

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				2 *****
				3 *
				4 * Zvector E6 instruction tests for VRR-k encoded:
				5 *
				6 * E651 VCLZDP - VECTOR COUNT LEADING ZERO DIGITS
				7 * E654 VUPKZH - VECTOR UNPACK ZONED HIGH
				8 * E65C VUPKZL - VECTOR UNPACK ZONED LOW
				9 *
				10 * James Wekel June 2024
				11 *****
				12
				13 *****
				14 *
				15 * basic instruction tests
				16 *
				17 *****
				18 * This program tests proper functioning of the z/arch E6 VRR-k vector
				19 * count leading zero digits, unpack zoned high and low instructions.
				20 * Exceptions are not tested.
				21 *
				22 * PLEASE NOTE that the tests are very SIMPLE TESTS designed to catch
				23 * obvious coding errors. None of the tests are thorough. They are
				24 * NOT designed to test all aspects of any of the instructions.
				25 *
				26 *****
				27 *
				28 * *Testcase zvector-e6-12-countzonedhighlow: VECTOR E6 VRR-k
				29 * * Zvector E6 tests for VRR-k encoded instruction:
				30 * *
				31 * * E651 VCLZDP - VECTOR COUNT LEADING ZERO DIGITS
				32 * * E654 VUPKZH - VECTOR UNPACK ZONED HIGH
				33 * * E65C VUPKZL - VECTOR UNPACK ZONED LOW
				34 * *
				35 * * # -----
				36 * * # This tests only the basic function of the instruction.
				37 * * # Exceptions are NOT tested.
				38 * * # -----
				39 * *
				40 * mainsize 2
				41 * numcpu 1
				42 * sysclear
				43 * archlvl z/Arch
				44 * *
				45 * diag8cmd enable # (needed for messages to Hercules console)
				46 * loadcore "\$(testpath)/zvector-e6-12-countzonedhighlow.core" 0x0
				47 * diag8cmd disable # (reset back to default)
				48 * *
				49 * *Done
				50 *****

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				52 *****
				53 * FCHECK Macro - Is a Facility Bit set?
				54 *
				55 * If the facility bit is NOT set, an message is issued and
				56 * the test is skipped.
				57 *
				58 * Fcheck uses R0, R1 and R2
				59 *
				60 * eg. FCHECK 134, 'vector-packed-decimal'
				61 *****
				62 MACRO
				63 FCHECK &BITNO, &NOTSETMSG
				64 . * &BITNO : facility bit number to check
				65 . * &NOTSETMSG : 'facility name'
				66 LCLA &FBBYTE Facility bit in Byte
				67 LCLA &FBBIT Facility bit within Byte
				68
				69 LCLA &L(8)
				70 &L(1) SetA 128, 64, 32, 16, 8, 4, 2, 1 bit positions within byte
				71
				72 &FBBYTE SETA &BITNO/8
				73 &FBBIT SETA &L((&BITNO-(&FBBYTE*8))+1)
				74 . * MNOTE 0, 'checking Bit=&BITNO: FBBYTE=&FBBYTE, FBBIT=&FBBIT'
				75
				76 B X&SYSNDX
				77 * Fcheck data area
				78 * skip messgae
				79 SKT&SYSNDX DC C' Skipping tests: '
				80 DC C&NOTSETMSG
				81 DC C' facility (bit &BITNO) is not installed.'
				82 SKL&SYSNDX EQU *-SKT&SYSNDX
				83 * facility bits
				84 DS FD gap
				85 FB&SYSNDX DS 4FD
				86 DS FD gap
				87 *
				88 X&SYSNDX EQU *
				89 LA R0, ((X&SYSNDX- FB&SYSNDX)/8)-1
				90 STFLE FB&SYSNDX get facility bits
				91
				92 XGR R0, R0
				93 IC R0, FB&SYSNDX+&FBBYTE get fbit byte
				94 N R0, =F' &FBBIT' is bit set?
				95 BNZ XC&SYSNDX
				96 *
				97 * facility bit not set, issue message and exit
				98 *
				99 LA R0, SKL&SYSNDX message length
				100 LA R1, SKT&SYSNDX message address
				101 BAL R2, MSG
				102
				103 B EOJ
				104 XC&SYSNDX EQU *
				105 MEND

