00			2220+	DC	X' 00'	
0000298F	07			2221+	DC	HL1' 7'	i4
00002990	01			2222+	DC	HL1' 1'	m5
00002991	02			2223+	DC	HL1' 2'	cc
00002992	0D			2224+	DC	HL1' 13'	cc failed mask
00002998	FFFFFFFF FFFFFFFF9C			2225+V2_49	DC	FD' -100'	binary value for v2 packed decimal
000029A0	FFFFFFFF FFFFFFFF4			2226+V3_49	DC	FD' -12'	binary value for v3 packed decimal
000029A8	E5C4D740 40404040			2227+	DC	CL8' VDP'	instruction name
000029B0	00000010			2228+	DC	A(16)	result length
000029B4	000029F4			2229+REA49	DC	A(RE49)	result address
				2230+*			INSTRUCTION UNDER TEST ROUTINE
000029B8				2231+X49	DS	0F	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00002B74				2340+RE52	DC	0F
00002B74				2341+	DROP	R5
00002B74	00000000 00000099			2342	DC	XL16' 00000000000000009999999999999999C'
00002B7C	99999999 9999999C					
				2343		
				2344	VRI_F	VDP, - 9999999999999999, +1000, 159, 1, 1
00002B88				2345+	DS	0FD
00002B88		00002B88		2346+	USING	*, R5
00002B88	00002BB8			2347+T53	DC	A(X53)
00002B8C	0035			2348+	DC	H' 53'
00002B8E	00			2349+	DC	X' 00'
00002B8F	9F			2350+	DC	HL1' 159'
00002B90	01			2351+	DC	HL1' 1'
00002B91	01			2352+	DC	HL1' 1'
00002B92	0B			2353+	DC	HL1' 11'
				2354+V2_53	DC	FD' - 9999999999999999' \
00002B98	FE9CBA87 A2760001			+		binary value for v2 packed decimal
00002BA0	00000000 000003E8			2355+V3_53	DC	FD' +1000'
00002BA8	E5C4D740 40404040			2356+	DC	CL8' VDP'
00002BB0	00000010			2357+	DC	A(16)
00002BB4	00002BF4			2358+REA53	DC	A(RE53)
				2359+*		INSTRUCTION UNDER TEST ROUTINE
00002BB8				2360+X53	DS	0F
00002BB8	E320 5010 0004		00002B98	2361+	LG	R2, V2_53
00002BBE	E320 8F57 002E		00001157	2362+	CVDG	R2, V2PACKED
00002BC4	E720 8F57 0006		00001157	2363+	VL	V2, V2PACKED
00002BCA	E320 5018 0004		00002BA0	2364+	LG	R2, V3_53
00002BD0	E320 8F67 002E		00001167	2365+	CVDG	R2, V3PACKED
00002BD6	E730 8F67 0006		00001167	2366+	VL	V3, V3PACKED
00002BDC	E612 3019 F07A			2367+	VDP	V1, V2, V3, 159, 1
00002BE2	E710 8F08 000E		00001108	2368+	VST	V1, V10UTPUT
00002BE8	B98D 0020			2369+	EPSW	R2, R0
00002BEC	5020 8EE8		000010E8	2370+	ST	R2, CCPSW
00002BF0	07FB			2371+	BR	R11
00002BF4				2372+RE53	DC	0F
00002BF4				2373+	DROP	R5
00002BF4	00000000 00000000			2374	DC	XL16' 00000000000000009999999999999999D'
00002BFC	09999999 9999999D					
				2375		
				2376	VRI_F	VDP, - 9999999999999999, - 1, 159, 1, 2
00002C08				2377+	DS	0FD
00002C08		00002C08		2378+	USING	*, R5
00002C08	00002C38			2379+T54	DC	A(X54)
00002C0C	0036			2380+	DC	H' 54'
00002C0E	00			2381+	DC	X' 00'
00002C0F	9F			2382+	DC	HL1' 159'
00002C10	01			2383+	DC	HL1' 1'
00002C11	02			2384+	DC	HL1' 2'
00002C12	0D			2385+	DC	HL1' 13'
				2386+V2_54	DC	FD' - 9999999999999999' \
00002C18	FFDC790D 903F0001			+		binary value for v2 packed decimal
00002C20	FFFFFFFF FFFFFFFF			2387+V3_54	DC	FD' - 1'
00002C28	E5C4D740 40404040			2388+	DC	CL8' VDP'
00002C30	00000010			2389+	DC	A(16)
00002C34	00002C74			2390+REA54	DC	A(RE54)
				2391+*		INSTRUCTION UNDER TEST ROUTINE

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00002C38				2392+X54	DS	OF	
00002C38	E320 5010 0004		00002C18	2393+	LG	R2, V2_54	convert v2
00002C3E	E320 8F57 002E		00001157	2394+	CVDG	R2, V2PACKED	
00002C44	E720 8F57 0006		00001157	2395+	VL	V2, V2PACKED	
00002C4A	E320 5018 0004		00002C20	2396+	LG	R2, V3_54	convert v3
00002C50	E320 8F67 002E		00001167	2397+	CVDG	R2, V3PACKED	
00002C56	E730 8F67 0006		00001167	2398+	VL	V3, V3PACKED	
00002C5C	E612 3019 F07A			2399+	VDP	V1, V2, V3, 159, 1	test instruction
00002C62	E710 8F08 000E		00001108	2400+	VST	V1, V10UTPUT	save result
00002C68	B98D 0020			2401+	EPSW	R2, R0	exptract psw
00002C6C	5020 8EE8		000010E8	2402+	ST	R2, CCPSW	to save CC
00002C70	07FB			2403+	BR	R11	return
00002C74				2404+RE54	DC	OF	
00002C74				2405+	DROP	R5	
00002C74	00000000 00000009			2406	DC	XL16' 0000000000000000099999999999999C'	
00002C7C	99999999 9999999C						
				2407			
00002C88				2408	VRI_F	VDP, - 9999999999999999, - 1, 135, 1, 3	i4=135(iom=1 & rdc=7)
00002C88		00002C88		2409+	DS	OFD	
00002C88	00002CB8			2410+	USING	*, R5	base for test data and test routine
00002C8C	0037			2411+T55	DC	A(X55)	address of test routine
00002C8E	00			2412+	DC	H' 55'	test number
00002C8E	00			2413+	DC	X' 00'	
00002C8F	87			2414+	DC	HL1' 135'	i4
00002C90	01			2415+	DC	HL1' 1'	m5
00002C91	03			2416+	DC	HL1' 3'	cc
00002C92	0E			2417+	DC	HL1' 14'	cc failed mask
				2418+V2_55	DC	FD' - 9999999999999999' \	
00002C98	FFDC790D 903F0001			+			binary value for v2 packed decimal
00002CA0	FFFFFFFF FFFFFFFF			2419+V3_55	DC	FD' - 1'	binary value for v3 packed decimal
00002CA8	E5C4D740 40404040			2420+	DC	CL8' VDP'	instruction name
00002CB0	00000010			2421+	DC	A(16)	result length
00002CB4	00002CF4			2422+REA55	DC	A(RE55)	result address
				2423+*			INSTRUCTION UNDER TEST ROUTINE
00002CB8				2424+X55	DS	OF	
00002CB8	E320 5010 0004		00002C98	2425+	LG	R2, V2_55	convert v2
00002CBE	E320 8F57 002E		00001157	2426+	CVDG	R2, V2PACKED	
00002CC4	E720 8F57 0006		00001157	2427+	VL	V2, V2PACKED	
00002CCA	E320 5018 0004		00002CA0	2428+	LG	R2, V3_55	convert v3
00002CD0	E320 8F67 002E		00001167	2429+	CVDG	R2, V3PACKED	
00002CD6	E730 8F67 0006		00001167	2430+	VL	V3, V3PACKED	
00002CDC	E612 3018 707A			2431+	VDP	V1, V2, V3, 135, 1	test instruction
00002CE2	E710 8F08 000E		00001108	2432+	VST	V1, V10UTPUT	save result
00002CE8	B98D 0020			2433+	EPSW	R2, R0	exptract psw
00002CEC	5020 8EE8		000010E8	2434+	ST	R2, CCPSW	to save CC
00002CF0	07FB			2435+	BR	R11	return
00002CF4				2436+RE55	DC	OF	
00002CF4				2437+	DROP	R5	
00002CF4	00000000 00000000			2438	DC	XL16' 00000000000000000000000009999999C'	overflow RDC
00002CFC	00000000 9999999C						
				2439			
00002D08				2440	VRI_F	VDP, +9999999999999999, +1234, 159, 1, 2	
00002D08		00002D08		2441+	DS	OFD	
00002D08	00002D38			2442+	USING	*, R5	base for test data and test routine
00002D0C	0038			2443+T56	DC	A(X56)	address of test routine
				2444+	DC	H' 56'	test number

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00002D0E	00			2445+	DC	X' 00'	
00002D0F	9F			2446+	DC	HL1' 159'	i4
00002D10	01			2447+	DC	HL1' 1'	m5
00002D11	02			2448+	DC	HL1' 2'	cc
00002D12	0D			2449+	DC	HL1' 13'	cc failed mask
				2450+V2_56	DC	FD' +99999999999999'	\
00002D18	00000918	4E729FFF		+			binary value for v2 packed decimal
00002D20	00000000	000004D2		2451+V3_56	DC	FD' +1234'	binary value for v3 packed decimal
00002D28	E5C4D740	40404040		2452+	DC	CL8' VDP'	instruction name
00002D30	00000010			2453+	DC	A(16)	result length
00002D34	00002D74			2454+REA56	DC	A(RE56)	result address
				2455+*			INSTRUCTION UNDER TEST ROUTINE
00002D38				2456+X56	DS	0F	
00002D38	E320 5010 0004		00002D18	2457+	LG	R2, V2_56	convert v2
00002D3E	E320 8F57 002E		00001157	2458+	CVDG	R2, V2PACKED	
00002D44	E720 8F57 0006		00001157	2459+	VL	V2, V2PACKED	
00002D4A	E320 5018 0004		00002D20	2460+	LG	R2, V3_56	convert v3
00002D50	E320 8F67 002E		00001167	2461+	CVDG	R2, V3PACKED	
00002D56	E730 8F67 0006		00001167	2462+	VL	V3, V3PACKED	
00002D5C	E612 3019 F07A			2463+	VDP	V1, V2, V3, 159, 1	test instruction
00002D62	E710 8F08 000E		00001108	2464+	VST	V1, V10OUTPUT	save result
00002D68	B98D 0020			2465+	EPSW	R2, R0	exptract psw
00002D6C	5020 8EE8		000010E8	2466+	ST	R2, CCPSW	to save CC
00002D70	07FB			2467+	BR	R11	return
00002D74				2468+RE56	DC	0F	
00002D74				2469+	DROP	R5	
00002D74	00000000 00000000			2470	DC	XL16' 00000000000000000000000008103727714C'	
00002D7C	00000810 3727714C						
				2471			
00002D88				2472	VRI_F	VDP, +999999999999999999, +1234, 159, 1, 2	
00002D88		00002D88		2473+	DS	0FD	
00002D88	00002DB8			2474+	USING	*, R5	base for test data and test routine
00002D8C	0039			2475+T57	DC	A(X57)	address of test routine
00002D8E	00			2476+	DC	H' 57'	test number
00002D8F	9F			2477+	DC	X' 00'	
00002D90	01			2478+	DC	HL1' 159'	i4
00002D91	02			2479+	DC	HL1' 1'	m5
00002D92	0D			2480+	DC	HL1' 2'	cc
				2481+	DC	HL1' 13'	cc failed mask
				2482+V2_57	DC	FD' +999999999999999999'	\
00002D98	0DE0B6B3	A763FFFF		+			binary value for v2 packed decimal
00002DA0	00000000	000004D2		2483+V3_57	DC	FD' +1234'	binary value for v3 packed decimal
00002DA8	E5C4D740	40404040		2484+	DC	CL8' VDP'	instruction name
00002DB0	00000010			2485+	DC	A(16)	result length
00002DB4	00002DF4			2486+REA57	DC	A(RE57)	result address
				2487+*			INSTRUCTION UNDER TEST ROUTINE
00002DB8				2488+X57	DS	0F	
00002DB8	E320 5010 0004		00002D98	2489+	LG	R2, V2_57	convert v2
00002DBE	E320 8F57 002E		00001157	2490+	CVDG	R2, V2PACKED	
00002DC4	E720 8F57 0006		00001157	2491+	VL	V2, V2PACKED	
00002DCA	E320 5018 0004		00002DA0	2492+	LG	R2, V3_57	convert v3
00002DD0	E320 8F67 002E		00001167	2493+	CVDG	R2, V3PACKED	
00002DD6	E730 8F67 0006		00001167	2494+	VL	V3, V3PACKED	
00002DDC	E612 3019 F07A			2495+	VDP	V1, V2, V3, 159, 1	test instruction
00002DE2	E710 8F08 000E		00001108	2496+	VST	V1, V10OUTPUT	save result
00002DE8	B98D 0020			2497+	EPSW	R2, R0	exptract psw

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00002DEC	5020 8EE8		000010E8	2498+	ST	R2, CCPSW	to save CC
00002DF0	07FB			2499+	BR	R11	return
00002DF4				2500+RE57	DC	0F	
00002DF4				2501+	DROP	R5	
00002DF4	00000000 00000000			2502	DC	XL16' 00000000000000000810372771474878C'	
00002DFC	81037277 1474878C						
				2503			
				2504 *	VDP	larger #'s , i4=159(iom=1 & rdc=31)	CS=1 for all m5
				2505 *	check	forced positive	
				2506	VRI_F	VDP, - 9999999999999999, +1, 159, 9, 2	m5=9(P2=1)
00002E08				2507+	DS	0FD	
00002E08		00002E08		2508+	USING	*, R5	base for test data and test routine
00002E08	00002E38			2509+T58	DC	A(X58)	address of test routine
00002E0C	003A			2510+	DC	H' 58'	test number
00002E0E	00			2511+	DC	X' 00'	
00002E0F	9F			2512+	DC	HL1' 159'	i4
00002E10	09			2513+	DC	HL1' 9'	m5
00002E11	02			2514+	DC	HL1' 2'	cc
00002E12	0D			2515+	DC	HL1' 13'	cc failed mask
				2516+V2_58	DC	FD' - 9999999999999999' \	
00002E18	FE9CBA87 A2760001			+			binary value for v2 packed decimal
00002E20	00000000 00000001			2517+V3_58	DC	FD' +1'	binary value for v3 packed decimal
00002E28	E5C4D740 40404040			2518+	DC	CL8' VDP'	instruction name
00002E30	00000010			2519+	DC	A(16)	result length
00002E34	00002E74			2520+REA58	DC	A(RE58)	result address
				2521+*			INSTRUCTION UNDER TEST ROUTINE
00002E38				2522+X58	DS	0F	
00002E38	E320 5010 0004		00002E18	2523+	LG	R2, V2_58	convert v2
00002E3E	E320 8F57 002E		00001157	2524+	CVDG	R2, V2PACKED	
00002E44	E720 8F57 0006		00001157	2525+	VL	V2, V2PACKED	
00002E4A	E320 5018 0004		00002E20	2526+	LG	R2, V3_58	convert v3
00002E50	E320 8F67 002E		00001167	2527+	CVDG	R2, V3PACKED	
00002E56	E730 8F67 0006		00001167	2528+	VL	V3, V3PACKED	
00002E5C	E612 3099 F07A			2529+	VDP	V1, V2, V3, 159, 9	test instruction
00002E62	E710 8F08 000E		00001108	2530+	VST	V1, V10UTPUT	save result
00002E68	B98D 0020			2531+	EPSW	R2, R0	exptract psw
00002E6C	5020 8EE8		000010E8	2532+	ST	R2, CCPSW	to save CC
00002E70	07FB			2533+	BR	R11	return
00002E74				2534+RE58	DC	0F	
00002E74				2535+	DROP	R5	
00002E74	00000000 00000099			2536	DC	XL16' 00000000000000009999999999999999C'	
00002E7C	99999999 9999999C						
				2537			
				2538	VRI_F	VDP, +9999999999999999, - 1000, 159, 13, 2	m5=13(P2=1, P3=1)
00002E88				2539+	DS	0FD	
00002E88		00002E88		2540+	USING	*, R5	base for test data and test routine
00002E88	00002EB8			2541+T59	DC	A(X59)	address of test routine
00002E8C	003B			2542+	DC	H' 59'	test number
00002E8E	00			2543+	DC	X' 00'	
00002E8F	9F			2544+	DC	HL1' 159'	i4
00002E90	0D			2545+	DC	HL1' 13'	m5
00002E91	02			2546+	DC	HL1' 2'	cc
00002E92	0D			2547+	DC	HL1' 13'	cc failed mask
				2548+V2_59	DC	FD' +9999999999999999' \	
00002E98	01634578 5D89FFFF			+			binary value for v2 packed decimal
00002EA0	FFFFFFFF FFFFC18			2549+V3_59	DC	FD' - 1000'	binary value for v3 packed decimal

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00002EA8	E5C4D740 40404040			2550+	DC	CL8' VDP'	instruction name
00002EB0	00000010			2551+	DC	A(16)	result length
00002EB4	00002EF4			2552+REA59	DC	A(RE59)	result address
				2553+*			INSTRUCTION UNDER TEST ROUTINE
00002EB8				2554+X59	DS	OF	
00002EB8	E320 5010 0004		00002E98	2555+	LG	R2, V2_59	convert v2
00002EBE	E320 8F57 002E		00001157	2556+	CVDG	R2, V2PACKED	
00002EC4	E720 8F57 0006		00001157	2557+	VL	V2, V2PACKED	
00002ECA	E320 5018 0004		00002EA0	2558+	LG	R2, V3_59	convert v3
00002ED0	E320 8F67 002E		00001167	2559+	CVDG	R2, V3PACKED	
00002ED6	E730 8F67 0006		00001167	2560+	VL	V3, V3PACKED	
00002EDC	E612 30D9 F07A			2561+	VDP	V1, V2, V3, 159, 13	test instruction
00002EE2	E710 8F08 000E		00001108	2562+	VST	V1, V10OUTPUT	save result
00002EE8	B98D 0020			2563+	EPSW	R2, R0	exptract psw
00002EEC	5020 8EE8		000010E8	2564+	ST	R2, CCPSW	to save CC
00002EF0	07FB			2565+	BR	R11	return
00002EF4				2566+RE59	DC	OF	
00002EF4				2567+	DROP	R5	
00002EF4	00000000 00000000			2568	DC	XL16' 0000000000000000099999999999999C'	
00002EFC	09999999 9999999C						
				2569			
				2570	VRI_F	VDP, - 9999999999999999, - 1, 159, 3, 2	m5=3(P1=1)
00002F08				2571+	DS	OFD	
00002F08		00002F08		2572+	USING	*, R5	base for test data and test routine
00002F08	00002F38			2573+T60	DC	A(X60)	address of test routine
00002F0C	003C			2574+	DC	H' 60'	test number
00002F0E	00			2575+	DC	X' 00'	
00002F0F	9F			2576+	DC	HL1' 159'	i4
00002F10	03			2577+	DC	HL1' 3'	m5
00002F11	02			2578+	DC	HL1' 2'	cc
00002F12	0D			2579+	DC	HL1' 13'	cc failed mask
				2580+V2_60	DC	FD' - 9999999999999999' \	
00002F18	FFDC790D 903F0001			+			binary value for v2 packed decimal
00002F20	FFFFFFFF FFFFFFFF			2581+V3_60	DC	FD' - 1'	binary value for v3 packed decimal
00002F28	E5C4D740 40404040			2582+	DC	CL8' VDP'	instruction name
00002F30	00000010			2583+	DC	A(16)	result length
00002F34	00002F74			2584+REA60	DC	A(RE60)	result address
				2585+*			INSTRUCTION UNDER TEST ROUTINE
00002F38				2586+X60	DS	OF	
00002F38	E320 5010 0004		00002F18	2587+	LG	R2, V2_60	convert v2
00002F3E	E320 8F57 002E		00001157	2588+	CVDG	R2, V2PACKED	
00002F44	E720 8F57 0006		00001157	2589+	VL	V2, V2PACKED	
00002F4A	E320 5018 0004		00002F20	2590+	LG	R2, V3_60	convert v3
00002F50	E320 8F67 002E		00001167	2591+	CVDG	R2, V3PACKED	
00002F56	E730 8F67 0006		00001167	2592+	VL	V3, V3PACKED	
00002F5C	E612 3039 F07A			2593+	VDP	V1, V2, V3, 159, 3	test instruction
00002F62	E710 8F08 000E		00001108	2594+	VST	V1, V10OUTPUT	save result
00002F68	B98D 0020			2595+	EPSW	R2, R0	exptract psw
00002F6C	5020 8EE8		000010E8	2596+	ST	R2, CCPSW	to save CC
00002F70	07FB			2597+	BR	R11	return
00002F74				2598+RE60	DC	OF	
00002F74				2599+	DROP	R5	
00002F74	00000000 00000009			2600	DC	XL16' 0000000000000000099999999999999F'	
00002F7C	99999999 9999999F						
				2601			
				2602 *			m5=13(P2=1, P3=1)

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00002F88				2603	VRI_F VDP, +9999999999999999, -1, 135, 13, 3	i4=135(iom=1 & rdc=7)
00002F88		00002F88		2604+	DS OFD	
00002F88	00002FB8			2605+	USING *, R5	base for test data and test routine
00002F8C	003D			2606+T61	DC A(X61)	address of test routine
00002F8E	00			2607+	DC H' 61'	test number
00002F8F	87			2608+	DC X' 00'	
00002F90	0D			2609+	DC HL1' 135'	i4
00002F91	03			2610+	DC HL1' 13'	m5
00002F92	0E			2611+	DC HL1' 3'	cc
				2612+	DC HL1' 14'	cc failed mask
				2613+V2_61	DC FD' +9999999999999999' \	
00002F98	002386F2 6FC0FFFF			+		binary value for v2 packed decimal
00002FA0	FFFFFFFF FFFFFFFF			2614+V3_61	DC FD' - 1'	binary value for v3 packed decimal
00002FA8	E5C4D740 40404040			2615+	DC CL8' VDP'	instruction name
00002FB0	00000010			2616+	DC A(16)	result length
00002FB4	00002FF4			2617+REA61	DC A(RE61)	result address
				2618+*		INSTRUCTION UNDER TEST ROUTINE
00002FB8				2619+X61	DS OF	
00002FB8	E320 5010 0004		00002F98	2620+	LG R2, V2_61	convert v2
00002FBE	E320 8F57 002E		00001157	2621+	CVDG R2, V2PACKED	
00002FC4	E720 8F57 0006		00001157	2622+	VL V2, V2PACKED	
00002FCA	E320 5018 0004		00002FA0	2623+	LG R2, V3_61	convert v3
00002FD0	E320 8F67 002E		00001167	2624+	CVDG R2, V3PACKED	
00002FD6	E730 8F67 0006		00001167	2625+	VL V3, V3PACKED	
00002FDC	E612 30D8 707A			2626+	VDP V1, V2, V3, 135, 13	test instruction
00002FE2	E710 8F08 000E		00001108	2627+	VST V1, V10UTPUT	save result
00002FE8	B98D 0020			2628+	EPSW R2, R0	exptract psw
00002FEC	5020 8EE8		000010E8	2629+	ST R2, CCPSW	to save CC
00002FF0	07FB			2630+	BR R11	return
00002FF4				2631+RE61	DC OF	
00002FF4				2632+	DROP R5	
00002FF4	00000000 00000000			2633	DC XL16' 00000000000000000000000009999999C'	overflow RDC
00002FFC	00000000 9999999C					
				2634		
				2635	VRI_F VDP, +9999999999999999, +1234, 159, 3, 2	m5=3(P1=1)
00003008				2636+	DS OFD	
00003008		00003008		2637+	USING *, R5	base for test data and test routine
00003008	00003038			2638+T62	DC A(X62)	address of test routine
0000300C	003E			2639+	DC H' 62'	test number
0000300E	00			2640+	DC X' 00'	
0000300F	9F			2641+	DC HL1' 159'	i4
00003010	03			2642+	DC HL1' 3'	m5
00003011	02			2643+	DC HL1' 2'	cc
00003012	0D			2644+	DC HL1' 13'	cc failed mask
				2645+V2_62	DC FD' +9999999999999999' \	
				+		binary value for v2 packed decimal
00003018	00000918 4E729FFF			2646+V3_62	DC FD' +1234'	binary value for v3 packed decimal
00003020	00000000 000004D2			2647+	DC CL8' VDP'	instruction name
00003028	E5C4D740 40404040			2648+	DC A(16)	result length
00003030	00000010			2649+REA62	DC A(RE62)	result address
00003034	00003074			2650+*		INSTRUCTION UNDER TEST ROUTINE
00003038				2651+X62	DS OF	
00003038	E320 5010 0004		00003018	2652+	LG R2, V2_62	convert v2
0000303E	E320 8F57 002E		00001157	2653+	CVDG R2, V2PACKED	
00003044	E720 8F57 0006		00001157	2654+	VL V2, V2PACKED	
0000304A	E320 5018 0004		00003020	2655+	LG R2, V3_62	convert v3

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00003050	E320 8F67 002E		00001167	2656+	CVDG	R2, V3PACKED	
00003056	E730 8F67 0006		00001167	2657+	VL	V3, V3PACKED	
0000305C	E612 3039 F07A			2658+	VDP	V1, V2, V3, 159, 3	test instruction
00003062	E710 8F08 000E		00001108	2659+	VST	V1, V10OUTPUT	save result
00003068	B98D 0020			2660+	EPSW	R2, R0	exptract psw
0000306C	5020 8EE8		000010E8	2661+	ST	R2, CCPSW	to save CC
00003070	07FB			2662+	BR	R11	return
00003074				2663+RE62	DC	0F	
00003074				2664+	DROP	R5	
00003074	00000000 00000000			2665	DC	XL16' 000000000000000000000008103727714F'	
0000307C	00000810 3727714F						
				2666			
				2667 *			m5=15(P1=1, P2=1, P3=1)
				2668	VRI_F	VDP, - 999999999999999999, - 1234, 159, 15, 2	
00003088				2669+	DS	0FD	
00003088		00003088		2670+	USING	*, R5	base for test data and test routine
00003088	000030B8			2671+T63	DC	A(X63)	address of test routine
0000308C	003F			2672+	DC	H' 63'	test number
0000308E	00			2673+	DC	X' 00'	
0000308F	9F			2674+	DC	HL1' 159'	i4
00003090	0F			2675+	DC	HL1' 15'	m5
00003091	02			2676+	DC	HL1' 2'	cc
00003092	0D			2677+	DC	HL1' 13'	cc failed mask
				2678+V2_63	DC	FD' - 999999999999999999' \	
00003098	F21F494C 589C0001			+			binary value for v2 packed decimal
000030A0	FFFFFFFF FFFFB2E			2679+V3_63	DC	FD' - 1234'	binary value for v3 packed decimal
000030A8	E5C4D740 40404040			2680+	DC	CL8' VDP'	instruction name
000030B0	00000010			2681+	DC	A(16)	result length
000030B4	000030F4			2682+REA63	DC	A(RE63)	result address
				2683+*			INSTRUCTION UNDER TEST ROUTINE
000030B8				2684+X63	DS	0F	
000030B8	E320 5010 0004		00003098	2685+	LG	R2, V2_63	convert v2
000030BE	E320 8F57 002E		00001157	2686+	CVDG	R2, V2PACKED	
000030C4	E720 8F57 0006		00001157	2687+	VL	V2, V2PACKED	
000030CA	E320 5018 0004		000030A0	2688+	LG	R2, V3_63	convert v3
000030D0	E320 8F67 002E		00001167	2689+	CVDG	R2, V3PACKED	
000030D6	E730 8F67 0006		00001167	2690+	VL	V3, V3PACKED	
000030DC	E612 30F9 F07A			2691+	VDP	V1, V2, V3, 159, 15	test instruction
000030E2	E710 8F08 000E		00001108	2692+	VST	V1, V10OUTPUT	save result
000030E8	B98D 0020			2693+	EPSW	R2, R0	exptract psw
000030EC	5020 8EE8		000010E8	2694+	ST	R2, CCPSW	to save CC
000030F0	07FB			2695+	BR	R11	return
000030F4				2696+RE63	DC	0F	
000030F4				2697+	DROP	R5	
000030F4	00000000 00000000			2698	DC	XL16' 0000000000000000000810372771474878F'	
000030FC	81037277 1474878F						
				2699			
				2700 *			
				2701 *	VRP	- VECTOR REMAINDER DECIMAL	
				2702 *			
				2703 *	VRP simple + CC checks		
				2704	VRI_F	VRP, +10, +12, 7, 1, 2	
00003108				2705+	DS	0FD	
00003108		00003108		2706+	USING	*, R5	base for test data and test routine
00003108	00003138			2707+T64	DC	A(X64)	address of test routine
0000310C	0040			2708+	DC	H' 64'	test number

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
0000310E	00			2709+	DC	X' 00'
0000310F	07			2710+	DC	HL1' 7' i4
00003110	01			2711+	DC	HL1' 1' m5
00003111	02			2712+	DC	HL1' 2' cc
00003112	0D			2713+	DC	HL1' 13' cc failed mask
00003118	00000000 0000000A			2714+V2_64	DC	FD' +10' binary value for v2 packed decimal
00003120	00000000 0000000C			2715+V3_64	DC	FD' +12' binary value for v3 packed decimal
00003128	E5D9D740 40404040			2716+	DC	CL8' VRP' instruction name
00003130	00000010			2717+	DC	A(16) result length
00003134	00003174			2718+REA64	DC	A(RE64) result address
				2719+*		INSTRUCTION UNDER TEST ROUTINE
00003138				2720+X64	DS	0F
00003138	E320 5010 0004		00003118	2721+	LG	R2, V2_64 convert v2
0000313E	E320 8F57 002E		00001157	2722+	CVDG	R2, V2PACKED
00003144	E720 8F57 0006		00001157	2723+	VL	V2, V2PACKED
0000314A	E320 5018 0004		00003120	2724+	LG	R2, V3_64 convert v3
00003150	E320 8F67 002E		00001167	2725+	CVDG	R2, V3PACKED
00003156	E730 8F67 0006		00001167	2726+	VL	V3, V3PACKED
0000315C	E612 3010 707B			2727+	VRP	V1, V2, V3, 7, 1 test instruction
00003162	E710 8F08 000E		00001108	2728+	VST	V1, V10OUTPUT save result
00003168	B98D 0020			2729+	EPSW	R2, R0 exptract psw
0000316C	5020 8EE8		000010E8	2730+	ST	R2, CCPSW to save CC
00003170	07FB			2731+	BR	R11 return
00003174				2732+RE64	DC	0F
00003174				2733+	DROP	R5
00003174	00000000 00000000			2734	DC	XL16' 0000000000000000000000000000000010C'
0000317C	00000000 0000010C					
				2735		
				2736	VRI_F	VRP, - 100, +12, 7, 1, 1
00003188				2737+	DS	0FD
00003188		00003188		2738+	USING	*, R5 base for test data and test routine
00003188	000031B8			2739+T65	DC	A(X65) address of test routine
0000318C	0041			2740+	DC	H' 65' test number
0000318E	00			2741+	DC	X' 00'
0000318F	07			2742+	DC	HL1' 7' i4
00003190	01			2743+	DC	HL1' 1' m5
00003191	01			2744+	DC	HL1' 1' cc
00003192	0B			2745+	DC	HL1' 11' cc failed mask
00003198	FFFFFFFF FFFFFFF9C			2746+V2_65	DC	FD' - 100' binary value for v2 packed decimal
000031A0	00000000 0000000C			2747+V3_65	DC	FD' +12' binary value for v3 packed decimal
000031A8	E5D9D740 40404040			2748+	DC	CL8' VRP' instruction name
000031B0	00000010			2749+	DC	A(16) result length
000031B4	000031F4			2750+REA65	DC	A(RE65) result address
				2751+*		INSTRUCTION UNDER TEST ROUTINE
000031B8				2752+X65	DS	0F
000031B8	E320 5010 0004		00003198	2753+	LG	R2, V2_65 convert v2
000031BE	E320 8F57 002E		00001157	2754+	CVDG	R2, V2PACKED
000031C4	E720 8F57 0006		00001157	2755+	VL	V2, V2PACKED
000031CA	E320 5018 0004		000031A0	2756+	LG	R2, V3_65 convert v3
000031D0	E320 8F67 002E		00001167	2757+	CVDG	R2, V3PACKED
000031D6	E730 8F67 0006		00001167	2758+	VL	V3, V3PACKED
000031DC	E612 3010 707B			2759+	VRP	V1, V2, V3, 7, 1 test instruction
000031E2	E710 8F08 000E		00001108	2760+	VST	V1, V10OUTPUT save result
000031E8	B98D 0020			2761+	EPSW	R2, R0 exptract psw
000031EC	5020 8EE8		000010E8	2762+	ST	R2, CCPSW to save CC
000031F0	07FB			2763+	BR	R11 return

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
000032BE	E320 8F57 002E		00001157	2818+	CVDG	R2, V2PACKED
000032C4	E720 8F57 0006		00001157	2819+	VL	V2, V2PACKED
000032CA	E320 5018 0004		000032A0	2820+	LG	R2, V3_67
000032D0	E320 8F67 002E		00001167	2821+	CVDG	R2, V3PACKED
000032D6	E730 8F67 0006		00001167	2822+	VL	V3, V3PACKED
000032DC	E612 3010 707B			2823+	VRP	V1, V2, V3, 7, 1
000032E2	E710 8F08 000E		00001108	2824+	VST	V1, V10OUTPUT
000032E8	B98D 0020			2825+	EPSW	R2, R0
000032EC	5020 8EE8		000010E8	2826+	ST	R2, CCPSW
000032F0	07FB			2827+	BR	R11
000032F4				2828+RE67	DC	0F
000032F4				2829+	DROP	R5
000032F4	00000000 00000000			2830	DC	XL16' 000000000000000000000000000000004C'
000032FC	00000000 0000004C					
				2831		
				2832	VRI_F	VRP, - 100, - 12, 7, 1, 1
00003308				2833+	DS	0FD
00003308		00003308		2834+	USING	*, R5
00003308	00003338			2835+T68	DC	A(X68)
0000330C	0044			2836+	DC	H' 68'
0000330E	00			2837+	DC	X' 00'
0000330F	07			2838+	DC	HL1' 7'
00003310	01			2839+	DC	HL1' 1'
00003311	01			2840+	DC	HL1' 1'
00003312	0B			2841+	DC	HL1' 11'
00003318	FFFFFFFF FFFFFFF9C			2842+V2_68	DC	FD' - 100'
00003320	FFFFFFFF FFFFFFFF4			2843+V3_68	DC	FD' - 12'
00003328	E5D9D740 40404040			2844+	DC	CL8' VRP'
00003330	00000010			2845+	DC	A(16)
00003334	00003374			2846+REA68	DC	A(RE68)
				2847+*		INSTRUCTION UNDER TEST ROUTINE
00003338				2848+X68	DS	0F
00003338	E320 5010 0004		00003318	2849+	LG	R2, V2_68
0000333E	E320 8F57 002E		00001157	2850+	CVDG	R2, V2PACKED
00003344	E720 8F57 0006		00001157	2851+	VL	V2, V2PACKED
0000334A	E320 5018 0004		00003320	2852+	LG	R2, V3_68
00003350	E320 8F67 002E		00001167	2853+	CVDG	R2, V3PACKED
00003356	E730 8F67 0006		00001167	2854+	VL	V3, V3PACKED
0000335C	E612 3010 707B			2855+	VRP	V1, V2, V3, 7, 1
00003362	E710 8F08 000E		00001108	2856+	VST	V1, V10OUTPUT
00003368	B98D 0020			2857+	EPSW	R2, R0
0000336C	5020 8EE8		000010E8	2858+	ST	R2, CCPSW
00003370	07FB			2859+	BR	R11
00003374				2860+RE68	DC	0F
00003374				2861+	DROP	R5
00003374	00000000 00000000			2862	DC	XL16' 000000000000000000000000000000004D'
0000337C	00000000 0000004D					
				2863		
				2864	VRI_F	VRP, - 100, - 10, 7, 1, 0
00003388				2865+	DS	0FD
00003388		00003388		2866+	USING	*, R5
00003388	000033B8			2867+T69	DC	A(X69)
0000338C	0045			2868+	DC	H' 69'
0000338E	00			2869+	DC	X' 00'
0000338F	07			2870+	DC	HL1' 7'
00003390	01			2871+	DC	HL1' 1'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
0000353E	E320 8F57 002E		00001157	2979+	CVDG	R2, V2PACKED
00003544	E720 8F57 0006		00001157	2980+	VL	V2, V2PACKED
0000354A	E320 5018 0004		00003520	2981+	LG	R2, V3_72
00003550	E320 8F67 002E		00001167	2982+	CVDG	R2, V3PACKED
00003556	E730 8F67 0006		00001167	2983+	VL	V3, V3PACKED
0000355C	E612 3019 F07B			2984+	VRP	V1, V2, V3, 159, 1
00003562	E710 8F08 000E		00001108	2985+	VST	V1, V10OUTPUT
00003568	B98D 0020			2986+	EPSW	R2, R0
0000356C	5020 8EE8		000010E8	2987+	ST	R2, CCPSW
00003570	07FB			2988+	BR	R11
00003574				2989+RE72	DC	0F
00003574				2990+	DROP	R5
00003574	00000000 00000000			2991	DC	XL16' 0000000000000000000000000000999D'
0000357C	00000000 0000999D					
				2992		
				2993	VRI_F	VRP, - 9999999999999999, - 47, 159, 1, 1
00003588				2994+	DS	0FD
00003588		00003588		2995+	USING	*, R5
00003588	000035B8			2996+T73	DC	A(X73)
0000358C	0049			2997+	DC	H' 73'
0000358E	00			2998+	DC	X' 00'
0000358F	9F			2999+	DC	HL1' 159'
00003590	01			3000+	DC	HL1' 1'
00003591	01			3001+	DC	HL1' 1'
00003592	0B			3002+	DC	HL1' 11'
				3003+V2_73	DC	FD' - 9999999999999999' \
00003598	FFDC790D 903F0001			+		binary value for v2 packed decimal
000035A0	FFFFFFFF FFFFFFFD1			3004+V3_73	DC	FD' - 47'
000035A8	E5D9D740 40404040			3005+	DC	CL8' VRP'
000035B0	00000010			3006+	DC	A(16)
000035B4	000035F4			3007+REA73	DC	A(RE73)
				3008+*		INSTRUCTION UNDER TEST ROUTINE
000035B8				3009+X73	DS	0F
000035B8	E320 5010 0004		00003598	3010+	LG	R2, V2_73
000035BE	E320 8F57 002E		00001157	3011+	CVDG	R2, V2PACKED
000035C4	E720 8F57 0006		00001157	3012+	VL	V2, V2PACKED
000035CA	E320 5018 0004		000035A0	3013+	LG	R2, V3_73
000035D0	E320 8F67 002E		00001167	3014+	CVDG	R2, V3PACKED
000035D6	E730 8F67 0006		00001167	3015+	VL	V3, V3PACKED
000035DC	E612 3019 F07B			3016+	VRP	V1, V2, V3, 159, 1
000035E2	E710 8F08 000E		00001108	3017+	VST	V1, V10OUTPUT
000035E8	B98D 0020			3018+	EPSW	R2, R0
000035EC	5020 8EE8		000010E8	3019+	ST	R2, CCPSW
000035F0	07FB			3020+	BR	R11
000035F4				3021+RE73	DC	0F
000035F4				3022+	DROP	R5
000035F4	00000000 00000000			3023	DC	XL16' 000000000000000000000000000023D'
000035FC	00000000 0000023D					
				3024		
				3025	VRI_F	VRP, - 9999999999999999, - 123456, 135, 1, 1 i4=135(iom=1 & rdc=7)
00003608				3026+	DS	0FD
00003608		00003608		3027+	USING	*, R5
00003608	00003638			3028+T74	DC	A(X74)
0000360C	004A			3029+	DC	H' 74'
0000360E	00			3030+	DC	X' 00'
0000360F	87			3031+	DC	HL1' 135'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
000036F4				3086+	DROP R5	
000036F4	00000000 00000000			3087	DC	XL16' 000000000000000000000000000923C'
000036FC	00000000 0000923C					
				3088		
				3089	VRI_F VRP, +9999999999999999, +1234, 159, 1, 2	
00003708				3090+	DS	OFD
00003708		00003708		3091+	USING	*, R5
00003708	00003738			3092+T76	DC	A(X76)
0000370C	004C			3093+	DC	H' 76'
0000370E	00			3094+	DC	X' 00'
0000370F	9F			3095+	DC	HL1' 159'
00003710	01			3096+	DC	HL1' 1'
00003711	02			3097+	DC	HL1' 2'
00003712	0D			3098+	DC	HL1' 13'
				3099+V2_76	DC	FD' +9999999999999999' \
00003718	0DE0B6B3 A763FFFF			+		binary value for v2 packed decimal
00003720	00000000 000004D2			3100+V3_76	DC	FD' +1234'
00003728	E5D9D740 40404040			3101+	DC	CL8' VRP'
00003730	00000010			3102+	DC	A(16)
00003734	00003774			3103+REA76	DC	A(RE76)
				3104+*		INSTRUCTION UNDER TEST ROUTINE
00003738				3105+X76	DS	OF
00003738	E320 5010 0004		00003718	3106+	LG	R2, V2_76
0000373E	E320 8F57 002E		00001157	3107+	CVDG	R2, V2PACKED
00003744	E720 8F57 0006		00001157	3108+	VL	V2, V2PACKED
0000374A	E320 5018 0004		00003720	3109+	LG	R2, V3_76
00003750	E320 8F67 002E		00001167	3110+	CVDG	R2, V3PACKED
00003756	E730 8F67 0006		00001167	3111+	VL	V3, V3PACKED
0000375C	E612 3019 F07B			3112+	VRP	V1, V2, V3, 159, 1
00003762	E710 8F08 000E		00001108	3113+	VST	V1, V10UTPUT
00003768	B98D 0020			3114+	EPSW	R2, R0
0000376C	5020 8EE8		000010E8	3115+	ST	R2, CCPSW
00003770	07FB			3116+	BR	R11
00003774				3117+RE76	DC	OF
00003774				3118+	DROP	R5
00003774	00000000 00000000			3119	DC	XL16' 000000000000000000000000000547C'
0000377C	00000000 0000547C					
				3120		
				3121	* VRP larger #'s , i4=159(iom=1 & rdc=31) CS=1 for all m5	
				3122	* check forced positive	
				3123	VRI_F VRP, - 9999999999999999, +13, 159, 9, 2	m5=9(P2=1)
00003788				3124+	DS	OFD
00003788		00003788		3125+	USING	*, R5
00003788	000037B8			3126+T77	DC	A(X77)
0000378C	004D			3127+	DC	H' 77'
0000378E	00			3128+	DC	X' 00'
0000378F	9F			3129+	DC	HL1' 159'
00003790	09			3130+	DC	HL1' 9'
00003791	02			3131+	DC	HL1' 2'
00003792	0D			3132+	DC	HL1' 13'
				3133+V2_77	DC	FD' - 9999999999999999' \
00003798	FE9CBA87 A2760001			+		binary value for v2 packed decimal
000037A0	00000000 0000000D			3134+V3_77	DC	FD' +13'
000037A8	E5D9D740 40404040			3135+	DC	CL8' VRP'
000037B0	00000010			3136+	DC	A(16)
000037B4	000037F4			3137+REA77	DC	A(RE77)