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				127 *****
				128 * The actual "ZVE6TST" program itself...
				129 *****
				130 *
				131 * Architecture Mode: z/Arch
				132 * Register Usage:
				133 *
				134 * R0 (work)
				135 * R1-4 (work)
				136 * R5 Testing control table - current test base
				137 * R6- R7 (work)
				138 * R8 First base register
				139 * R9 Second base register
				140 * R10 Third base register
				141 * R11 E6TEST call return
				142 * R12 E6TESTS register
				143 * R13 (work)
				144 * R14 Subroutine call
				145 * R15 Secondary Subroutine call or work
				146 *
				147 *****
00000200		00000200		149 USING BEGIN, R8 FIRST Base Register
00000200		00001200		150 USING BEGIN+4096, R9 SECOND Base Register
00000200		00002200		151 USING BEGIN+8192, R10 THIRD Base Register
				152
00000200	0580			153 BEGIN BALR R8, 0 Initalize FIRST base register
00000202	0680			154 BCTR R8, 0 Initalize FIRST base register
00000204	0680			155 BCTR R8, 0 Initalize FIRST base register
				156
00000206	4190 8800		00000800	157 LA R9, 2048(, R8) Initalize SECOND base register
0000020A	4190 9800		00000800	158 LA R9, 2048(, R9) Initalize SECOND base register
				159
0000020E	41A0 9800		00000800	160 LA R10, 2048(, R9) Initalize THIRD base register
00000212	41A0 A800		00000800	161 LA R10, 2048(, R10) Initalize THIRD base register
				162
00000216	B600 834C		0000054C	163 STCTL R0, R0, CTLR0 Store CRO to enable AFP
0000021A	9604 834D		0000054D	164 OI CTLR0+1, X' 04' Turn on AFP bit
0000021E	9602 834D		0000054D	165 OI CTLR0+1, X' 02' Turn on Vector bit
00000222	B700 834C		0000054C	166 LCTL R0, R0, CTLR0 Reload updated CRO
				167
				168 *****
				169 * Is vector-packed-decimal-enhancement facility 2 installed (bit 192)
				170 *****
				171
00000226	47F0 80C8		000002C8	172 FCHECK 192, 'vector-packed-decimal-enhancement facility 2'
				173+ B X0001
				174+ * Fcheck data area
				175+ * skip messgae
0000022A	40404040 40404040			176+SKT0001 DC C' Skipping tests: '
00000244	A58583A3 96996097			177+ DC C' vector-packed-decimal-enhancement facility 2'
00000270	40868183 899389A3			178+ DC C' facility (bit 192) is not installed.'
		0000006B 00000001		179+SKL0001 EQU *-SKT0001
				180+ * facility bits
00000298	00000000 00000000			181+ DS FD gap
000002A0	00000000 00000000			182+FB0001 DS 4FD

LOC	OBJECT CODE			ADDR1	ADDR2	STMT	
						237	*****
						238	* cc was not as expected
						239	*****
0000033A	E310	0001	0082	0000033A	00000001	240	CCMSG EQU *
00000340	E310	5007	0076		00000001	241	XG R1, R1
00000346	5410	835C			00000007	242	LB R1, M3 m3 has CS bit
0000034A	4780	811E			0000055C	243	N R1, =F' 1' get CS (CC set) bit
					0000031E	244	BZ TESTREST ignore if not set
						245	*
						246	* extract CC extracted PSW
						247	*
0000034E	5810	8ED8			000010D8	248	L R1, CCPSW
00000352	8810	000C			0000000C	249	SRL R1, 12
00000356	5410	8360			00000560	250	N R1, =XL4' 3'
0000035A	4210	8EE0			000010E0	251	STC R1, CCFOUND save cc
						252	*
						253	* FILL IN MESSAGE
						254	*
0000035E	4820	5004			00000004	255	LH R2, TNUM get test number and convert
00000362	4E20	8EC8			000010C8	256	CVD R2, DECNUM
00000366	D211	8EB2	8E9C	000010B2	0000109C	257	MVC PRT3, EDIT
0000036C	DE11	8EB2	8EC8	000010B2	000010C8	258	ED PRT3, DECNUM
00000372	D202	8E57	8EBF	00001057	000010BF	259	MVC CCPRTNUM(3), PRT3+13 fill in message with test #
						260	
00000378	D207	8E74	500A	00001074	0000000A	261	MVC CCPRTNAME, OPNAME fill in message with instruction
						262	
0000037E	B982	0022				263	XGR R2, R2 get CC as U8
00000382	4320	5008			00000008	264	IC R2, CC
00000386	4E20	8EC8			000010C8	265	CVD R2, DECNUM and convert
0000038A	D211	8EB2	8E9C	000010B2	0000109C	266	MVC PRT3, EDIT
00000390	DE11	8EB2	8EC8	000010B2	000010C8	267	ED PRT3, DECNUM
00000396	D200	8E8A	8EC1	0000108A	000010C1	268	MVC CCPRTEXP(1), PRT3+15 fill in message with CC field
						269	
0000039C	B982	0022				270	XGR R2, R2 get CCFOUND as U8
000003A0	4320	8EE0			000010E0	271	IC R2, CCFOUND
000003A4	4E20	8EC8			000010C8	272	CVD R2, DECNUM and convert
000003A8	D211	8EB2	8E9C	000010B2	0000109C	273	MVC PRT3, EDIT
000003AE	DE11	8EB2	8EC8	000010B2	000010C8	274	ED PRT3, DECNUM
000003B4	D200	8E9A	8EC1	0000109A	000010C1	275	MVC CCPRTGOT(1), PRT3+15 fill in message with ccfound
						276	
000003BA	4100	0055			00000055	277	LA R0, CCPRTLNG message length
000003BE	4110	8E47			00001047	278	LA R1, CCPRTLNE messagfe address
000003C2	45F0	8232			00000432	279	BAL R15, RPTERROR
						280	
000003C6	47F0	8214			00000414	281	B FAILCONT

LOC	OBJECT CODE			ADDR1	ADDR2	STMT	
						283	*****
						284	* result not as expected:
						285	* issue message with test number, instruction under test
						286	* and instruction 12
						287	*****
				000003CA	00000001	288	FAILMSG EQU *
000003CA	4820	5004			00000004	289	LH R2, TNUM get test number and convert
000003CE	4E20	8EC8			000010C8	290	CVD R2, DECNUM
000003D2	D211	8EB2 8E9C		000010B2	0000109C	291	MVC PRT3, EDIT
000003D8	DE11	8EB2 8EC8		000010B2	000010C8	292	ED PRT3, DECNUM
000003DE	D202	8E18 8EBF		00001018	000010BF	293	MVC PRTNUM(3), PRT3+13 fill in message with test #
						294	
000003E4	D207	8E33 500A		00001033	0000000A	295	MVC PRTNAME, OPNAME fill in message with instruction
						296	
000003EA	B982	0022				297	XGR R2, R2 get M3 as U8
000003EE	4320	5007			00000007	298	IC R2, M3 and convert
000003F2	4E20	8EC8			000010C8	299	CVD R2, DECNUM
000003F6	D211	8EB2 8E9C		000010B2	0000109C	300	MVC PRT3, EDIT
000003FC	DE11	8EB2 8EC8		000010B2	000010C8	301	ED PRT3, DECNUM
00000402	D201	8E44 8EC0		00001044	000010C0	302	MVC PRTM3(2), PRT3+14 fill in message with m3 field
						303	
00000408	4100	003F			0000003F	304	LA R0, PRTLNG message length
0000040C	4110	8E08			00001008	305	LA R1, PRTLNE messagfe address
00000410	45F0	8232			00000432	306	BAL R15, RPTERROR
						308	*****
						309	* continue after a failed test
						310	*****
				00000414	00000001	311	FAILCONT EQU *
00000414	5800	835C			0000055C	312	L R0, =F' 1' set GLOBAL failed test indicator
00000418	5000	8E00			00001000	313	ST R0, FAILED
						314	
0000041C	41C0	C004			00000004	315	LA R12, 4(0, R12) next test address
00000420	47F0	80F4			000002F4	316	B NEXTE6
						318	*****
						319	* end of testing; set ending psw
						320	*****
				00000424	00000001	321	ENDTEST EQU *
00000424	5810	8E00			00001000	322	L R1, FAILED did a test fail?
00000428	1211					323	LTR R1, R1
0000042A	4780	8330			00000530	324	BZ E0J No, exit
0000042E	47F0	8348			00000548	325	B FAILTEST Yes, exit with BAD PSW
						326	

[illegible]