[illegible]

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
0000388C	004F			3191+	DC	H' 79' test number
0000388E	00			3192+	DC	X' 00'
0000388F	9F			3193+	DC	HL1' 159' i4
00003890	03			3194+	DC	HL1' 3' m5
00003891	02			3195+	DC	HL1' 2' cc
00003892	0D			3196+	DC	HL1' 13' cc failed mask
				3197+V2_79	DC	FD' - 9999999999999999' \
00003898	FFDC790D 903F0001			+		binary value for v2 packed decimal
000038A0	FFFFFFFF FFFFFFFD1			3198+V3_79	DC	FD' - 47' binary value for v3 packed decimal
000038A8	E5D9D740 40404040			3199+	DC	CL8' VRP' instruction name
000038B0	00000010			3200+	DC	A(16) result length
000038B4	000038F4			3201+REA79	DC	A(RE79) result address
				3202+*		INSTRUCTION UNDER TEST ROUTINE
000038B8				3203+X79	DS	0F
000038B8	E320 5010 0004		00003898	3204+	LG	R2, V2_79 convert v2
000038BE	E320 8F57 002E		00001157	3205+	CVDG	R2, V2PACKED
000038C4	E720 8F57 0006		00001157	3206+	VL	V2, V2PACKED
000038CA	E320 5018 0004		000038A0	3207+	LG	R2, V3_79 convert v3
000038D0	E320 8F67 002E		00001167	3208+	CVDG	R2, V3PACKED
000038D6	E730 8F67 0006		00001167	3209+	VL	V3, V3PACKED
000038DC	E612 3039 F07B			3210+	VRP	V1, V2, V3, 159, 3 test instruction
000038E2	E710 8F08 000E		00001108	3211+	VST	V1, V10OUTPUT save result
000038E8	B98D 0020			3212+	EPSW	R2, R0 exptrect psw
000038EC	5020 8EE8		000010E8	3213+	ST	R2, CCPSW to save CC
000038F0	07FB			3214+	BR	R11 return
000038F4				3215+RE79	DC	0F
000038F4				3216+	DROP	R5
000038F4	00000000 00000000			3217	DC	XL16' 0000000000000000000000000000000023F'
000038FC	00000000 0000023F					
				3218		
				3219 *		m5=13(P2=1, P3=1)
				3220	VRI_F	VRP, - 999999999999, - 123456, 135, 13, 2 i4=135(iom=1 & rdc=7)
00003908				3221+	DS	0FD
00003908		00003908		3222+	USING	*, R5 base for test data and test routine
00003908	00003938			3223+T80	DC	A(X80) address of test routine
0000390C	0050			3224+	DC	H' 80' test number
0000390E	00			3225+	DC	X' 00'
0000390F	87			3226+	DC	HL1' 135' i4
00003910	0D			3227+	DC	HL1' 13' m5
00003911	02			3228+	DC	HL1' 2' cc
00003912	0D			3229+	DC	HL1' 13' cc failed mask
00003918	FFFFFF17 2B5AF001			3230+V2_80	DC	FD' - 999999999999' binary value for v2 packed decimal
00003920	FFFFFFFF FFFE1DC0			3231+V3_80	DC	FD' - 123456' binary value for v3 packed decimal
00003928	E5D9D740 40404040			3232+	DC	CL8' VRP' instruction name
00003930	00000010			3233+	DC	A(16) result length
00003934	00003974			3234+REA80	DC	A(RE80) result address
				3235+*		INSTRUCTION UNDER TEST ROUTINE
00003938				3236+X80	DS	0F
00003938	E320 5010 0004		00003918	3237+	LG	R2, V2_80 convert v2
0000393E	E320 8F57 002E		00001157	3238+	CVDG	R2, V2PACKED
00003944	E720 8F57 0006		00001157	3239+	VL	V2, V2PACKED
0000394A	E320 5018 0004		00003920	3240+	LG	R2, V3_80 convert v3
00003950	E320 8F67 002E		00001167	3241+	CVDG	R2, V3PACKED
00003956	E730 8F67 0006		00001167	3242+	VL	V3, V3PACKED
0000395C	E612 30D8 707B			3243+	VRP	V1, V2, V3, 135, 13 test instruction
00003962	E710 8F08 000E		00001108	3244+	VST	V1, V10OUTPUT save result

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00003A30	00000010			3297+	DC	A(16)	result length
00003A34	00003A74			3298+REA82	DC	A(RE82)	result address
				3299+*			INSTRUCTION UNDER TEST ROUTINE
00003A38				3300+X82	DS	OF	
00003A38	E320 5010 0004		00003A18	3301+	LG	R2, V2_82	convert v2
00003A3E	E320 8F57 002E		00001157	3302+	CVDG	R2, V2PACKED	
00003A44	E720 8F57 0006		00001157	3303+	VL	V2, V2PACKED	
00003A4A	E320 5018 0004		00003A20	3304+	LG	R2, V3_82	convert v3
00003A50	E320 8F67 002E		00001167	3305+	CVDG	R2, V3PACKED	
00003A56	E730 8F67 0006		00001167	3306+	VL	V3, V3PACKED	
00003A5C	E612 3039 F07B			3307+	VRP	V1, V2, V3, 159, 3	test instruction
00003A62	E710 8F08 000E		00001108	3308+	VST	V1, V10OUTPUT	save result
00003A68	B98D 0020			3309+	EPSW	R2, R0	exptract psw
00003A6C	5020 8EE8		000010E8	3310+	ST	R2, CCPSW	to save CC
00003A70	07FB			3311+	BR	R11	return
00003A74				3312+RE82	DC	OF	
00003A74				3313+	DROP	R5	
00003A74	00000000 00000000			3314	DC	XL16' 0000000000000000000000000000000547F'	
00003A7C	00000000 0000547F						
				3315			
				3316 *			
				3317 * VMSP			VECTOR MULTIPLY AND SHIFT DECIMAL
				3318 *			
				3319 *			VMSP simple + CC checks
				3320 *			i4=128(iom=1 & shamt=0)
				3321 *			i4=129(iom=1 & shamt=1)
				3322 *			i4=132(iom=1 & shamt=4)
				3323 *			i4=135(iom=1 & shamt=7)
				3324 *			i4=142(iom=1 & shamt=14)
				3325 *			i4=159(iom=1 & shamt=31)
				3326			
				3327	VRI_F	VMSP, +10, +12, 129, 1, 2	shamt=1
00003A88				3328+	DS	OFD	
00003A88		00003A88		3329+	USING	*, R5	base for test data and test routine
00003A88	00003AB8			3330+T83	DC	A(X83)	address of test routine
00003A8C	0053			3331+	DC	H' 83'	test number
00003A8E	00			3332+	DC	X' 00'	
00003A8F	81			3333+	DC	HL1' 129'	i4
00003A90	01			3334+	DC	HL1' 1'	m5
00003A91	02			3335+	DC	HL1' 2'	cc
00003A92	0D			3336+	DC	HL1' 13'	cc failed mask
00003A98	00000000 0000000A			3337+V2_83	DC	FD' +10'	binary value for v2 packed decimal
00003AA0	00000000 0000000C			3338+V3_83	DC	FD' +12'	binary value for v3 packed decimal
00003AA8	E5D4E2D7 40404040			3339+	DC	CL8' VMSP'	instruction name
00003AB0	00000010			3340+	DC	A(16)	result length
00003AB4	00003AF4			3341+REA83	DC	A(RE83)	result address
				3342+*			INSTRUCTION UNDER TEST ROUTINE
00003AB8				3343+X83	DS	OF	
00003AB8	E320 5010 0004		00003A98	3344+	LG	R2, V2_83	convert v2
00003ABE	E320 8F57 002E		00001157	3345+	CVDG	R2, V2PACKED	
00003AC4	E720 8F57 0006		00001157	3346+	VL	V2, V2PACKED	
00003ACA	E320 5018 0004		00003AA0	3347+	LG	R2, V3_83	convert v3
00003AD0	E320 8F67 002E		00001167	3348+	CVDG	R2, V3PACKED	
00003AD6	E730 8F67 0006		00001167	3349+	VL	V3, V3PACKED	
00003ADC	E612 3018 1079			3350+	VMSP	V1, V2, V3, 129, 1	test instruction
00003AE2	E710 8F08 000E		00001108	3351+	VST	V1, V10OUTPUT	save result

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00003AE8	B98D 0020			3352+	EPSW	R2, R0	exptract psw
00003AEC	5020 8EE8		000010E8	3353+	ST	R2, CCPSW	to save CC
00003AF0	07FB			3354+	BR	R11	return
00003AF4				3355+RE83	DC	0F	
00003AF4				3356+	DROP	R5	
00003AF4	00000000 00000000			3357	DC	XL16' 0000000000000000000000000000000012C'	
00003AFC	00000000 0000012C						
				3358			
				3359	VRI_F	VMSP, - 100, +12, 129, 1, 1	shamt=1
00003B08				3360+	DS	0FD	
00003B08		00003B08		3361+	USING	*, R5	base for test data and test routine
00003B08	00003B38			3362+T84	DC	A(X84)	address of test routine
00003B0C	0054			3363+	DC	H' 84'	test number
00003B0E	00			3364+	DC	X' 00'	
00003B0F	81			3365+	DC	HL1' 129'	i4
00003B10	01			3366+	DC	HL1' 1'	m5
00003B11	01			3367+	DC	HL1' 1'	cc
00003B12	0B			3368+	DC	HL1' 11'	cc failed mask
00003B18	FFFFFFFF FFFFFFF9C			3369+V2_84	DC	FD' - 100'	binary value for v2 packed decimal
00003B20	00000000 0000000C			3370+V3_84	DC	FD' +12'	binary value for v3 packed decimal
00003B28	E5D4E2D7 40404040			3371+	DC	CL8' VMSP'	instruction name
00003B30	00000010			3372+	DC	A(16)	result length
00003B34	00003B74			3373+REA84	DC	A(RE84)	result address
				3374+*			INSTRUCTION UNDER TEST ROUTINE
00003B38				3375+X84	DS	0F	
00003B38	E320 5010 0004		00003B18	3376+	LG	R2, V2_84	convert v2
00003B3E	E320 8F57 002E		00001157	3377+	CVDG	R2, V2PACKED	
00003B44	E720 8F57 0006		00001157	3378+	VL	V2, V2PACKED	
00003B4A	E320 5018 0004		00003B20	3379+	LG	R2, V3_84	convert v3
00003B50	E320 8F67 002E		00001167	3380+	CVDG	R2, V3PACKED	
00003B56	E730 8F67 0006		00001167	3381+	VL	V3, V3PACKED	
00003B5C	E612 3018 1079			3382+	VMSP	V1, V2, V3, 129, 1	test instruction
00003B62	E710 8F08 000E		00001108	3383+	VST	V1, V10UTPUT	save result
00003B68	B98D 0020			3384+	EPSW	R2, R0	exptract psw
00003B6C	5020 8EE8		000010E8	3385+	ST	R2, CCPSW	to save CC
00003B70	07FB			3386+	BR	R11	return
00003B74				3387+RE84	DC	0F	
00003B74				3388+	DROP	R5	
00003B74	00000000 00000000			3389	DC	XL16' 00000000000000000000000000000000120D'	
00003B7C	00000000 0000120D						
				3390			
				3391	VRI_F	VMSP, +100, - 12, 128, 1, 1	shamt=0
00003B88				3392+	DS	0FD	
00003B88		00003B88		3393+	USING	*, R5	base for test data and test routine
00003B88	00003BB8			3394+T85	DC	A(X85)	address of test routine
00003B8C	0055			3395+	DC	H' 85'	test number
00003B8E	00			3396+	DC	X' 00'	
00003B8F	80			3397+	DC	HL1' 128'	i4
00003B90	01			3398+	DC	HL1' 1'	m5
00003B91	01			3399+	DC	HL1' 1'	cc
00003B92	0B			3400+	DC	HL1' 11'	cc failed mask
00003B98	00000000 00000064			3401+V2_85	DC	FD' +100'	binary value for v2 packed decimal
00003BA0	FFFFFFFF FFFFFFFF4			3402+V3_85	DC	FD' - 12'	binary value for v3 packed decimal
00003BA8	E5D4E2D7 40404040			3403+	DC	CL8' VMSP'	instruction name
00003BB0	00000010			3404+	DC	A(16)	result length
00003BB4	00003BF4			3405+REA85	DC	A(RE85)	result address

[illegible]

LOC	OBJECT CODE			ADDR1	ADDR2	STMT
00003C8E	00				3460+	DC X' 00'
00003C8F	00				3461+	DC HL1' 0' i 4
00003C90	01				3462+	DC HL1' 1' m5
00003C91	02				3463+	DC HL1' 2' cc
00003C92	0D				3464+	DC HL1' 13' cc failed mask
00003C98	FFFFFFFF	FFFFFF9C			3465+V2_87	DC FD' - 100' binary value for v2 packed decimal
00003CA0	FFFFFFFF	FFFFFFF4			3466+V3_87	DC FD' - 12' binary value for v3 packed decimal
00003CA8	E5D4E2D7	40404040			3467+	DC CL8' VMSP' instruction name
00003CB0	00000010				3468+	DC A(16) result length
00003CB4	00003CF4				3469+REA87	DC A(RE87) result address
					3470+*	INSTRUCTION UNDER TEST ROUTINE
00003CB8					3471+X87	DS OF
00003CB8	E320	5010	0004	00003C98	3472+	LG R2, V2_87 convert v2
00003CBE	E320	8F57	002E	00001157	3473+	CVDG R2, V2PACKED
00003CC4	E720	8F57	0006	00001157	3474+	VL V2, V2PACKED
00003CCA	E320	5018	0004	00003CA0	3475+	LG R2, V3_87 convert v3
00003CD0	E320	8F67	002E	00001167	3476+	CVDG R2, V3PACKED
00003CD6	E730	8F67	0006	00001167	3477+	VL V3, V3PACKED
00003CDC	E612	3010	0079		3478+	VMSP V1, V2, V3, 0, 1 test instruction
00003CE2	E710	8F08	000E	00001108	3479+	VST V1, V1OUTPUT save result
00003CE8	B98D	0020			3480+	EPSW R2, R0 exptract psw
00003CEC	5020	8EE8		000010E8	3481+	ST R2, CCPSW to save CC
00003CF0	07FB				3482+	BR R11 return
00003CF4					3483+RE87	DC OF
00003CF4					3484+	DROP R5
00003CF4	00000000	00000000			3485	DC XL16' 00000000000000000000000001200C'
00003CFC	00000000	0001200C				
					3486	
					3487	VRI_F VMSP, - 100, - 10, 0, 1, 2 shamt=0
00003D08					3488+	DS OFD
00003D08			00003D08		3489+	USING *, R5 base for test data and test routine
00003D08	00003D38				3490+T88	DC A(X88) address of test routine
00003DOC	0058				3491+	DC H' 88' test number
00003DOE	00				3492+	DC X' 00'
00003DOF	00				3493+	DC HL1' 0' i 4
00003D10	01				3494+	DC HL1' 1' m5
00003D11	02				3495+	DC HL1' 2' cc
00003D12	0D				3496+	DC HL1' 13' cc failed mask
00003D18	FFFFFFFF	FFFFFF9C			3497+V2_88	DC FD' - 100' binary value for v2 packed decimal
00003D20	FFFFFFFF	FFFFFFF6			3498+V3_88	DC FD' - 10' binary value for v3 packed decimal
00003D28	E5D4E2D7	40404040			3499+	DC CL8' VMSP' instruction name
00003D30	00000010				3500+	DC A(16) result length
00003D34	00003D74				3501+REA88	DC A(RE88) result address
					3502+*	INSTRUCTION UNDER TEST ROUTINE
00003D38					3503+X88	DS OF
00003D38	E320	5010	0004	00003D18	3504+	LG R2, V2_88 convert v2
00003D3E	E320	8F57	002E	00001157	3505+	CVDG R2, V2PACKED
00003D44	E720	8F57	0006	00001157	3506+	VL V2, V2PACKED
00003D4A	E320	5018	0004	00003D20	3507+	LG R2, V3_88 convert v3
00003D50	E320	8F67	002E	00001167	3508+	CVDG R2, V3PACKED
00003D56	E730	8F67	0006	00001167	3509+	VL V3, V3PACKED
00003D5C	E612	3010	0079		3510+	VMSP V1, V2, V3, 0, 1 test instruction
00003D62	E710	8F08	000E	00001108	3511+	VST V1, V1OUTPUT save result
00003D68	B98D	0020			3512+	EPSW R2, R0 exptract psw
00003D6C	5020	8EE8		000010E8	3513+	ST R2, CCPSW to save CC
00003D70	07FB				3514+	BR R11 return

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00003E38				3568+X90	DS	0F	
00003E38	E320 5010 0004		00003E18	3569+	LG	R2, V2_90	convert v2
00003E3E	E320 8F57 002E		00001157	3570+	CVDG	R2, V2PACKED	
00003E44	E720 8F57 0006		00001157	3571+	VL	V2, V2PACKED	
00003E4A	E320 5018 0004		00003E20	3572+	LG	R2, V3_90	convert v3
00003E50	E320 8F67 002E		00001167	3573+	CVDG	R2, V3PACKED	
00003E56	E730 8F67 0006		00001167	3574+	VL	V3, V3PACKED	
00003E5C	E612 3018 E079			3575+	VMSP	V1, V2, V3, 142, 1	test instruction
00003E62	E710 8F08 000E		00001108	3576+	VST	V1, V10UTPUT	save result
00003E68	B98D 0020			3577+	EPSW	R2, R0	exptract psw
00003E6C	5020 8EE8		000010E8	3578+	ST	R2, CCPSW	to save CC
00003E70	07FB			3579+	BR	R11	return
00003E74				3580+RE90	DC	0F	
00003E74				3581+	DROP	R5	
00003E74	00000000 00000000			3582	DC	XL16' 0000000000000000000000000000999C'	
00003E7C	00000000 0000999C						
				3583			
				3584 *			shamt=14
				3585	VRI_F	VMSP, +9999999999999999, +10000000000000000, 142, 1, 2	
00003E88				3586+	DS	0FD	
00003E88		00003E88		3587+	USING	*, R5	base for test data and test routine
00003E88	00003EB8			3588+T91	DC	A(X91)	address of test routine
00003E8C	005B			3589+	DC	H' 91'	test number
00003E8E	00			3590+	DC	X' 00'	
00003E8F	8E			3591+	DC	HL1' 142'	i4
00003E90	01			3592+	DC	HL1' 1'	m5
00003E91	02			3593+	DC	HL1' 2'	cc
00003E92	0D			3594+	DC	HL1' 13'	cc failed mask
				3595+V2_91	DC	FD' +9999999999999999' \	
00003E98	01634578 5D89FFFF			+			binary value for v2 packed decimal
				3596+V3_91	DC	FD' +10000000000000000' \	
				+			binary value for v3 packed decimal
00003EA0	002386F2 6FC10000			3597+	DC	CL8' VMSP'	instruction name
00003EA8	E5D4E2D7 40404040			3598+	DC	A(16)	result length
00003EB0	00000010			3599+REA91	DC	A(RE91)	result address
00003EB4	00003EF4			3600+*			INSTRUCTION UNDER TEST ROUTINE
00003EB8				3601+X91	DS	0F	
00003EB8	E320 5010 0004		00003E98	3602+	LG	R2, V2_91	convert v2
00003EBE	E320 8F57 002E		00001157	3603+	CVDG	R2, V2PACKED	
00003EC4	E720 8F57 0006		00001157	3604+	VL	V2, V2PACKED	
00003ECA	E320 5018 0004		00003EA0	3605+	LG	R2, V3_91	convert v3
00003ED0	E320 8F67 002E		00001167	3606+	CVDG	R2, V3PACKED	
00003ED6	E730 8F67 0006		00001167	3607+	VL	V3, V3PACKED	
00003EDC	E612 3018 E079			3608+	VMSP	V1, V2, V3, 142, 1	test instruction
00003EE2	E710 8F08 000E		00001108	3609+	VST	V1, V10UTPUT	save result
00003EE8	B98D 0020			3610+	EPSW	R2, R0	exptract psw
00003EEC	5020 8EE8		000010E8	3611+	ST	R2, CCPSW	to save CC
00003EF0	07FB			3612+	BR	R11	return
00003EF4				3613+RE91	DC	0F	
00003EF4				3614+	DROP	R5	
00003EF4	00000000 00009999			3615	DC	XL16' 000000000000999999999999999999900C'	
00003EFC	99999999 9999900C						
				3616			
				3617	VRI_F	VMSP, - 9999999999999999, - 1, 159, 1, 0	shamt=31
00003F08				3618+	DS	0FD	
00003F08		00003F08		3619+	USING	*, R5	base for test data and test routine

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00003F08	00003F38			3620+T92	DC	A(X92)	address of test routine
00003F0C	005C			3621+	DC	H' 92'	test number
00003F0E	00			3622+	DC	X' 00'	
00003F0F	9F			3623+	DC	HL1' 159'	i4
00003F10	01			3624+	DC	HL1' 1'	m5
00003F11	00			3625+	DC	HL1' 0'	cc
00003F12	07			3626+	DC	HL1' 7'	cc failed mask
				3627+V2_92	DC	FD' - 9999999999999999' \	
00003F18	FFDC790D 903F0001			+			binary value for v2 packed decimal
00003F20	FFFFFFFF FFFFFFFF			3628+V3_92	DC	FD' - 1'	binary value for v3 packed decimal
00003F28	E5D4E2D7 40404040			3629+	DC	CL8' VMSP'	instruction name
00003F30	00000010			3630+	DC	A(16)	result length
00003F34	00003F74			3631+REA92	DC	A(RE92)	result address
				3632+*			INSTRUCTION UNDER TEST ROUTINE
00003F38				3633+X92	DS	0F	
00003F38	E320 5010 0004		00003F18	3634+	LG	R2, V2_92	convert v2
00003F3E	E320 8F57 002E		00001157	3635+	CVDG	R2, V2PACKED	
00003F44	E720 8F57 0006		00001157	3636+	VL	V2, V2PACKED	
00003F4A	E320 5018 0004		00003F20	3637+	LG	R2, V3_92	convert v3
00003F50	E320 8F67 002E		00001167	3638+	CVDG	R2, V3PACKED	
00003F56	E730 8F67 0006		00001167	3639+	VL	V3, V3PACKED	
00003F5C	E612 3019 F079			3640+	VMSP	V1, V2, V3, 159, 1	test instruction
00003F62	E710 8F08 000E		00001108	3641+	VST	V1, V10UTPUT	save result
00003F68	B98D 0020			3642+	EPSW	R2, R0	exptract psw
00003F6C	5020 8EE8		000010E8	3643+	ST	R2, CCPSW	to save CC
00003F70	07FB			3644+	BR	R11	return
00003F74				3645+RE92	DC	0F	
00003F74				3646+	DROP	R5	
00003F74	00000000 00000000			3647	DC	XL16' 00000000000000000000000000000000C'	
00003F7C	00000000 0000000C						
				3648			
				3649	VRI_F	VMSP, - 9999999999999999, - 1, 135, 1, 2	shamt=7
00003F88				3650+	DS	0FD	
00003F88		00003F88		3651+	USING	*, R5	base for test data and test routine
00003F88	00003FB8			3652+T93	DC	A(X93)	address of test routine
00003F8C	005D			3653+	DC	H' 93'	test number
00003F8E	00			3654+	DC	X' 00'	
00003F8F	87			3655+	DC	HL1' 135'	i4
00003F90	01			3656+	DC	HL1' 1'	m5
00003F91	02			3657+	DC	HL1' 2'	cc
00003F92	0D			3658+	DC	HL1' 13'	cc failed mask
				3659+V2_93	DC	FD' - 9999999999999999' \	
00003F98	FFDC790D 903F0001			+			binary value for v2 packed decimal
00003FA0	FFFFFFFF FFFFFFFF			3660+V3_93	DC	FD' - 1'	binary value for v3 packed decimal
00003FA8	E5D4E2D7 40404040			3661+	DC	CL8' VMSP'	instruction name
00003FB0	00000010			3662+	DC	A(16)	result length
00003FB4	00003FF4			3663+REA93	DC	A(RE93)	result address
				3664+*			INSTRUCTION UNDER TEST ROUTINE
00003FB8				3665+X93	DS	0F	
00003FB8	E320 5010 0004		00003F98	3666+	LG	R2, V2_93	convert v2
00003FBE	E320 8F57 002E		00001157	3667+	CVDG	R2, V2PACKED	
00003FC4	E720 8F57 0006		00001157	3668+	VL	V2, V2PACKED	
00003FCA	E320 5018 0004		00003FA0	3669+	LG	R2, V3_93	convert v3
00003FD0	E320 8F67 002E		00001167	3670+	CVDG	R2, V3PACKED	
00003FD6	E730 8F67 0006		00001167	3671+	VL	V3, V3PACKED	
00003FDC	E612 3018 7079			3672+	VMSP	V1, V2, V3, 135, 1	test instruction

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00004092	0D			3725+	DC	HL1' 13'	cc failed mask
				3726+V2_95	DC	FD' - 9999999999999999'	\
00004098	FE9CBA87 A2760001			+			binary value for v2 packed decimal
000040A0	00000000 00000001			3727+V3_95	DC	FD' +1'	binary value for v3 packed decimal
000040A8	E5D4E2D7 40404040			3728+	DC	CL8' VMSP'	instruction name
000040B0	00000010			3729+	DC	A(16)	result length
000040B4	000040F4			3730+REA95	DC	A(RE95)	result address
				3731+*			INSTRUCTION UNDER TEST ROUTINE
000040B8				3732+X95	DS	0F	
000040B8	E320 5010 0004		00004098	3733+	LG	R2, V2_95	convert v2
000040BE	E320 8F57 002E		00001157	3734+	CVDG	R2, V2PACKED	
000040C4	E720 8F57 0006		00001157	3735+	VL	V2, V2PACKED	
000040CA	E320 5018 0004		000040A0	3736+	LG	R2, V3_95	convert v3
000040D0	E320 8F67 002E		00001167	3737+	CVDG	R2, V3PACKED	
000040D6	E730 8F67 0006		00001167	3738+	VL	V3, V3PACKED	
000040DC	E612 3098 1079			3739+	VMSP	V1, V2, V3, 129, 9	test instruction
000040E2	E710 8F08 000E		00001108	3740+	VST	V1, V10OUTPUT	save result
000040E8	B98D 0020			3741+	EPSW	R2, R0	exptract psw
000040EC	5020 8EE8		000010E8	3742+	ST	R2, CCPSW	to save CC
000040F0	07FB			3743+	BR	R11	return
000040F4				3744+RE95	DC	0F	
000040F4				3745+	DROP	R5	
000040F4	00000000 00000009			3746	DC	XL16' 00000000000000009999999999999999C'	
000040FC	99999999 9999999C						
				3747			
				3748 *			shamt=7
				3749 *			m5=13(P2=1, P3=1)
				3750	VRI_F	VMSP, - 9999999999999999, - 1000000000000000, 135, 13, 2	
00004108				3751+	DS	0FD	
00004108		00004108		3752+	USING	*, R5	base for test data and test routine
00004108	00004138			3753+T96	DC	A(X96)	address of test routine
0000410C	0060			3754+	DC	H' 96'	test number
0000410E	00			3755+	DC	X' 00'	
0000410F	87			3756+	DC	HL1' 135'	i4
00004110	0D			3757+	DC	HL1' 13'	m5
00004111	02			3758+	DC	HL1' 2'	cc
00004112	0D			3759+	DC	HL1' 13'	cc failed mask
				3760+V2_96	DC	FD' - 9999999999999999'	\
00004118	FE9CBA87 A2760001			+			binary value for v2 packed decimal
				3761+V3_96	DC	FD' - 1000000000000000'	\
				+			binary value for v3 packed decimal
00004120	FFDC790D 903F0000						
00004128	E5D4E2D7 40404040			3762+	DC	CL8' VMSP'	instruction name
00004130	00000010			3763+	DC	A(16)	result length
00004134	00004174			3764+REA96	DC	A(RE96)	result address
				3765+*			INSTRUCTION UNDER TEST ROUTINE
00004138				3766+X96	DS	0F	
00004138	E320 5010 0004		00004118	3767+	LG	R2, V2_96	convert v2
0000413E	E320 8F57 002E		00001157	3768+	CVDG	R2, V2PACKED	
00004144	E720 8F57 0006		00001157	3769+	VL	V2, V2PACKED	
0000414A	E320 5018 0004		00004120	3770+	LG	R2, V3_96	convert v3
00004150	E320 8F67 002E		00001167	3771+	CVDG	R2, V3PACKED	
00004156	E730 8F67 0006		00001167	3772+	VL	V3, V3PACKED	
0000415C	E612 30D8 7079			3773+	VMSP	V1, V2, V3, 135, 13	test instruction
00004162	E710 8F08 000E		00001108	3774+	VST	V1, V10OUTPUT	save result
00004168	B98D 0020			3775+	EPSW	R2, R0	exptract psw
0000416C	5020 8EE8		000010E8	3776+	ST	R2, CCPSW	to save CC

[illegible]

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00004228	E5D4E2D7 40404040			3829+	DC	CL8' VMSP'	instruction name
00004230	00000010			3830+	DC	A(16)	result length
00004234	00004274			3831+REA98	DC	A(RE98)	result address
				3832+*			INSTRUCTION UNDER TEST ROUTINE
00004238				3833+X98	DS	OF	
00004238	E320 5010 0004		00004218	3834+	LG	R2, V2_98	convert v2
0000423E	E320 8F57 002E		00001157	3835+	CVDG	R2, V2PACKED	
00004244	E720 8F57 0006		00001157	3836+	VL	V2, V2PACKED	
0000424A	E320 5018 0004		00004220	3837+	LG	R2, V3_98	convert v3
00004250	E320 8F67 002E		00001167	3838+	CVDG	R2, V3PACKED	
00004256	E730 8F67 0006		00001167	3839+	VL	V3, V3PACKED	
0000425C	E612 30D8 4079			3840+	VMSP	V1, V2, V3, 132, 13	test instruction
00004262	E710 8F08 000E		00001108	3841+	VST	V1, V10OUTPUT	save result
00004268	B98D 0020			3842+	EPSW	R2, R0	exptract psw
0000426C	5020 8EE8		000010E8	3843+	ST	R2, CCPSW	to save CC
00004270	07FB			3844+	BR	R11	return
00004274				3845+RE98	DC	OF	
00004274				3846+	DROP	R5	
00004274	00000000 00000000			3847	DC	XL16' 00000000000000000000099999999999C'	
0000427C	00099999 9999999C						
				3848			
				3849 *			shamt=31
				3850 *			m5=3(P1=1)
00004288				3851	VRI_F	VMSP, +9999999999999999, +1000000000000000, 159, 3, 2	
00004288		00004288		3852+	DS	OFD	
00004288	000042B8			3853+	USING	*, R5	base for test data and test routine
0000428C	0063			3854+T99	DC	A(X99)	address of test routine
0000428E	00			3855+	DC	H' 99'	test number
0000428E	00			3856+	DC	X' 00'	
0000428F	9F			3857+	DC	HL1' 159'	i4
00004290	03			3858+	DC	HL1' 3'	m5
00004291	02			3859+	DC	HL1' 2'	cc
00004292	0D			3860+	DC	HL1' 13'	cc failed mask
00004298	01634578 5D89FFFF			3861+V2_99	DC	FD' +9999999999999999' \	
				+			binary value for v2 packed decimal
000042A0	002386F2 6FC10000			3862+V3_99	DC	FD' +1000000000000000' \	
000042A8	E5D4E2D7 40404040			+			binary value for v3 packed decimal
000042B0	00000010			3863+	DC	CL8' VMSP'	instruction name
000042B4	000042F4			3864+	DC	A(16)	result length
				3865+REA99	DC	A(RE99)	result address
				3866+*			INSTRUCTION UNDER TEST ROUTINE
000042B8				3867+X99	DS	OF	
000042B8	E320 5010 0004		00004298	3868+	LG	R2, V2_99	convert v2
000042BE	E320 8F57 002E		00001157	3869+	CVDG	R2, V2PACKED	
000042C4	E720 8F57 0006		00001157	3870+	VL	V2, V2PACKED	
000042CA	E320 5018 0004		000042A0	3871+	LG	R2, V3_99	convert v3
000042D0	E320 8F67 002E		00001167	3872+	CVDG	R2, V3PACKED	
000042D6	E730 8F67 0006		00001167	3873+	VL	V3, V3PACKED	
000042DC	E612 3039 F079			3874+	VMSP	V1, V2, V3, 159, 3	test instruction
000042E2	E710 8F08 000E		00001108	3875+	VST	V1, V10OUTPUT	save result
000042E8	B98D 0020			3876+	EPSW	R2, R0	exptract psw
000042EC	5020 8EE8		000010E8	3877+	ST	R2, CCPSW	to save CC
000042F0	07FB			3878+	BR	R11	return
000042F4				3879+RE99	DC	OF	
000042F4				3880+	DROP	R5	
000042F4	00000000 00000000			3881	DC	XL16' 0000000000000000000000000099F'	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
000042FC	00000000	0000099F		3882	
				3883	*-----
				3884	* VSDP - VECTOR SHIFT AND DIVIDE DECIMAL
				3885	*-----
				3886	* VSDP simple + CC checks
				3887	* i4=128(i om=1 & shant=0)
				3888	* i4=129(i om=1 & shant=1)
				3889	* i4=132(i om=1 & shant=4)
				3890	* i4=135(i om=1 & shant=7)
				3891	* i4=142(i om=1 & shant=14)
				3892	* i4=159(i om=1 & shant=31)
				3893	
				3894	VRI_F VSDP, +10, +12, 128, 1, 0 shant=0
00004308				3895+	DS OFD
00004308		00004308		3896+	USING *, R5 base for test data and test routine
00004308	00004338			3897+T100	DC A(X100) address of test routine
0000430C	0064			3898+	DC H' 100' test number
0000430E	00			3899+	DC X' 00'
0000430F	80			3900+	DC HL1' 128' i4
00004310	01			3901+	DC HL1' 1' m5
00004311	00			3902+	DC HL1' 0' cc
00004312	07			3903+	DC HL1' 7' cc failed mask
00004318	00000000	0000000A		3904+V2_100	DC FD' +10' binary value for v2 packed decimal
00004320	00000000	0000000C		3905+V3_100	DC FD' +12' binary value for v3 packed decimal
00004328	E5E2C4D7	40404040		3906+	DC CL8' VSDP' instruction name
00004330	00000010			3907+	DC A(16) result length
00004334	00004374			3908+REA100	DC A(RE100) result address
				3909+*	INSTRUCTION UNDER TEST ROUTINE
00004338				3910+X100	DS OF
00004338	E320 5010 0004		00004318	3911+	LG R2, V2_100 convert v2
0000433E	E320 8F57 002E		00001157	3912+	CVDG R2, V2PACKED
00004344	E720 8F57 0006		00001157	3913+	VL V2, V2PACKED
0000434A	E320 5018 0004		00004320	3914+	LG R2, V3_100 convert v3
00004350	E320 8F67 002E		00001167	3915+	CVDG R2, V3PACKED
00004356	E730 8F67 0006		00001167	3916+	VL V3, V3PACKED
0000435C	E612 3018 007E			3917+	VSDP V1, V2, V3, 128, 1 test instruction
00004362	E710 8F08 000E		00001108	3918+	VST V1, V1OUTPUT save result
00004368	B98D 0020			3919+	EPSW R2, R0 exptract psw
0000436C	5020 8EE8		000010E8	3920+	ST R2, CCPSW to save CC
00004370	07FB			3921+	BR R11 return
00004374				3922+RE100	DC OF
00004374				3923+	DROP R5
00004374	00000000	00000000		3924	DC XL16' 00000000000000000000000000000000C'
0000437C	00000000	0000000C			
				3925	
				3926	VRI_F VSDP, +10, +12, 129, 1, 2 shant=1
00004388				3927+	DS OFD
00004388		00004388		3928+	USING *, R5 base for test data and test routine
00004388	000043B8			3929+T101	DC A(X101) address of test routine
0000438C	0065			3930+	DC H' 101' test number
0000438E	00			3931+	DC X' 00'
0000438F	81			3932+	DC HL1' 129' i4
00004390	01			3933+	DC HL1' 1' m5
00004391	02			3934+	DC HL1' 2' cc
00004392	0D			3935+	DC HL1' 13' cc failed mask

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00004630	00000010			4099+	DC	A(16)	result length
00004634	00004674			4100+REA106	DC	A(RE106)	result address
				4101+*			INSTRUCTION UNDER TEST ROUTINE
00004638				4102+X106	DS	0F	
00004638	E320 5010 0004		00004618	4103+	LG	R2, V2_106	convert v2
0000463E	E320 8F57 002E		00001157	4104+	CVDG	R2, V2PACKED	
00004644	E720 8F57 0006		00001157	4105+	VL	V2, V2PACKED	
0000464A	E320 5018 0004		00004620	4106+	LG	R2, V3_106	convert v3
00004650	E320 8F67 002E		00001167	4107+	CVDG	R2, V3PACKED	
00004656	E730 8F67 0006		00001167	4108+	VL	V3, V3PACKED	
0000465C	E612 3018 707E			4109+	VSDP	V1, V2, V3, 135, 1	test instruction
00004662	E710 8F08 000E		00001108	4110+	VST	V1, V10UTPUT	save result
00004668	B98D 0020			4111+	EPSW	R2, R0	exptract psw
0000466C	5020 8EE8		000010E8	4112+	ST	R2, CCPSW	to save CC
00004670	07FB			4113+	BR	R11	return
00004674				4114+RE106	DC	0F	
00004674				4115+	DROP	R5	
00004674	00000000 00000000			4116	DC	XL16' 0000000000000000000000000100000000C'	
0000467C	00000010 0000000C						
				4117			
				4118	VRI_F	VSDP, +10000000010, +10, 135, 1, 2	shamt=7
00004688				4119+	DS	0FD	
00004688		00004688		4120+	USING	*, R5	base for test data and test routine
00004688	000046B8			4121+T107	DC	A(X107)	address of test routine
0000468C	006B			4122+	DC	H' 107'	test number
0000468E	00			4123+	DC	X' 00'	
0000468F	87			4124+	DC	HL1' 135'	i4
00004690	01			4125+	DC	HL1' 1'	m5
00004691	02			4126+	DC	HL1' 2'	cc
00004692	0D			4127+	DC	HL1' 13'	cc failed mask
00004698	00000002 540BE40A			4128+V2_107	DC	FD' +10000000010'	binary value for v2 packed decimal
000046A0	00000000 0000000A			4129+V3_107	DC	FD' +10'	binary value for v3 packed decimal
000046A8	E5E2C4D7 40404040			4130+	DC	CL8' VSDP'	instruction name
000046B0	00000010			4131+	DC	A(16)	result length
000046B4	000046F4			4132+REA107	DC	A(RE107)	result address
				4133+*			INSTRUCTION UNDER TEST ROUTINE
000046B8				4134+X107	DS	0F	
000046B8	E320 5010 0004		00004698	4135+	LG	R2, V2_107	convert v2
000046BE	E320 8F57 002E		00001157	4136+	CVDG	R2, V2PACKED	
000046C4	E720 8F57 0006		00001157	4137+	VL	V2, V2PACKED	
000046CA	E320 5018 0004		000046A0	4138+	LG	R2, V3_107	convert v3
000046D0	E320 8F67 002E		00001167	4139+	CVDG	R2, V3PACKED	
000046D6	E730 8F67 0006		00001167	4140+	VL	V3, V3PACKED	
000046DC	E612 3018 707E			4141+	VSDP	V1, V2, V3, 135, 1	test instruction
000046E2	E710 8F08 000E		00001108	4142+	VST	V1, V10UTPUT	save result
000046E8	B98D 0020			4143+	EPSW	R2, R0	exptract psw
000046EC	5020 8EE8		000010E8	4144+	ST	R2, CCPSW	to save CC
000046F0	07FB			4145+	BR	R11	return
000046F4				4146+RE107	DC	0F	
000046F4				4147+	DROP	R5	
000046F4	00000000 00000010			4148	DC	XL16' 000000000000000010000000010000000C'	
000046FC	00000001 0000000C						
				4149			
				4150 * VSDP larger #'s			
				4151	VRI_F	VSDP, +9999999999999999, +1, 132, 1, 2	shamt=4
00004708				4152+	DS	0FD	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000047DC	E612 3018 007E			4206+	VSDP	V1, V2, V3, 128, 1	test instruction
000047E2	E710 8F08 000E		00001108	4207+	VST	V1, V10OUTPUT	save result
000047E8	B98D 0020			4208+	EPSW	R2, R0	exptract psw
000047EC	5020 8EE8		000010E8	4209+	ST	R2, CCPSW	to save CC
000047F0	07FB			4210+	BR	R11	return
000047F4				4211+RE109	DC	0F	
000047F4				4212+	DROP	R5	
000047F4	00000000 00000000			4213	DC	XL16' 000000000000000000999999999999D'	
000047FC	09999999 9999999D						
				4214			
				4215	VRI_F	VSDP, - 9999999999999999, - 1, 128, 1, 2	shamt=0
00004808				4216+	DS	0FD	
00004808		00004808		4217+	USING	*, R5	base for test data and test routine
00004808	00004838			4218+T110	DC	A(X110)	address of test routine
0000480C	006E			4219+	DC	H' 110'	test number
0000480E	00			4220+	DC	X' 00'	
0000480F	80			4221+	DC	HL1' 128'	i4
00004810	01			4222+	DC	HL1' 1'	m5
00004811	02			4223+	DC	HL1' 2'	cc
00004812	0D			4224+	DC	HL1' 13'	cc failed mask
				4225+V2_110	DC	FD' - 9999999999999999' \	
00004818	FFDC790D 903F0001			+			binary value for v2 packed decimal
00004820	FFFFFFFF FFFFFFFF			4226+V3_110	DC	FD' - 1'	binary value for v3 packed decimal
00004828	E5E2C4D7 40404040			4227+	DC	CL8' VSDP'	instruction name
00004830	00000010			4228+	DC	A(16)	result length
00004834	00004874			4229+REA110	DC	A(RE110)	result address
				4230+*			INSTRUCTION UNDER TEST ROUTINE
00004838				4231+X110	DS	0F	
00004838	E320 5010 0004		00004818	4232+	LG	R2, V2_110	convert v2
0000483E	E320 8F57 002E		00001157	4233+	CVDG	R2, V2PACKED	
00004844	E720 8F57 0006		00001157	4234+	VL	V2, V2PACKED	
0000484A	E320 5018 0004		00004820	4235+	LG	R2, V3_110	convert v3
00004850	E320 8F67 002E		00001167	4236+	CVDG	R2, V3PACKED	
00004856	E730 8F67 0006		00001167	4237+	VL	V3, V3PACKED	
0000485C	E612 3018 007E			4238+	VSDP	V1, V2, V3, 128, 1	test instruction
00004862	E710 8F08 000E		00001108	4239+	VST	V1, V10OUTPUT	save result
00004868	B98D 0020			4240+	EPSW	R2, R0	exptract psw
0000486C	5020 8EE8		000010E8	4241+	ST	R2, CCPSW	to save CC
00004870	07FB			4242+	BR	R11	return
00004874				4243+RE110	DC	0F	
00004874				4244+	DROP	R5	
00004874	00000000 00000009			4245	DC	XL16' 000000000000000000999999999999C'	
0000487C	99999999 9999999C						
				4246			
				4247	VRI_F	VSDP, - 9999999999999999, - 1, 142, 1, 2	shamt=14
00004888				4248+	DS	0FD	
00004888		00004888		4249+	USING	*, R5	base for test data and test routine
00004888	000048B8			4250+T111	DC	A(X111)	address of test routine
0000488C	006F			4251+	DC	H' 111'	test number
0000488E	00			4252+	DC	X' 00'	
0000488F	8E			4253+	DC	HL1' 142'	i4
00004890	01			4254+	DC	HL1' 1'	m5
00004891	02			4255+	DC	HL1' 2'	cc
00004892	0D			4256+	DC	HL1' 13'	cc failed mask
				4257+V2_111	DC	FD' - 9999999999999999' \	
00004898	FFDC790D 903F0001			+			binary value for v2 packed decimal

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
000048A0	FFFFFFFF FFFFFFFF			4258+V3_111	DC	FD' - 1'
000048A8	E5E2C4D7 40404040			4259+	DC	CL8' VSDP'
000048B0	00000010			4260+	DC	A(16)
000048B4	000048F4			4261+REA111	DC	A(RE111)
				4262+*		INSTRUCTION UNDER TEST ROUTINE
000048B8				4263+X111	DS	OF
000048B8	E320 5010 0004		00004898	4264+	LG	R2, V2_111
000048BE	E320 8F57 002E		00001157	4265+	CVDG	R2, V2PACKED
000048C4	E720 8F57 0006		00001157	4266+	VL	V2, V2PACKED
000048CA	E320 5018 0004		000048A0	4267+	LG	R2, V3_111
000048D0	E320 8F67 002E		00001167	4268+	CVDG	R2, V3PACKED
000048D6	E730 8F67 0006		00001167	4269+	VL	V3, V3PACKED
000048DC	E612 3018 E07E			4270+	VSDP	V1, V2, V3, 142, 1
000048E2	E710 8F08 000E		00001108	4271+	VST	V1, V10OUTPUT
000048E8	B98D 0020			4272+	EPSW	R2, R0
000048EC	5020 8EE8		000010E8	4273+	ST	R2, CCPSW
000048F0	07FB			4274+	BR	R11
000048F4				4275+RE111	DC	OF
000048F4				4276+	DROP	R5
000048F4	09999999 99999999			4277	DC	XL16' 099999999999999900000000000000C'
000048FC	90000000 0000000C					
				4278		
				4279	VRI_F	VSDP, +99999999999999, +1234, 129, 1, 2
00004908				4280+	DS	OFD
00004908		00004908		4281+	USING	*, R5
00004908	00004938			4282+T112	DC	A(X112)
0000490C	0070			4283+	DC	H' 112'
0000490E	00			4284+	DC	X' 00'
0000490F	81			4285+	DC	HL1' 129'
00004910	01			4286+	DC	HL1' 1'
00004911	02			4287+	DC	HL1' 2'
00004912	0D			4288+	DC	HL1' 13'
				4289+V2_112	DC	FD' +99999999999999' \
00004918	00000918 4E729FFF			+		binary value for v2 packed decimal
00004920	00000000 000004D2			4290+V3_112	DC	FD' +1234'
00004928	E5E2C4D7 40404040			4291+	DC	CL8' VSDP'
00004930	00000010			4292+	DC	A(16)
00004934	00004974			4293+REA112	DC	A(RE112)
				4294+*		INSTRUCTION UNDER TEST ROUTINE
00004938				4295+X112	DS	OF
00004938	E320 5010 0004		00004918	4296+	LG	R2, V2_112
0000493E	E320 8F57 002E		00001157	4297+	CVDG	R2, V2PACKED
00004944	E720 8F57 0006		00001157	4298+	VL	V2, V2PACKED
0000494A	E320 5018 0004		00004920	4299+	LG	R2, V3_112
00004950	E320 8F67 002E		00001167	4300+	CVDG	R2, V3PACKED
00004956	E730 8F67 0006		00001167	4301+	VL	V3, V3PACKED
0000495C	E612 3018 107E			4302+	VSDP	V1, V2, V3, 129, 1
00004962	E710 8F08 000E		00001108	4303+	VST	V1, V10OUTPUT
00004968	B98D 0020			4304+	EPSW	R2, R0
0000496C	5020 8EE8		000010E8	4305+	ST	R2, CCPSW
00004970	07FB			4306+	BR	R11
00004974				4307+RE112	DC	OF
00004974				4308+	DROP	R5
00004974	00000000 00000000			4309	DC	XL16' 0000000000000000000000081037277147C'
0000497C	00008103 7277147C					
				4310		

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00004988				4311	VRI_F	VSDP, +999999999999999, +12345, 129, 1, 2 shamt=1
00004988		00004988		4312+	DS	OFD
00004988	000049B8			4313+	USING	*, R5 base for test data and test routine
0000498C	0071			4314+T113	DC	A(X113) address of test routine
0000498E	00			4315+	DC	H' 113' test number
0000498F	81			4316+	DC	X' 00'
00004990	01			4317+	DC	HL1' 129' i4
00004991	02			4318+	DC	HL1' 1' m5
00004992	0D			4319+	DC	HL1' 2' cc
				4320+	DC	HL1' 13' cc failed mask
				4321+V2_113	DC	FD' +999999999999999' \
00004998	00038D7E A4C67FFF			+		binary value for v2 packed decimal
000049A0	00000000 00003039			4322+V3_113	DC	FD' +12345' binary value for v3 packed decimal
000049A8	E5E2C4D7 40404040			4323+	DC	CL8' VSDP' instruction name
000049B0	00000010			4324+	DC	A(16) result length
000049B4	000049F4			4325+REA113	DC	A(RE113) result address
				4326+*		INSTRUCTION UNDER TEST ROUTINE
000049B8				4327+X113	DS	OF
000049B8	E320 5010 0004		00004998	4328+	LG	R2, V2_113 convert v2
000049BE	E320 8F57 002E		00001157	4329+	CVDG	R2, V2PACKED
000049C4	E720 8F57 0006		00001157	4330+	VL	V2, V2PACKED
000049CA	E320 5018 0004		000049A0	4331+	LG	R2, V3_113 convert v3
000049D0	E320 8F67 002E		00001167	4332+	CVDG	R2, V3PACKED
000049D6	E730 8F67 0006		00001167	4333+	VL	V3, V3PACKED
000049DC	E612 3018 107E			4334+	VSDP	V1, V2, V3, 129, 1 test instruction
000049E2	E710 8F08 000E		00001108	4335+	VST	V1, V10UTPUT save result
000049E8	B98D 0020			4336+	EPSW	R2, R0 exptrect psw
000049EC	5020 8EE8		000010E8	4337+	ST	R2, CCPSW to save CC
000049F0	07FB			4338+	BR	R11 return
000049F4				4339+RE113	DC	OF
000049F4				4340+	DROP	R5
000049F4	00000000 00000000			4341	DC	XL16' 000000000000000000000810044552450C'
000049FC	00081004 4552450C					
				4342		
				4343 *	VSDP	larger #'s CS=1 for all m5
				4344 *		check forced positive
				4345 *		
00004A08				4346	VRI_F	VSDP, - 999999999999999, +1, 129, 9, 2 shamt=1
00004A08		00004A08		4347+	DS	OFD m5=9(P2=1)
00004A08	00004A38			4348+	USING	*, R5 base for test data and test routine
00004A0C	0072			4349+T114	DC	A(X114) address of test routine
00004A0E	00			4350+	DC	H' 114' test number
00004A0F	81			4351+	DC	X' 00'
00004A10	09			4352+	DC	HL1' 129' i4
00004A11	02			4353+	DC	HL1' 9' m5
00004A12	0D			4354+	DC	HL1' 2' cc
				4355+	DC	HL1' 13' cc failed mask
				4356+V2_114	DC	FD' - 999999999999999' \
00004A18	FE9CBA87 A2760001			+		binary value for v2 packed decimal
00004A20	00000000 00000001			4357+V3_114	DC	FD' +1' binary value for v3 packed decimal
00004A28	E5E2C4D7 40404040			4358+	DC	CL8' VSDP' instruction name
00004A30	00000010			4359+	DC	A(16) result length
00004A34	00004A74			4360+REA114	DC	A(RE114) result address
				4361+*		INSTRUCTION UNDER TEST ROUTINE
00004A38				4362+X114	DS	OF
00004A38	E320 5010 0004		00004A18	4363+	LG	R2, V2_114 convert v2

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00004A3E	E320 8F57 002E		00001157	4364+	CVDG	R2, V2PACKED	
00004A44	E720 8F57 0006		00001157	4365+	VL	V2, V2PACKED	
00004A4A	E320 5018 0004		00004A20	4366+	LG	R2, V3_114	convert v3
00004A50	E320 8F67 002E		00001167	4367+	CVDG	R2, V3PACKED	
00004A56	E730 8F67 0006		00001167	4368+	VL	V3, V3PACKED	
00004A5C	E612 3098 107E			4369+	VSDP	V1, V2, V3, 129, 9	test instruction
00004A62	E710 8F08 000E		00001108	4370+	VST	V1, V10OUTPUT	save result
00004A68	B98D 0020			4371+	EPSW	R2, R0	exptract psw
00004A6C	5020 8EE8		000010E8	4372+	ST	R2, CCPSW	to save CC
00004A70	07FB			4373+	BR	R11	return
00004A74				4374+RE114	DC	0F	
00004A74				4375+	DROP	R5	
00004A74	00000000 00000999			4376	DC	XL16' 00000000000000099999999999999999C'	
00004A7C	99999999 9999990C						
				4377			
				4378 *			shamt=3
				4379	VRI_F	VSDP, +9999999999999999, - 1000, 131, 13, 2	m5=13(P2=1, P3=1)
00004A88				4380+	DS	0FD	
00004A88		00004A88		4381+	USING	*, R5	base for test data and test routine
00004A88	00004AB8			4382+T115	DC	A(X115)	address of test routine
00004A8C	0073			4383+	DC	H' 115'	test number
00004A8E	00			4384+	DC	X' 00'	
00004A8F	83			4385+	DC	HL1' 131'	i4
00004A90	0D			4386+	DC	HL1' 13'	m5
00004A91	02			4387+	DC	HL1' 2'	cc
00004A92	0D			4388+	DC	HL1' 13'	cc failed mask
				4389+V2_115	DC	FD' +9999999999999999' \	
00004A98	01634578 5D89FFFF			+			binary value for v2 packed decimal
00004AA0	FFFFFFFF FFFFC18			4390+V3_115	DC	FD' - 1000'	binary value for v3 packed decimal
00004AA8	E5E2C4D7 40404040			4391+	DC	CL8' VSDP'	instruction name
00004AB0	00000010			4392+	DC	A(16)	result length
00004AB4	00004AF4			4393+REA115	DC	A(RE115)	result address
				4394+*			INSTRUCTION UNDER TEST ROUTINE
00004AB8				4395+X115	DS	0F	
00004AB8	E320 5010 0004		00004A98	4396+	LG	R2, V2_115	convert v2
00004ABE	E320 8F57 002E		00001157	4397+	CVDG	R2, V2PACKED	
00004AC4	E720 8F57 0006		00001157	4398+	VL	V2, V2PACKED	
00004ACA	E320 5018 0004		00004AA0	4399+	LG	R2, V3_115	convert v3
00004AD0	E320 8F67 002E		00001167	4400+	CVDG	R2, V3PACKED	
00004AD6	E730 8F67 0006		00001167	4401+	VL	V3, V3PACKED	
00004ADC	E612 30D8 307E			4402+	VSDP	V1, V2, V3, 131, 13	test instruction
00004AE2	E710 8F08 000E		00001108	4403+	VST	V1, V10OUTPUT	save result
00004AE8	B98D 0020			4404+	EPSW	R2, R0	exptract psw
00004AEC	5020 8EE8		000010E8	4405+	ST	R2, CCPSW	to save CC
00004AF0	07FB			4406+	BR	R11	return
00004AF4				4407+RE115	DC	0F	
00004AF4				4408+	DROP	R5	
00004AF4	00000000 00000099			4409	DC	XL16' 00000000000000009999999999999999C'	
00004AFC	99999999 9999999C						
				4410			
				4411 *			shamt=3
				4412	VRI_F	VSDP, - 9999999999999999, - 1, 131, 3, 2	m5=3(P1=1)
00004B08				4413+	DS	0FD	
00004B08		00004B08		4414+	USING	*, R5	base for test data and test routine
00004B08	00004B38			4415+T116	DC	A(X116)	address of test routine
00004B0C	0074			4416+	DC	H' 116'	test number

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00004B0E	00			4417+	DC	X' 00'	
00004B0F	83			4418+	DC	HL1' 131'	i4
00004B10	03			4419+	DC	HL1' 3'	m5
00004B11	02			4420+	DC	HL1' 2'	cc
00004B12	0D			4421+	DC	HL1' 13'	cc failed mask
				4422+V2_116	DC	FD' - 9999999999999999'	\
00004B18	FFDC790D 903F0001			+			binary value for v2 packed decimal
00004B20	FFFFFFFF FFFFFFFF			4423+V3_116	DC	FD' - 1'	binary value for v3 packed decimal
00004B28	E5E2C4D7 40404040			4424+	DC	CL8' VSDP'	instruction name
00004B30	00000010			4425+	DC	A(16)	result length
00004B34	00004B74			4426+REA116	DC	A(RE116)	result address
				4427+*			INSTRUCTION UNDER TEST ROUTINE
00004B38				4428+X116	DS	0F	
00004B38	E320 5010 0004		00004B18	4429+	LG	R2, V2_116	convert v2
00004B3E	E320 8F57 002E		00001157	4430+	CVDG	R2, V2PACKED	
00004B44	E720 8F57 0006		00001157	4431+	VL	V2, V2PACKED	
00004B4A	E320 5018 0004		00004B20	4432+	LG	R2, V3_116	convert v3
00004B50	E320 8F67 002E		00001167	4433+	CVDG	R2, V3PACKED	
00004B56	E730 8F67 0006		00001167	4434+	VL	V3, V3PACKED	
00004B5C	E612 3038 307E			4435+	VSDP	V1, V2, V3, 131, 3	test instruction
00004B62	E710 8F08 000E		00001108	4436+	VST	V1, V10UTPUT	save result
00004B68	B98D 0020			4437+	EPSW	R2, R0	exptract psw
00004B6C	5020 8EE8		000010E8	4438+	ST	R2, CCPSW	to save CC
00004B70	07FB			4439+	BR	R11	return
00004B74				4440+RE116	DC	0F	
00004B74				4441+	DROP	R5	
00004B74	00000000 00009999			4442	DC	XL16' 0000000000000999999999999999000F'	
00004B7C	99999999 9999000F						
				4443			
				4444 *			shamt=7
				4445 *			m5=13(P2=1, P3=1)
				4446	VRI_F	VSDP, +9999999999999999, - 1, 135, 13, 2	
00004B88				4447+	DS	0FD	
00004B88		00004B88		4448+	USING	*, R5	base for test data and test routine
00004B88	00004BB8			4449+T117	DC	A(X117)	address of test routine
00004B8C	0075			4450+	DC	H' 117'	test number
00004B8E	00			4451+	DC	X' 00'	
00004B8F	87			4452+	DC	HL1' 135'	i4
00004B90	0D			4453+	DC	HL1' 13'	m5
00004B91	02			4454+	DC	HL1' 2'	cc
00004B92	0D			4455+	DC	HL1' 13'	cc failed mask
				4456+V2_117	DC	FD' +9999999999999999'	\
00004B98	002386F2 6FC0FFFF			+			binary value for v2 packed decimal
00004BA0	FFFFFFFF FFFFFFFF			4457+V3_117	DC	FD' - 1'	binary value for v3 packed decimal
00004BA8	E5E2C4D7 40404040			4458+	DC	CL8' VSDP'	instruction name
00004BB0	00000010			4459+	DC	A(16)	result length
00004BB4	00004BF4			4460+REA117	DC	A(RE117)	result address
				4461+*			INSTRUCTION UNDER TEST ROUTINE
00004BB8				4462+X117	DS	0F	
00004BB8	E320 5010 0004		00004B98	4463+	LG	R2, V2_117	convert v2
00004BBE	E320 8F57 002E		00001157	4464+	CVDG	R2, V2PACKED	
00004BC4	E720 8F57 0006		00001157	4465+	VL	V2, V2PACKED	
00004BCA	E320 5018 0004		00004BA0	4466+	LG	R2, V3_117	convert v3
00004BD0	E320 8F67 002E		00001167	4467+	CVDG	R2, V3PACKED	
00004BD6	E730 8F67 0006		00001167	4468+	VL	V3, V3PACKED	
00004BDC	E612 30D8 707E			4469+	VSDP	V1, V2, V3, 135, 13	test instruction

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00004D68	00001D08			4577+	DC	A(T24)	address of test
00004D6C	00001D88			4578+	DC	A(T25)	address of test
00004D70	00001E08			4579+	DC	A(T26)	address of test
00004D74	00001E88			4580+	DC	A(T27)	address of test
00004D78	00001F08			4581+	DC	A(T28)	address of test
00004D7C	00001F88			4582+	DC	A(T29)	address of test
00004D80	00002008			4583+	DC	A(T30)	address of test
00004D84	00002088			4584+	DC	A(T31)	address of test
00004D88	00002108			4585+	DC	A(T32)	address of test
00004D8C	00002188			4586+	DC	A(T33)	address of test
00004D90	00002208			4587+	DC	A(T34)	address of test
00004D94	00002288			4588+	DC	A(T35)	address of test
00004D98	00002308			4589+	DC	A(T36)	address of test
00004D9C	00002388			4590+	DC	A(T37)	address of test
00004DA0	00002408			4591+	DC	A(T38)	address of test
00004DA4	00002488			4592+	DC	A(T39)	address of test
00004DA8	00002508			4593+	DC	A(T40)	address of test
00004DAC	00002588			4594+	DC	A(T41)	address of test
00004DB0	00002608			4595+	DC	A(T42)	address of test
00004DB4	00002688			4596+	DC	A(T43)	address of test
00004DB8	00002708			4597+	DC	A(T44)	address of test
00004DBC	00002788			4598+	DC	A(T45)	address of test
00004DC0	00002808			4599+	DC	A(T46)	address of test
00004DC4	00002888			4600+	DC	A(T47)	address of test
00004DC8	00002908			4601+	DC	A(T48)	address of test
00004DCC	00002988			4602+	DC	A(T49)	address of test
00004DD0	00002A08			4603+	DC	A(T50)	address of test
00004DD4	00002A88			4604+	DC	A(T51)	address of test
00004DD8	00002B08			4605+	DC	A(T52)	address of test
00004DDC	00002B88			4606+	DC	A(T53)	address of test
00004DE0	00002C08			4607+	DC	A(T54)	address of test
00004DE4	00002C88			4608+	DC	A(T55)	address of test
00004DE8	00002D08			4609+	DC	A(T56)	address of test
00004DEC	00002D88			4610+	DC	A(T57)	address of test
00004DF0	00002E08			4611+	DC	A(T58)	address of test
00004DF4	00002E88			4612+	DC	A(T59)	address of test
00004DF8	00002F08			4613+	DC	A(T60)	address of test
00004DFC	00002F88			4614+	DC	A(T61)	address of test
00004E00	00003008			4615+	DC	A(T62)	address of test
00004E04	00003088			4616+	DC	A(T63)	address of test
00004E08	00003108			4617+	DC	A(T64)	address of test
00004E0C	00003188			4618+	DC	A(T65)	address of test
00004E10	00003208			4619+	DC	A(T66)	address of test
00004E14	00003288			4620+	DC	A(T67)	address of test
00004E18	00003308			4621+	DC	A(T68)	address of test
00004E1C	00003388			4622+	DC	A(T69)	address of test
00004E20	00003408			4623+	DC	A(T70)	address of test
00004E24	00003488			4624+	DC	A(T71)	address of test
00004E28	00003508			4625+	DC	A(T72)	address of test
00004E2C	00003588			4626+	DC	A(T73)	address of test
00004E30	00003608			4627+	DC	A(T74)	address of test
00004E34	00003688			4628+	DC	A(T75)	address of test
00004E38	00003708			4629+	DC	A(T76)	address of test
00004E3C	00003788			4630+	DC	A(T77)	address of test
00004E40	00003808			4631+	DC	A(T78)	address of test
00004E44	00003888			4632+	DC	A(T79)	address of test

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00004E48	00003908		4633+	DC	A(T80)	address of test
00004E4C	00003988		4634+	DC	A(T81)	address of test
00004E50	00003A08		4635+	DC	A(T82)	address of test
00004E54	00003A88		4636+	DC	A(T83)	address of test
00004E58	00003B08		4637+	DC	A(T84)	address of test
00004E5C	00003B88		4638+	DC	A(T85)	address of test
00004E60	00003C08		4639+	DC	A(T86)	address of test
00004E64	00003C88		4640+	DC	A(T87)	address of test
00004E68	00003D08		4641+	DC	A(T88)	address of test
00004E6C	00003D88		4642+	DC	A(T89)	address of test
00004E70	00003E08		4643+	DC	A(T90)	address of test
00004E74	00003E88		4644+	DC	A(T91)	address of test
00004E78	00003F08		4645+	DC	A(T92)	address of test
00004E7C	00003F88		4646+	DC	A(T93)	address of test
00004E80	00004008		4647+	DC	A(T94)	address of test
00004E84	00004088		4648+	DC	A(T95)	address of test
00004E88	00004108		4649+	DC	A(T96)	address of test
00004E8C	00004188		4650+	DC	A(T97)	address of test
00004E90	00004208		4651+	DC	A(T98)	address of test
00004E94	00004288		4652+	DC	A(T99)	address of test
00004E98	00004308		4653+	DC	A(T100)	address of test
00004E9C	00004388		4654+	DC	A(T101)	address of test
00004EA0	00004408		4655+	DC	A(T102)	address of test
00004EA4	00004488		4656+	DC	A(T103)	address of test
00004EA8	00004508		4657+	DC	A(T104)	address of test
00004EAC	00004588		4658+	DC	A(T105)	address of test
00004EB0	00004608		4659+	DC	A(T106)	address of test
00004EB4	00004688		4660+	DC	A(T107)	address of test
00004EB8	00004708		4661+	DC	A(T108)	address of test
00004EBC	00004788		4662+	DC	A(T109)	address of test
00004EC0	00004808		4663+	DC	A(T110)	address of test
00004EC4	00004888		4664+	DC	A(T111)	address of test
00004EC8	00004908		4665+	DC	A(T112)	address of test
00004ECC	00004988		4666+	DC	A(T113)	address of test
00004ED0	00004A08		4667+	DC	A(T114)	address of test
00004ED4	00004A88		4668+	DC	A(T115)	address of test
00004ED8	00004B08		4669+	DC	A(T116)	address of test
00004EDC	00004B88		4670+	DC	A(T117)	address of test
00004EE0	00004C08		4671+	DC	A(T118)	address of test
00004EE4	00004C88		4672+	DC	A(T119)	address of test
			4673+*			
00004EE8	00000000		4674+	DC	A(0)	END OF TABLE
00004EEC	00000000		4675+	DC	A(0)	
			4676			
00004EF0	00000000		4677	DC	F' 0'	END OF TABLE
00004EF4	00000000		4678	DC	F' 0'	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				4680	*****
				4681	* Register equates
				4682	*****
		00000000	00000001	4684 R0	EQU 0
		00000001	00000001	4685 R1	EQU 1
		00000002	00000001	4686 R2	EQU 2
		00000003	00000001	4687 R3	EQU 3
		00000004	00000001	4688 R4	EQU 4
		00000005	00000001	4689 R5	EQU 5
		00000006	00000001	4690 R6	EQU 6
		00000007	00000001	4691 R7	EQU 7
		00000008	00000001	4692 R8	EQU 8
		00000009	00000001	4693 R9	EQU 9
		0000000A	00000001	4694 R10	EQU 10
		0000000B	00000001	4695 R11	EQU 11
		0000000C	00000001	4696 R12	EQU 12
		0000000D	00000001	4697 R13	EQU 13
		0000000E	00000001	4698 R14	EQU 14
		0000000F	00000001	4699 R15	EQU 15
				4701	*****
				4702	* Register equates
				4703	*****
		00000000	00000001	4705 V0	EQU 0
		00000001	00000001	4706 V1	EQU 1
		00000002	00000001	4707 V2	EQU 2
		00000003	00000001	4708 V3	EQU 3
		00000004	00000001	4709 V4	EQU 4
		00000005	00000001	4710 V5	EQU 5
		00000006	00000001	4711 V6	EQU 6
		00000007	00000001	4712 V7	EQU 7
		00000008	00000001	4713 V8	EQU 8
		00000009	00000001	4714 V9	EQU 9
		0000000A	00000001	4715 V10	EQU 10
		0000000B	00000001	4716 V11	EQU 11
		0000000C	00000001	4717 V12	EQU 12
		0000000D	00000001	4718 V13	EQU 13
		0000000E	00000001	4719 V14	EQU 14
		0000000F	00000001	4720 V15	EQU 15
		00000010	00000001	4721 V16	EQU 16
		00000011	00000001	4722 V17	EQU 17
		00000012	00000001	4723 V18	EQU 18
		00000013	00000001	4724 V19	EQU 19
		00000014	00000001	4725 V20	EQU 20
		00000015	00000001	4726 V21	EQU 21

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES												
PRTM5	C	00001051	2	471	320												
PRTNAME	C	00001033	8	466	306												
PRTNUM	C	00001018	3	464	304												
R0	U	00000000	1	4684	123	174	177	197	199	200	201	206	223	227	228	288	322
					330	331	357	359	375	378	380	382	384	399	681	713	745
					777	809	841	874	906	938	972	1004	1036	1072	1104	1136	1168
					1200	1232	1264	1297	1329	1361	1393	1427	1459	1491	1523	1559	1591
					1623	1655	1687	1719	1751	1784	1816	1848	1880	1912	1946	1979	2011
					2043	2076	2112	2144	2176	2208	2240	2272	2304	2337	2369	2401	2433
					2465	2497	2531	2563	2595	2628	2660	2693	2729	2761	2793	2825	2857
					2889	2921	2954	2986	3018	3050	3082	3114	3148	3180	3212	3245	3277
					3309	3352	3384	3416	3448	3480	3512	3544	3577	3610	3642	3674	3706
					3741	3775	3808	3842	3876	3919	3951	3983	4015	4047	4079	4111	4143
					4176	4208	4240	4272	4304	4336	4371	4404	4437	4471	4504	4538	
					207	234	235	236	239	240	252	253	254	259	260	261	262
					289	323	340	341	389	403							
R1	U	00000001	1	4685	207	234	235	236	239	240	252	253	254	259	260	261	262
R10	U	0000000A	1	4694	162	171	172										
R11	U	0000000B	1	4695	231	232	683	715	747	779	811	843	876	908	940	974	1006
					1038	1074	1106	1138	1170	1202	1234	1266	1299	1331	1363	1395	1429
					1461	1493	1525	1561	1593	1625	1657	1689	1721	1753	1786	1818	1850
					1882	1914	1948	1981	2013	2045	2078	2114	2146	2178	2210	2242	2274
					2306	2339	2371	2403	2435	2467	2499	2533	2565	2597	2630	2662	2695
					2731	2763	2795	2827	2859	2891	2923	2956	2988	3020	3052	3084	3116
					3150	3182	3214	3247	3279	3311	3354	3386	3418	3450	3482	3514	3546
					3579	3612	3644	3676	3708	3743	3777	3810	3844	3878	3921	3953	3985
					4017	4049	4081	4113	4145	4178	4210	4242	4274	4306	4338	4373	4406
					4439	4473	4506	4540									
R12	U	0000000C	1	4696	216	219	243	333									
R13	U	0000000D	1	4697													
R14	U	0000000E	1	4698													
R15	U	0000000F	1	4699	290	324	352	362	363								
R2	U	00000002	1	4686	208	266	267	274	275	276	281	282	283	300	301	308	309
					310	315	316	317	357	358	359	376	378	384	385	386	388
					394	399	400	673	674	676	677	681	682	705	706	708	709
					713	714	737	738	740	741	745	746	769	770	772	773	777
					778	801	802	804	805	809	810	833	834	836	837	841	842
					866	867	869	870	874	875	898	899	901	902	906	907	930
					931	933	934	938	939	964	965	967	968	972	973	996	997
					999	1000	1004	1005	1028	1029	1031	1032	1036	1037	1064	1065	1067
					1068	1072	1073	1096	1097	1099	1100	1104	1105	1128	1129	1131	1132
					1136	1137	1160	1161	1163	1164	1168	1169	1192	1193	1195	1196	1200
					1201	1224	1225	1227	1228	1232	1233	1256	1257	1259	1260	1264	1265
					1289	1290	1292	1293	1297	1298	1321	1322	1324	1325	1329	1330	1353
					1354	1356	1357	1361	1362	1385	1386	1388	1389	1393	1394	1419	1420
					1422	1423	1427	1428	1451	1452	1454	1455	1459	1460	1483	1484	1486
					1487	1491	1492	1515	1516	1518	1519	1523	1524	1551	1552	1554	1555
					1559	1560	1583	1584	1586	1587	1591	1592	1615	1616	1618	1619	1623
					1624	1647	1648	1650	1651	1655	1656	1679	1680	1682	1683	1687	1688
					1711	1712	1714	1715	1719	1720	1743	1744	1746	1747	1751	1752	1776
					1777	1779	1780	1784	1785	1808	1809	1811	1812	1816	1817	1840	1841
					1843	1844	1848	1849	1872	1873	1875	1876	1880	1881	1904	1905	1907
					1908	1912	1913	1938	1939	1941	1942	1946	1947	1971	1972	1974	1975
					1979	1980	2003	2004	2006	2007	2011	2012	2035	2036	2038	2039	2043
					2044	2068	2069	2071	2072	2076	2077	2104	2105	2107	2108	2112	2113
					2136	2137	2139	2140	2144	2145	2168	2169	2171	2172	2176	2177	2200
					2201	2203	2204	2208	2209	2232	2233	2235	2236	2240	2241	2264	2265

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES													
						2267	2268	2272	2273	2296	2297	2299	2300	2304	2305	2329	2330	2332
						2333	2337	2338	2361	2362	2364	2365	2369	2370	2393	2394	2396	2397
						2401	2402	2425	2426	2428	2429	2433	2434	2457	2458	2460	2461	2465
						2466	2489	2490	2492	2493	2497	2498	2523	2524	2526	2527	2531	2532
						2555	2556	2558	2559	2563	2564	2587	2588	2590	2591	2595	2596	2620
						2621	2623	2624	2628	2629	2652	2653	2655	2656	2660	2661	2685	2686
						2688	2689	2693	2694	2721	2722	2724	2725	2729	2730	2753	2754	2756
						2757	2761	2762	2785	2786	2788	2789	2793	2794	2817	2818	2820	2821
						2825	2826	2849	2850	2852	2853	2857	2858	2881	2882	2884	2885	2889
						2890	2913	2914	2916	2917	2921	2922	2946	2947	2949	2950	2954	2955
						2978	2979	2981	2982	2986	2987	3010	3011	3013	3014	3018	3019	3042
						3043	3045	3046	3050	3051	3074	3075	3077	3078	3082	3083	3106	3107
						3109	3110	3114	3115	3140	3141	3143	3144	3148	3149	3172	3173	3175
						3176	3180	3181	3204	3205	3207	3208	3212	3213	3237	3238	3240	3241
						3245	3246	3269	3270	3272	3273	3277	3278	3301	3302	3304	3305	3309
						3310	3344	3345	3347	3348	3352	3353	3376	3377	3379	3380	3384	3385
						3408	3409	3411	3412	3416	3417	3440	3441	3443	3444	3448	3449	3472
						3473	3475	3476	3480	3481	3504	3505	3507	3508	3512	3513	3536	3537
						3539	3540	3544	3545	3569	3570	3572	3573	3577	3578	3602	3603	3605
						3606	3610	3611	3634	3635	3637	3638	3642	3643	3666	3667	3669	3670
						3674	3675	3698	3699	3701	3702	3706	3707	3733	3734	3736	3737	3741
						3742	3767	3768	3770	3771	3775	3776	3800	3801	3803	3804	3808	3809
						3834	3835	3837	3838	3842	3843	3868	3869	3871	3872	3876	3877	3911
						3912	3914	3915	3919	3920	3943	3944	3946	3947	3951	3952	3975	3976
						3978	3979	3983	3984	4007	4008	4010	4011	4015	4016	4039	4040	4042
						4043	4047	4048	4071	4072	4074	4075	4079	4080	4103	4104	4106	4107
						4111	4112	4135	4136	4138	4139	4143	4144	4168	4169	4171	4172	4176
						4177	4200	4201	4203	4204	4208	4209	4232	4233	4235	4236	4240	4241
						4264	4265	4267	4268	4272	4273	4296	4297	4299	4300	4304	4305	4328
						4329	4331	4332	4336	4337	4363	4364	4366	4367	4371	4372	4396	4397
						4399	4400	4404	4405	4429	4430	4432	4433	4437	4438	4463	4464	4466
						4467	4471	4472	4496	4497	4499	4500	4504	4505	4530	4531	4533	4534
						4538	4539											
R3	U	00000003	1	4687														
R4	U	00000004	1	4688														
R5	U	00000005	1	4689	219	220	225	353	361	658	685	690	717	722	749	754	781	
					786	813	818	845	851	878	883	910	915	942	949	976	981	
					1008	1013	1040	1049	1076	1081	1108	1113	1140	1145	1172	1177	1204	
					1209	1236	1241	1268	1274	1301	1306	1333	1338	1365	1370	1397	1404	
					1431	1436	1463	1468	1495	1500	1527	1536	1563	1568	1595	1600	1627	
					1632	1659	1664	1691	1696	1723	1728	1755	1761	1788	1793	1820	1825	
					1852	1857	1884	1889	1916	1923	1950	1956	1983	1988	2015	2020	2047	
					2053	2080	2089	2116	2121	2148	2153	2180	2185	2212	2217	2244	2249	
					2276	2281	2308	2314	2341	2346	2373	2378	2405	2410	2437	2442	2469	
					2474	2501	2508	2535	2540	2567	2572	2599	2605	2632	2637	2664	2670	
					2697	2706	2733	2738	2765	2770	2797	2802	2829	2834	2861	2866	2893	
					2898	2925	2931	2958	2963	2990	2995	3022	3027	3054	3059	3086	3091	
					3118	3125	3152	3157	3184	3189	3216	3222	3249	3254	3281	3286	3313	
					3329	3356	3361	3388	3393	3420	3425	3452	3457	3484	3489	3516	3521	
					3548	3554	3581	3587	3614	3619	3646	3651	3678	3683	3710	3718	3745	
					3752	3779	3785	3812	3819	3846	3853	3880	3896	3923	3928	3955	3960	
					3987	3992	4019	4024	4051	4056	4083	4088	4115	4120	4147	4153	4180	
					4185	4212	4217	4244	4249	4276	4281	4308	4313	4340	4348	4375	4381	
					4408	4414	4441	4448	4475	4481	4508	4515	4542					
R6	U	00000006	1	4690														
R7	U	00000007	1	4691														

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES				
R8	U	00000008	1	4692	160	164	165	166	168
R9	U	00000009	1	4693	161	168	169	171	
RE1	F	000011F4	4	684	670				
RE10	F	00001674	4	975	961				
RE100	F	00004374	4	3922	3908				
RE101	F	000043F4	4	3954	3940				
RE102	F	00004474	4	3986	3972				
RE103	F	000044F4	4	4018	4004				
RE104	F	00004574	4	4050	4036				
RE105	F	000045F4	4	4082	4068				
RE106	F	00004674	4	4114	4100				
RE107	F	000046F4	4	4146	4132				
RE108	F	00004774	4	4179	4165				
RE109	F	000047F4	4	4211	4197				
RE11	F	000016F4	4	1007	993				
RE110	F	00004874	4	4243	4229				
RE111	F	000048F4	4	4275	4261				
RE112	F	00004974	4	4307	4293				
RE113	F	000049F4	4	4339	4325				
RE114	F	00004A74	4	4374	4360				
RE115	F	00004AF4	4	4407	4393				
RE116	F	00004B74	4	4440	4426				
RE117	F	00004BF4	4	4474	4460				
RE118	F	00004C74	4	4507	4493				
RE119	F	00004CF4	4	4541	4527				
RE12	F	00001774	4	1039	1025				
RE13	F	000017F4	4	1075	1061				
RE14	F	00001874	4	1107	1093				
RE15	F	000018F4	4	1139	1125				
RE16	F	00001974	4	1171	1157				
RE17	F	000019F4	4	1203	1189				
RE18	F	00001A74	4	1235	1221				
RE19	F	00001AF4	4	1267	1253				
RE2	F	00001274	4	716	702				
RE20	F	00001B74	4	1300	1286				
RE21	F	00001BF4	4	1332	1318				
RE22	F	00001C74	4	1364	1350				
RE23	F	00001CF4	4	1396	1382				
RE24	F	00001D74	4	1430	1416				
RE25	F	00001DF4	4	1462	1448				
RE26	F	00001E74	4	1494	1480				
RE27	F	00001EF4	4	1526	1512				
RE28	F	00001F74	4	1562	1548				
RE29	F	00001FF4	4	1594	1580				
RE3	F	000012F4	4	748	734				
RE30	F	00002074	4	1626	1612				
RE31	F	000020F4	4	1658	1644				
RE32	F	00002174	4	1690	1676				
RE33	F	000021F4	4	1722	1708				
RE34	F	00002274	4	1754	1740				
RE35	F	000022F4	4	1787	1773				
RE36	F	00002374	4	1819	1805				
RE37	F	000023F4	4	1851	1837				
RE38	F	00002474	4	1883	1869				
RE39	F	000024F4	4	1915	1901				
RE4	F	00001374	4	780	766				

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
RE40	F	00002574	4	1949	1935
RE41	F	000025F4	4	1982	1968
RE42	F	00002674	4	2014	2000
RE43	F	000026F4	4	2046	2032
RE44	F	00002774	4	2079	2065
RE45	F	000027F4	4	2115	2101
RE46	F	00002874	4	2147	2133
RE47	F	000028F4	4	2179	2165
RE48	F	00002974	4	2211	2197
RE49	F	000029F4	4	2243	2229
RE5	F	000013F4	4	812	798
RE50	F	00002A74	4	2275	2261
RE51	F	00002AF4	4	2307	2293
RE52	F	00002B74	4	2340	2326
RE53	F	00002BF4	4	2372	2358
RE54	F	00002C74	4	2404	2390
RE55	F	00002CF4	4	2436	2422
RE56	F	00002D74	4	2468	2454
RE57	F	00002DF4	4	2500	2486
RE58	F	00002E74	4	2534	2520
RE59	F	00002EF4	4	2566	2552
RE6	F	00001474	4	844	830
RE60	F	00002F74	4	2598	2584
RE61	F	00002FF4	4	2631	2617
RE62	F	00003074	4	2663	2649
RE63	F	000030F4	4	2696	2682
RE64	F	00003174	4	2732	2718
RE65	F	000031F4	4	2764	2750
RE66	F	00003274	4	2796	2782
RE67	F	000032F4	4	2828	2814
RE68	F	00003374	4	2860	2846
RE69	F	000033F4	4	2892	2878
RE7	F	000014F4	4	877	863
RE70	F	00003474	4	2924	2910
RE71	F	000034F4	4	2957	2943
RE72	F	00003574	4	2989	2975
RE73	F	000035F4	4	3021	3007
RE74	F	00003674	4	3053	3039
RE75	F	000036F4	4	3085	3071
RE76	F	00003774	4	3117	3103
RE77	F	000037F4	4	3151	3137
RE78	F	00003874	4	3183	3169
RE79	F	000038F4	4	3215	3201
RE8	F	00001574	4	909	895
RE80	F	00003974	4	3248	3234
RE81	F	000039F4	4	3280	3266
RE82	F	00003A74	4	3312	3298
RE83	F	00003AF4	4	3355	3341
RE84	F	00003B74	4	3387	3373
RE85	F	00003BF4	4	3419	3405
RE86	F	00003C74	4	3451	3437
RE87	F	00003CF4	4	3483	3469
RE88	F	00003D74	4	3515	3501
RE89	F	00003DF4	4	3547	3533
RE9	F	000015F4	4	941	927
RE90	F	00003E74	4	3580	3566

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
RE91	F	00003EF4	4	3613	3599
RE92	F	00003F74	4	3645	3631
RE93	F	00003FF4	4	3677	3663
RE94	F	00004074	4	3709	3695
RE95	F	000040F4	4	3744	3730
RE96	F	00004174	4	3778	3764
RE97	F	000041F4	4	3811	3797
RE98	F	00004274	4	3845	3831
RE99	F	000042F4	4	3879	3865
REA1	A	000011B4	4	670	
REA10	A	00001634	4	961	
REA100	A	00004334	4	3908	
REA101	A	000043B4	4	3940	
REA102	A	00004434	4	3972	
REA103	A	000044B4	4	4004	
REA104	A	00004534	4	4036	
REA105	A	000045B4	4	4068	
REA106	A	00004634	4	4100	
REA107	A	000046B4	4	4132	
REA108	A	00004734	4	4165	
REA109	A	000047B4	4	4197	
REA11	A	000016B4	4	993	
REA110	A	00004834	4	4229	
REA111	A	000048B4	4	4261	
REA112	A	00004934	4	4293	
REA113	A	000049B4	4	4325	
REA114	A	00004A34	4	4360	
REA115	A	00004AB4	4	4393	
REA116	A	00004B34	4	4426	
REA117	A	00004BB4	4	4460	
REA118	A	00004C34	4	4493	
REA119	A	00004CB4	4	4527	
REA12	A	00001734	4	1025	
REA13	A	000017B4	4	1061	
REA14	A	00001834	4	1093	
REA15	A	000018B4	4	1125	
REA16	A	00001934	4	1157	
REA17	A	000019B4	4	1189	
REA18	A	00001A34	4	1221	
REA19	A	00001AB4	4	1253	
REA2	A	00001234	4	702	
REA20	A	00001B34	4	1286	
REA21	A	00001BB4	4	1318	
REA22	A	00001C34	4	1350	
REA23	A	00001CB4	4	1382	
REA24	A	00001D34	4	1416	
REA25	A	00001DB4	4	1448	
REA26	A	00001E34	4	1480	
REA27	A	00001EB4	4	1512	
REA28	A	00001F34	4	1548	
REA29	A	00001FB4	4	1580	
REA3	A	000012B4	4	734	
REA30	A	00002034	4	1612	
REA31	A	000020B4	4	1644	
REA32	A	00002134	4	1676	
REA33	A	000021B4	4	1708	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
REA34	A	00002234	4	1740	
REA35	A	000022B4	4	1773	
REA36	A	00002334	4	1805	
REA37	A	000023B4	4	1837	
REA38	A	00002434	4	1869	
REA39	A	000024B4	4	1901	
REA4	A	00001334	4	766	
REA40	A	00002534	4	1935	
REA41	A	000025B4	4	1968	
REA42	A	00002634	4	2000	
REA43	A	000026B4	4	2032	
REA44	A	00002734	4	2065	
REA45	A	000027B4	4	2101	
REA46	A	00002834	4	2133	
REA47	A	000028B4	4	2165	
REA48	A	00002934	4	2197	
REA49	A	000029B4	4	2229	
REA5	A	000013B4	4	798	
REA50	A	00002A34	4	2261	
REA51	A	00002AB4	4	2293	
REA52	A	00002B34	4	2326	
REA53	A	00002BB4	4	2358	
REA54	A	00002C34	4	2390	
REA55	A	00002CB4	4	2422	
REA56	A	00002D34	4	2454	
REA57	A	00002DB4	4	2486	
REA58	A	00002E34	4	2520	
REA59	A	00002EB4	4	2552	
REA6	A	00001434	4	830	
REA60	A	00002F34	4	2584	
REA61	A	00002FB4	4	2617	
REA62	A	00003034	4	2649	
REA63	A	000030B4	4	2682	
REA64	A	00003134	4	2718	
REA65	A	000031B4	4	2750	
REA66	A	00003234	4	2782	
REA67	A	000032B4	4	2814	
REA68	A	00003334	4	2846	
REA69	A	000033B4	4	2878	
REA7	A	000014B4	4	863	
REA70	A	00003434	4	2910	
REA71	A	000034B4	4	2943	
REA72	A	00003534	4	2975	
REA73	A	000035B4	4	3007	
REA74	A	00003634	4	3039	
REA75	A	000036B4	4	3071	
REA76	A	00003734	4	3103	
REA77	A	000037B4	4	3137	
REA78	A	00003834	4	3169	
REA79	A	000038B4	4	3201	
REA8	A	00001534	4	895	
REA80	A	00003934	4	3234	
REA81	A	000039B4	4	3266	
REA82	A	00003A34	4	3298	
REA83	A	00003AB4	4	3341	
REA84	A	00003B34	4	3373	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES	
REA85	A	00003BB4	4	3405		
REA86	A	00003C34	4	3437		
REA87	A	00003CB4	4	3469		
REA88	A	00003D34	4	3501		
REA89	A	00003DB4	4	3533		
REA9	A	000015B4	4	927		
REA90	A	00003E34	4	3566		
REA91	A	00003EB4	4	3599		
REA92	A	00003F34	4	3631		
REA93	A	00003FB4	4	3663		
REA94	A	00004034	4	3695		
REA95	A	000040B4	4	3730		
REA96	A	00004134	4	3764		
REA97	A	000041B4	4	3797		
REA98	A	00004234	4	3831		
REA99	A	000042B4	4	3865		
READDR	A	0000002C	4	542	239	
REG2LOW	U	000000DD	1	444		
REG2PATT	U	AABBCCDD	1	443		
RELEN	A	00000028	4	541		
RPTDWSAV	D	00000468	8	368	357	359
RPTERROR	I	0000043E	4	352	290	324
RPTSAVE	F	0000045C	4	365	352	362
RPTSVR5	F	00000460	4	366	353	361
SKL0001	U	00000054	1	190	206	
SKT0001	C	0000022A	26	187	190	207
SVOLDPSW	U	00000140	0	125		
T1	A	00001188	4	659	4554	
T10	A	00001608	4	950	4563	
T100	A	00004308	4	3897	4653	
T101	A	00004388	4	3929	4654	
T102	A	00004408	4	3961	4655	
T103	A	00004488	4	3993	4656	
T104	A	00004508	4	4025	4657	
T105	A	00004588	4	4057	4658	
T106	A	00004608	4	4089	4659	
T107	A	00004688	4	4121	4660	
T108	A	00004708	4	4154	4661	
T109	A	00004788	4	4186	4662	
T11	A	00001688	4	982	4564	
T110	A	00004808	4	4218	4663	
T111	A	00004888	4	4250	4664	
T112	A	00004908	4	4282	4665	
T113	A	00004988	4	4314	4666	
T114	A	00004A08	4	4349	4667	
T115	A	00004A88	4	4382	4668	
T116	A	00004B08	4	4415	4669	
T117	A	00004B88	4	4449	4670	
T118	A	00004C08	4	4482	4671	
T119	A	00004C88	4	4516	4672	
T12	A	00001708	4	1014	4565	
T13	A	00001788	4	1050	4566	
T14	A	00001808	4	1082	4567	
T15	A	00001888	4	1114	4568	
T16	A	00001908	4	1146	4569	
T17	A	00001988	4	1178	4570	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
T18	A	00001A08	4	1210	4571
T19	A	00001A88	4	1242	4572
T2	A	00001208	4	691	4555
T20	A	00001B08	4	1275	4573
T21	A	00001B88	4	1307	4574
T22	A	00001C08	4	1339	4575
T23	A	00001C88	4	1371	4576
T24	A	00001D08	4	1405	4577
T25	A	00001D88	4	1437	4578
T26	A	00001E08	4	1469	4579
T27	A	00001E88	4	1501	4580
T28	A	00001F08	4	1537	4581
T29	A	00001F88	4	1569	4582
T3	A	00001288	4	723	4556
T30	A	00002008	4	1601	4583
T31	A	00002088	4	1633	4584
T32	A	00002108	4	1665	4585
T33	A	00002188	4	1697	4586
T34	A	00002208	4	1729	4587
T35	A	00002288	4	1762	4588
T36	A	00002308	4	1794	4589
T37	A	00002388	4	1826	4590
T38	A	00002408	4	1858	4591
T39	A	00002488	4	1890	4592
T4	A	00001308	4	755	4557
T40	A	00002508	4	1924	4593
T41	A	00002588	4	1957	4594
T42	A	00002608	4	1989	4595
T43	A	00002688	4	2021	4596
T44	A	00002708	4	2054	4597
T45	A	00002788	4	2090	4598
T46	A	00002808	4	2122	4599
T47	A	00002888	4	2154	4600
T48	A	00002908	4	2186	4601
T49	A	00002988	4	2218	4602
T5	A	00001388	4	787	4558
T50	A	00002A08	4	2250	4603
T51	A	00002A88	4	2282	4604
T52	A	00002B08	4	2315	4605
T53	A	00002B88	4	2347	4606
T54	A	00002C08	4	2379	4607
T55	A	00002C88	4	2411	4608
T56	A	00002D08	4	2443	4609
T57	A	00002D88	4	2475	4610
T58	A	00002E08	4	2509	4611
T59	A	00002E88	4	2541	4612
T6	A	00001408	4	819	4559
T60	A	00002F08	4	2573	4613
T61	A	00002F88	4	2606	4614
T62	A	00003008	4	2638	4615
T63	A	00003088	4	2671	4616
T64	A	00003108	4	2707	4617
T65	A	00003188	4	2739	4618
T66	A	00003208	4	2771	4619
T67	A	00003288	4	2803	4620
T68	A	00003308	4	2835	4621

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES													
T69	A	00003388	4	2867	4622													
T7	A	00001488	4	852	4560													
T70	A	00003408	4	2899	4623													
T71	A	00003488	4	2932	4624													
T72	A	00003508	4	2964	4625													
T73	A	00003588	4	2996	4626													
T74	A	00003608	4	3028	4627													
T75	A	00003688	4	3060	4628													
T76	A	00003708	4	3092	4629													
T77	A	00003788	4	3126	4630													
T78	A	00003808	4	3158	4631													
T79	A	00003888	4	3190	4632													
T8	A	00001508	4	884	4561													
T80	A	00003908	4	3223	4633													
T81	A	00003988	4	3255	4634													
T82	A	00003A08	4	3287	4635													
T83	A	00003A88	4	3330	4636													
T84	A	00003B08	4	3362	4637													
T85	A	00003B88	4	3394	4638													
T86	A	00003C08	4	3426	4639													
T87	A	00003C88	4	3458	4640													
T88	A	00003D08	4	3490	4641													
T89	A	00003D88	4	3522	4642													
T9	A	00001588	4	916	4562													
T90	A	00003E08	4	3555	4643													
T91	A	00003E88	4	3588	4644													
T92	A	00003F08	4	3620	4645													
T93	A	00003F88	4	3652	4646													
T94	A	00004008	4	3684	4647													
T95	A	00004088	4	3719	4648													
T96	A	00004108	4	3753	4649													
T97	A	00004188	4	3786	4650													
T98	A	00004208	4	3820	4651													
T99	A	00004288	4	3854	4652													
TESTCC	I	00000324	4	246	236													
TESTING	F	00001004	4	455	228													
TESTREST	U	0000030C	1	238	255													
TNUM	H	00000004	2	529	227	266	300											
TSUB	A	00000000	4	528	231													
TTABLE	F	00004D0C	4	4553														
V0	U	00000000	1	4705														
V1	U	00000001	1	4706	230	679	680	711	712	743	744	775	776	807	808	839	840	
					872	873	904	905	936	937	970	971	1002	1003	1034	1035	1070	
					1071	1102	1103	1134	1135	1166	1167	1198	1199	1230	1231	1262	1263	
					1295	1296	1327	1328	1359	1360	1391	1392	1425	1426	1457	1458	1489	
					1490	1521	1522	1557	1558	1589	1590	1621	1622	1653	1654	1685	1686	
					1717	1718	1749	1750	1782	1783	1814	1815	1846	1847	1878	1879	1910	
					1911	1944	1945	1977	1978	2009	2010	2041	2042	2074	2075	2110	2111	
					2142	2143	2174	2175	2206	2207	2238	2239	2270	2271	2302	2303	2335	
					2336	2367	2368	2399	2400	2431	2432	2463	2464	2495	2496	2529	2530	
					2561	2562	2593	2594	2626	2627	2658	2659	2691	2692	2727	2728	2759	
					2760	2791	2792	2823	2824	2855	2856	2887	2888	2919	2920	2952	2953	
					2984	2985	3016	3017	3048	3049	3080	3081	3112	3113	3146	3147	3178	
					3179	3210	3211	3243	3244	3275	3276	3307	3308	3350	3351	3382	3383	
					3414	3415	3446	3447	3478	3479	3510	3511	3542	3543	3575	3576	3608	
					3609	3640	3641	3672	3673	3704	3705	3739	3740	3773	3774	3806	3807	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES												
					3840	3841	3874	3875	3917	3918	3949	3950	3981	3982	4013	4014	4045
					4046	4077	4078	4109	4110	4141	4142	4174	4175	4206	4207	4238	4239
					4270	4271	4302	4303	4334	4335	4369	4370	4402	4403	4435	4436	4469
					4470	4502	4503	4536	4537								
V10	U	0000000A	1	4715													
V11	U	0000000B	1	4716													
V12	U	0000000C	1	4717													
V13	U	0000000D	1	4718													
V14	U	0000000E	1	4719													
V15	U	0000000F	1	4720													
V16	U	00000010	1	4721													
V17	U	00000011	1	4722													
V18	U	00000012	1	4723													
V19	U	00000013	1	4724													
V1FUDGE	X	00001128	16	515	230												
V1INPUT	C	00001138	16	516													
V1OUTPUT	X	00001108	16	513	240	680	712	744	776	808	840	873	905	937	971	1003	1035
					1071	1103	1135	1167	1199	1231	1263	1296	1328	1360	1392	1426	1458
					1490	1522	1558	1590	1622	1654	1686	1718	1750	1783	1815	1847	1879
					1911	1945	1978	2010	2042	2075	2111	2143	2175	2207	2239	2271	2303
					2336	2368	2400	2432	2464	2496	2530	2562	2594	2627	2659	2692	2728
					2760	2792	2824	2856	2888	2920	2953	2985	3017	3049	3081	3113	3147
					3179	3211	3244	3276	3308	3351	3383	3415	3447	3479	3511	3543	3576
					3609	3641	3673	3705	3740	3774	3807	3841	3875	3918	3950	3982	4014
					4046	4078	4110	4142	4175	4207	4239	4271	4303	4335	4370	4403	4436
					4470	4503	4537										
V2	U	00000002	1	4707	675	679	707	711	739	743	771	775	803	807	835	839	868
					872	900	904	932	936	966	970	998	1002	1030	1034	1066	1070
					1098	1102	1130	1134	1162	1166	1194	1198	1226	1230	1258	1262	1291
					1295	1323	1327	1355	1359	1387	1391	1421	1425	1453	1457	1485	1489
					1517	1521	1553	1557	1585	1589	1617	1621	1649	1653	1681	1685	1713
					1717	1745	1749	1778	1782	1810	1814	1842	1846	1874	1878	1906	1910
					1940	1944	1973	1977	2005	2009	2037	2041	2070	2074	2106	2110	2138
					2142	2170	2174	2202	2206	2234	2238	2266	2270	2298	2302	2331	2335
					2363	2367	2395	2399	2427	2431	2459	2463	2491	2495	2525	2529	2557
					2561	2589	2593	2622	2626	2654	2658	2687	2691	2723	2727	2755	2759
					2787	2791	2819	2823	2851	2855	2883	2887	2915	2919	2948	2952	2980
					2984	3012	3016	3044	3048	3076	3080	3108	3112	3142	3146	3174	3178
					3206	3210	3239	3243	3271	3275	3303	3307	3346	3350	3378	3382	3410
					3414	3442	3446	3474	3478	3506	3510	3538	3542	3571	3575	3604	3608
					3636	3640	3668	3672	3700	3704	3735	3739	3769	3773	3802	3806	3836
					3840	3870	3874	3913	3917	3945	3949	3977	3981	4009	4013	4041	4045
					4073	4077	4105	4109	4137	4141	4170	4174	4202	4206	4234	4238	4266
					4270	4298	4302	4330	4334	4365	4369	4398	4402	4431	4435	4465	4469
					4498	4502	4532	4536									
V20	U	00000014	1	4725													
V21	U	00000015	1	4726													
V22	U	00000016	1	4727													
V23	U	00000017	1	4728													
V24	U	00000018	1	4729													
V25	U	00000019	1	4730													
V26	U	0000001A	1	4731													
V27	U	0000001B	1	4732													
V28	U	0000001C	1	4733													
V29	U	0000001D	1	4734													
V2PACKED	X	00001157	16	519	674	675	706	707	738	739	770	771	802	803	834	835	867

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
					868 899 900 931 932 965 966 997 998 1029 1030 1065 1066
					1097 1098 1129 1130 1161 1162 1193 1194 1225 1226 1257 1258 1290
					1291 1322 1323 1354 1355 1386 1387 1420 1421 1452 1453 1484 1485
					1516 1517 1552 1553 1584 1585 1616 1617 1648 1649 1680 1681 1712
					1713 1744 1745 1777 1778 1809 1810 1841 1842 1873 1874 1905 1906
					1939 1940 1972 1973 2004 2005 2036 2037 2069 2070 2105 2106 2137
					2138 2169 2170 2201 2202 2233 2234 2265 2266 2297 2298 2330 2331
					2362 2363 2394 2395 2426 2427 2458 2459 2490 2491 2524 2525 2556
					2557 2588 2589 2621 2622 2653 2654 2686 2687 2722 2723 2754 2755
					2786 2787 2818 2819 2850 2851 2882 2883 2914 2915 2947 2948 2979
					2980 3011 3012 3043 3044 3075 3076 3107 3108 3141 3142 3173 3174
					3205 3206 3238 3239 3270 3271 3302 3303 3345 3346 3377 3378 3409
					3410 3441 3442 3473 3474 3505 3506 3537 3538 3570 3571 3603 3604
					3635 3636 3667 3668 3699 3700 3734 3735 3768 3769 3801 3802 3835
					3836 3869 3870 3912 3913 3944 3945 3976 3977 4008 4009 4040 4041
					4072 4073 4104 4105 4136 4137 4169 4170 4201 4202 4233 4234 4265
					4266 4297 4298 4329 4330 4364 4365 4397 4398 4430 4431 4464 4465
					4497 4498 4531 4532
V2VALUE	F	00000010	8	536	
V2_1	F	00001198	8	666	673
V2_10	F	00001618	8	957	964
V2_100	F	00004318	8	3904	3911
V2_101	F	00004398	8	3936	3943
V2_102	F	00004418	8	3968	3975
V2_103	F	00004498	8	4000	4007
V2_104	F	00004518	8	4032	4039
V2_105	F	00004598	8	4064	4071
V2_106	F	00004618	8	4096	4103
V2_107	F	00004698	8	4128	4135
V2_108	F	00004718	8	4161	4168
V2_109	F	00004798	8	4193	4200
V2_11	F	00001698	8	989	996
V2_110	F	00004818	8	4225	4232
V2_111	F	00004898	8	4257	4264
V2_112	F	00004918	8	4289	4296
V2_113	F	00004998	8	4321	4328
V2_114	F	00004A18	8	4356	4363
V2_115	F	00004A98	8	4389	4396
V2_116	F	00004B18	8	4422	4429
V2_117	F	00004B98	8	4456	4463
V2_118	F	00004C18	8	4489	4496
V2_119	F	00004C98	8	4523	4530
V2_12	F	00001718	8	1021	1028
V2_13	F	00001798	8	1057	1064
V2_14	F	00001818	8	1089	1096
V2_15	F	00001898	8	1121	1128
V2_16	F	00001918	8	1153	1160
V2_17	F	00001998	8	1185	1192
V2_18	F	00001A18	8	1217	1224
V2_19	F	00001A98	8	1249	1256
V2_2	F	00001218	8	698	705
V2_20	F	00001B18	8	1282	1289
V2_21	F	00001B98	8	1314	1321
V2_22	F	00001C18	8	1346	1353
V2_23	F	00001C98	8	1378	1385
V2_24	F	00001D18	8	1412	1419

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
V2_25	F	00001D98	8	1444	1451
V2_26	F	00001E18	8	1476	1483
V2_27	F	00001E98	8	1508	1515
V2_28	F	00001F18	8	1544	1551
V2_29	F	00001F98	8	1576	1583
V2_3	F	00001298	8	730	737
V2_30	F	00002018	8	1608	1615
V2_31	F	00002098	8	1640	1647
V2_32	F	00002118	8	1672	1679
V2_33	F	00002198	8	1704	1711
V2_34	F	00002218	8	1736	1743
V2_35	F	00002298	8	1769	1776
V2_36	F	00002318	8	1801	1808
V2_37	F	00002398	8	1833	1840
V2_38	F	00002418	8	1865	1872
V2_39	F	00002498	8	1897	1904
V2_4	F	00001318	8	762	769
V2_40	F	00002518	8	1931	1938
V2_41	F	00002598	8	1964	1971
V2_42	F	00002618	8	1996	2003
V2_43	F	00002698	8	2028	2035
V2_44	F	00002718	8	2061	2068
V2_45	F	00002798	8	2097	2104
V2_46	F	00002818	8	2129	2136
V2_47	F	00002898	8	2161	2168
V2_48	F	00002918	8	2193	2200
V2_49	F	00002998	8	2225	2232
V2_5	F	00001398	8	794	801
V2_50	F	00002A18	8	2257	2264
V2_51	F	00002A98	8	2289	2296
V2_52	F	00002B18	8	2322	2329
V2_53	F	00002B98	8	2354	2361
V2_54	F	00002C18	8	2386	2393
V2_55	F	00002C98	8	2418	2425
V2_56	F	00002D18	8	2450	2457
V2_57	F	00002D98	8	2482	2489
V2_58	F	00002E18	8	2516	2523
V2_59	F	00002E98	8	2548	2555
V2_6	F	00001418	8	826	833
V2_60	F	00002F18	8	2580	2587
V2_61	F	00002F98	8	2613	2620
V2_62	F	00003018	8	2645	2652
V2_63	F	00003098	8	2678	2685
V2_64	F	00003118	8	2714	2721
V2_65	F	00003198	8	2746	2753
V2_66	F	00003218	8	2778	2785
V2_67	F	00003298	8	2810	2817
V2_68	F	00003318	8	2842	2849
V2_69	F	00003398	8	2874	2881
V2_7	F	00001498	8	859	866
V2_70	F	00003418	8	2906	2913
V2_71	F	00003498	8	2939	2946
V2_72	F	00003518	8	2971	2978
V2_73	F	00003598	8	3003	3010
V2_74	F	00003618	8	3035	3042
V2_75	F	00003698	8	3067	3074

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES												
V2_76	F	00003718	8	3099	3106												
V2_77	F	00003798	8	3133	3140												
V2_78	F	00003818	8	3165	3172												
V2_79	F	00003898	8	3197	3204												
V2_8	F	00001518	8	891	898												
V2_80	F	00003918	8	3230	3237												
V2_81	F	00003998	8	3262	3269												
V2_82	F	00003A18	8	3294	3301												
V2_83	F	00003A98	8	3337	3344												
V2_84	F	00003B18	8	3369	3376												
V2_85	F	00003B98	8	3401	3408												
V2_86	F	00003C18	8	3433	3440												
V2_87	F	00003C98	8	3465	3472												
V2_88	F	00003D18	8	3497	3504												
V2_89	F	00003D98	8	3529	3536												
V2_9	F	00001598	8	923	930												
V2_90	F	00003E18	8	3562	3569												
V2_91	F	00003E98	8	3595	3602												
V2_92	F	00003F18	8	3627	3634												
V2_93	F	00003F98	8	3659	3666												
V2_94	F	00004018	8	3691	3698												
V2_95	F	00004098	8	3726	3733												
V2_96	F	00004118	8	3760	3767												
V2_97	F	00004198	8	3793	3800												
V2_98	F	00004218	8	3827	3834												
V2_99	F	00004298	8	3861	3868												
V3	U	00000003	1	4708	678	679	710	711	742	743	774	775	806	807	838	839	871
					872	903	904	935	936	969	970	1001	1002	1033	1034	1069	1070
					1101	1102	1133	1134	1165	1166	1197	1198	1229	1230	1261	1262	1294
					1295	1326	1327	1358	1359	1390	1391	1424	1425	1456	1457	1488	1489
					1520	1521	1556	1557	1588	1589	1620	1621	1652	1653	1684	1685	1716
					1717	1748	1749	1781	1782	1813	1814	1845	1846	1877	1878	1909	1910
					1943	1944	1976	1977	2008	2009	2040	2041	2073	2074	2109	2110	2141
					2142	2173	2174	2205	2206	2237	2238	2269	2270	2301	2302	2334	2335
					2366	2367	2398	2399	2430	2431	2462	2463	2494	2495	2528	2529	2560
					2561	2592	2593	2625	2626	2657	2658	2690	2691	2726	2727	2758	2759
					2790	2791	2822	2823	2854	2855	2886	2887	2918	2919	2951	2952	2983
					2984	3015	3016	3047	3048	3079	3080	3111	3112	3145	3146	3177	3178
					3209	3210	3242	3243	3274	3275	3306	3307	3349	3350	3381	3382	3413
					3414	3445	3446	3477	3478	3509	3510	3541	3542	3574	3575	3607	3608
					3639	3640	3671	3672	3703	3704	3738	3739	3772	3773	3805	3806	3839
					3840	3873	3874	3916	3917	3948	3949	3980	3981	4012	4013	4044	4045
					4076	4077	4108	4109	4140	4141	4173	4174	4205	4206	4237	4238	4269
					4270	4301	4302	4333	4334	4368	4369	4401	4402	4434	4435	4468	4469
					4501	4502	4535	4536									
V30	U	0000001E	1	4735													
V31	U	0000001F	1	4736													
V3PACKED	X	00001167	16	520	677	678	709	710	741	742	773	774	805	806	837	838	870
					871	902	903	934	935	968	969	1000	1001	1032	1033	1068	1069
					1100	1101	1132	1133	1164	1165	1196	1197	1228	1229	1260	1261	1293
					1294	1325	1326	1357	1358	1389	1390	1423	1424	1455	1456	1487	1488
					1519	1520	1555	1556	1587	1588	1619	1620	1651	1652	1683	1684	1715
					1716	1747	1748	1780	1781	1812	1813	1844	1845	1876	1877	1908	1909
					1942	1943	1975	1976	2007	2008	2039	2040	2072	2073	2108	2109	2140
					2141	2172	2173	2204	2205	2236	2237	2268	2269	2300	2301	2333	2334
					2365	2366	2397	2398	2429	2430	2461	2462	2493	2494	2527	2528	2559

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
					2560 2591 2592 2624 2625 2656 2657 2689 2690 2725 2726 2757 2758
					2789 2790 2821 2822 2853 2854 2885 2886 2917 2918 2950 2951 2982
					2983 3014 3015 3046 3047 3078 3079 3110 3111 3144 3145 3176 3177
					3208 3209 3241 3242 3273 3274 3305 3306 3348 3349 3380 3381 3412
					3413 3444 3445 3476 3477 3508 3509 3540 3541 3573 3574 3606 3607
					3638 3639 3670 3671 3702 3703 3737 3738 3771 3772 3804 3805 3838
					3839 3872 3873 3915 3916 3947 3948 3979 3980 4011 4012 4043 4044
					4075 4076 4107 4108 4139 4140 4172 4173 4204 4205 4236 4237 4268
					4269 4300 4301 4332 4333 4367 4368 4400 4401 4433 4434 4467 4468
					4500 4501 4534 4535
V3VALUE	F	00000018	8	537	
V3_1	F	000011A0	8	667	676
V3_10	F	00001620	8	958	967
V3_100	F	00004320	8	3905	3914
V3_101	F	000043A0	8	3937	3946
V3_102	F	00004420	8	3969	3978
V3_103	F	000044A0	8	4001	4010
V3_104	F	00004520	8	4033	4042
V3_105	F	000045A0	8	4065	4074
V3_106	F	00004620	8	4097	4106
V3_107	F	000046A0	8	4129	4138
V3_108	F	00004720	8	4162	4171
V3_109	F	000047A0	8	4194	4203
V3_11	F	000016A0	8	990	999
V3_110	F	00004820	8	4226	4235
V3_111	F	000048A0	8	4258	4267
V3_112	F	00004920	8	4290	4299
V3_113	F	000049A0	8	4322	4331
V3_114	F	00004A20	8	4357	4366
V3_115	F	00004AA0	8	4390	4399
V3_116	F	00004B20	8	4423	4432
V3_117	F	00004BA0	8	4457	4466
V3_118	F	00004C20	8	4490	4499
V3_119	F	00004CA0	8	4524	4533
V3_12	F	00001720	8	1022	1031
V3_13	F	000017A0	8	1058	1067
V3_14	F	00001820	8	1090	1099
V3_15	F	000018A0	8	1122	1131
V3_16	F	00001920	8	1154	1163
V3_17	F	000019A0	8	1186	1195
V3_18	F	00001A20	8	1218	1227
V3_19	F	00001AA0	8	1250	1259
V3_2	F	00001220	8	699	708
V3_20	F	00001B20	8	1283	1292
V3_21	F	00001BA0	8	1315	1324
V3_22	F	00001C20	8	1347	1356
V3_23	F	00001CA0	8	1379	1388
V3_24	F	00001D20	8	1413	1422
V3_25	F	00001DA0	8	1445	1454
V3_26	F	00001E20	8	1477	1486
V3_27	F	00001EA0	8	1509	1518
V3_28	F	00001F20	8	1545	1554
V3_29	F	00001FA0	8	1577	1586
V3_3	F	000012A0	8	731	740
V3_30	F	00002020	8	1609	1618
V3_31	F	000020A0	8	1641	1650

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
V3_32	F	00002120	8	1673	1682
V3_33	F	000021A0	8	1705	1714
V3_34	F	00002220	8	1737	1746
V3_35	F	000022A0	8	1770	1779
V3_36	F	00002320	8	1802	1811
V3_37	F	000023A0	8	1834	1843
V3_38	F	00002420	8	1866	1875
V3_39	F	000024A0	8	1898	1907
V3_4	F	00001320	8	763	772
V3_40	F	00002520	8	1932	1941
V3_41	F	000025A0	8	1965	1974
V3_42	F	00002620	8	1997	2006
V3_43	F	000026A0	8	2029	2038
V3_44	F	00002720	8	2062	2071
V3_45	F	000027A0	8	2098	2107
V3_46	F	00002820	8	2130	2139
V3_47	F	000028A0	8	2162	2171
V3_48	F	00002920	8	2194	2203
V3_49	F	000029A0	8	2226	2235
V3_5	F	000013A0	8	795	804
V3_50	F	00002A20	8	2258	2267
V3_51	F	00002AA0	8	2290	2299
V3_52	F	00002B20	8	2323	2332
V3_53	F	00002BA0	8	2355	2364
V3_54	F	00002C20	8	2387	2396
V3_55	F	00002CA0	8	2419	2428
V3_56	F	00002D20	8	2451	2460
V3_57	F	00002DA0	8	2483	2492
V3_58	F	00002E20	8	2517	2526
V3_59	F	00002EA0	8	2549	2558
V3_6	F	00001420	8	827	836
V3_60	F	00002F20	8	2581	2590
V3_61	F	00002FA0	8	2614	2623
V3_62	F	00003020	8	2646	2655
V3_63	F	000030A0	8	2679	2688
V3_64	F	00003120	8	2715	2724
V3_65	F	000031A0	8	2747	2756
V3_66	F	00003220	8	2779	2788
V3_67	F	000032A0	8	2811	2820
V3_68	F	00003320	8	2843	2852
V3_69	F	000033A0	8	2875	2884
V3_7	F	000014A0	8	860	869
V3_70	F	00003420	8	2907	2916
V3_71	F	000034A0	8	2940	2949
V3_72	F	00003520	8	2972	2981
V3_73	F	000035A0	8	3004	3013
V3_74	F	00003620	8	3036	3045
V3_75	F	000036A0	8	3068	3077
V3_76	F	00003720	8	3100	3109
V3_77	F	000037A0	8	3134	3143
V3_78	F	00003820	8	3166	3175
V3_79	F	000038A0	8	3198	3207
V3_8	F	00001520	8	892	901
V3_80	F	00003920	8	3231	3240
V3_81	F	000039A0	8	3263	3272
V3_82	F	00003A20	8	3295	3304

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES	
V3_83	F	00003AA0	8	3338	3347	
V3_84	F	00003B20	8	3370	3379	
V3_85	F	00003BA0	8	3402	3411	
V3_86	F	00003C20	8	3434	3443	
V3_87	F	00003CA0	8	3466	3475	
V3_88	F	00003D20	8	3498	3507	
V3_89	F	00003DA0	8	3530	3539	
V3_9	F	000015A0	8	924	933	
V3_90	F	00003E20	8	3563	3572	
V3_91	F	00003EA0	8	3596	3605	
V3_92	F	00003F20	8	3628	3637	
V3_93	F	00003FA0	8	3660	3669	
V3_94	F	00004020	8	3692	3701	
V3_95	F	000040A0	8	3727	3736	
V3_96	F	00004120	8	3761	3770	
V3_97	F	000041A0	8	3794	3803	
V3_98	F	00004220	8	3828	3837	
V3_99	F	000042A0	8	3862	3871	
V4	U	00000004	1	4709		
V5	U	00000005	1	4710		
V6	U	00000006	1	4711		
V7	U	00000007	1	4712		
V8	U	00000008	1	4713		
V9	U	00000009	1	4714		
X0001	U	000002B0	1	196	184	197
X1	F	000011B8	4	672	659	
X10	F	00001638	4	963	950	
X100	F	00004338	4	3910	3897	
X101	F	000043B8	4	3942	3929	
X102	F	00004438	4	3974	3961	
X103	F	000044B8	4	4006	3993	
X104	F	00004538	4	4038	4025	
X105	F	000045B8	4	4070	4057	
X106	F	00004638	4	4102	4089	
X107	F	000046B8	4	4134	4121	
X108	F	00004738	4	4167	4154	
X109	F	000047B8	4	4199	4186	
X11	F	000016B8	4	995	982	
X110	F	00004838	4	4231	4218	
X111	F	000048B8	4	4263	4250	
X112	F	00004938	4	4295	4282	
X113	F	000049B8	4	4327	4314	
X114	F	00004A38	4	4362	4349	
X115	F	00004AB8	4	4395	4382	
X116	F	00004B38	4	4428	4415	
X117	F	00004BB8	4	4462	4449	
X118	F	00004C38	4	4495	4482	
X119	F	00004CB8	4	4529	4516	
X12	F	00001738	4	1027	1014	
X13	F	000017B8	4	1063	1050	
X14	F	00001838	4	1095	1082	
X15	F	000018B8	4	1127	1114	
X16	F	00001938	4	1159	1146	
X17	F	000019B8	4	1191	1178	
X18	F	00001A38	4	1223	1210	
X19	F	00001AB8	4	1255	1242	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
X2	F	00001238	4	704	691
X20	F	00001B38	4	1288	1275
X21	F	00001BB8	4	1320	1307
X22	F	00001C38	4	1352	1339
X23	F	00001CB8	4	1384	1371
X24	F	00001D38	4	1418	1405
X25	F	00001DB8	4	1450	1437
X26	F	00001E38	4	1482	1469
X27	F	00001EB8	4	1514	1501
X28	F	00001F38	4	1550	1537
X29	F	00001FB8	4	1582	1569
X3	F	000012B8	4	736	723
X30	F	00002038	4	1614	1601
X31	F	000020B8	4	1646	1633
X32	F	00002138	4	1678	1665
X33	F	000021B8	4	1710	1697
X34	F	00002238	4	1742	1729
X35	F	000022B8	4	1775	1762
X36	F	00002338	4	1807	1794
X37	F	000023B8	4	1839	1826
X38	F	00002438	4	1871	1858
X39	F	000024B8	4	1903	1890
X4	F	00001338	4	768	755
X40	F	00002538	4	1937	1924
X41	F	000025B8	4	1970	1957
X42	F	00002638	4	2002	1989
X43	F	000026B8	4	2034	2021
X44	F	00002738	4	2067	2054
X45	F	000027B8	4	2103	2090
X46	F	00002838	4	2135	2122
X47	F	000028B8	4	2167	2154
X48	F	00002938	4	2199	2186
X49	F	000029B8	4	2231	2218
X5	F	000013B8	4	800	787
X50	F	00002A38	4	2263	2250
X51	F	00002AB8	4	2295	2282
X52	F	00002B38	4	2328	2315
X53	F	00002BB8	4	2360	2347
X54	F	00002C38	4	2392	2379
X55	F	00002CB8	4	2424	2411
X56	F	00002D38	4	2456	2443
X57	F	00002DB8	4	2488	2475
X58	F	00002E38	4	2522	2509
X59	F	00002EB8	4	2554	2541
X6	F	00001438	4	832	819
X60	F	00002F38	4	2586	2573
X61	F	00002FB8	4	2619	2606
X62	F	00003038	4	2651	2638
X63	F	000030B8	4	2684	2671
X64	F	00003138	4	2720	2707
X65	F	000031B8	4	2752	2739
X66	F	00003238	4	2784	2771
X67	F	000032B8	4	2816	2803
X68	F	00003338	4	2848	2835
X69	F	000033B8	4	2880	2867
X7	F	000014B8	4	865	852

DESC	SYMBOL	SIZE	POS	ADDR
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Entry: 0

Image	IMAGE	20216	0000-4EF7	0000-4EF7
Regi on		20216	0000-4EF7	0000-4EF7
CSECT	ZVE6TST	20216	0000-4EF7	0000-4EF7

```
1 /home/tn529/sharedvfp/tests/zvector-e6-05-packarith.asm
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**** NO ERRORS FOUND ****