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				391 *****
				392 * Normal completion or Abnormal termination PSWs
				393 *****
00000520	00020001 80000000			395 E0JPSW DC OD' 0' , X' 0002000180000000' , AD(0)
00000530	B2B2 8320		00000520	397 E0J LPSWE E0JPSW Normal completion
00000538	00020001 80000000			399 FAILPSW DC OD' 0' , X' 0002000180000000' , AD(X' BAD')
00000548	B2B2 8338		00000538	401 FAILTEST LPSWE FAILPSW Abnormal termination
				403 *****
				404 * Working Storage
				405 *****
0000054C	00000000			407 CTLR0 DS F CRO
00000550	00000000			408 DS F
00000554				410 LTORG , Literals pool
00000554	00000080			411 =F' 128'
00000558	000022D0			412 =A(E6TESTS)
0000055C	00000001			413 =F' 1'
00000560	00000003			414 =XL4' 3'
00000564	0000			415 =H' 0'
00000566	005F			416 =AL2(L' MSGMSG)
				417
				418 * some constants
				419
	00000400	00000001		420 K EQU 1024 One KB
	00001000	00000001		421 PAGE EQU (4*K) Size of one page
	00010000	00000001		422 K64 EQU (64*K) 64 KB
	00100000	00000001		423 MB EQU (K*K) 1 MB
				424
				425
	AABBCCDD	00000001		426 REG2PATT EQU X' AABBCCDD' Polluted Register pattern
	000000DD	00000001		427 REG2LOW EQU X' DD' (last byte above)

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
					429 *=====
					430 *
					431 * NOTE: start data on an address that is easy to display
					432 * within Hercules
					433 *
					434 *=====
					435
00000568			00000568	00001000	436
					ORG ZVE6TST+X' 1000'
00001000	00000000				437 FAILED DC F' 0' some test failed?
00001004	00000000				438 TESTING DC F' 0' current test #
					440 *****
					441 * TEST failed : result messgae
					442 *****
					443 *
					444 * failed message and associated editting
					445 *
00001008	40404040	40404040			446 PRTLNE DC C' Test # '
00001018	A7A7A7				447 PRTNUM DC C' xxx'
0000101B	40868189	93858440			448 DC C' failed for instruction '
00001033	A7A7A7A7	A7A7A7A7			449 PRTNAME DC CL8' xxxxxxxx'
0000103B	40A689A3	884094F3			450 DC C' with m3='
00001044	A7A7				451 PRTMB DC C' xx'
00001046	4B				452 DC C' . '
			0000003F	00000001	453 PRTLNG EQU *- PRTLNE
					455 *****
					456 * TEST failed : CC message
					457 *****
					458 *
					459 * failed message and associated editting
					460 *
00001047	40404040	40404040			461 CCPRTLNE DC C' Test # '
00001057	A7A7A7				462 CCPRTNUM DC C' xxx'
0000105A	40A69996	95874083			463 DC c' wrong cc for instruction '
00001074	A7A7A7A7	A7A7A7A7			464 CCPRTNAME DC CL8' xxxxxxxx'
0000107C	4085A797	8583A385			465 DC C' expected: cc='
0000108A	A7				466 CCPRTEXP DC C' x'
0000108B	6B				467 DC C' , '
0000108C	40998583	8589A585			468 DC C' received: cc='
0000109A	A7				469 CCPRTGOT DC C' x'
0000109B	4B				470 DC C' . '
			00000055	00000001	471 CCPRTLNG EQU *- CCPRTLNE

[illegible]

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				528 *****
				529 * Macros to help build test tables
				530 *-----
				531 * VRR_K Macro to help build test tables
				532 *****
				533 MACRO
				534 VRR_K &INST, &MB, &CC
				535 . * &INST - instruction under test
				536 . * &MB
				537 . * &CC - expected CC
				538 . *
				539 LCLA &XCC(4) &CC has mask values for FAILED condition codes
				540 &XCC(1) SETA 7 CC != 0
				541 &XCC(2) SETA 11 CC != 1
				542 &XCC(3) SETA 13 CC != 2
				543 &XCC(4) SETA 14 CC != 3
				544
				545 GBLA &TNUM
				546 &TNUM SETA &TNUM+1
				547
				548 DS OFD
				549 USING *, R5 base for test data and test routine
				550
				551 T&TNUM DC A(X&TNUM) address of test routine
				552 DC H' &TNUM test number
				553 DC XL1' 00'
				554 DC HL1' &MB' &MB
				555 DC HL1' &CC' cc
				556 DC HL1' &XCC(&CC+1)' cc failed mask
				557
				558 DC CL8' &INST' instruction name
				559 DC A(16) result length
				560 REA&TNUM DC A(RE&TNUM) result address
				561 . *
				562 * INSTRUCTION UNDER TEST ROUTINE
				563 X&TNUM DS OF
				564 VL V1, V1FUDGE pollute V1
				565 VL V2, RE&TNUM+16 get V2 source
				566
				567 &INST V1, V2, &MB test instruction
				568
				569 VST V1, V10OUTPUT save
				570 EPSW R2, R0 exptract psw
				571 ST R2, CCPSW to save CC
				572
				573 BR R11 return
				574
				575 RE&TNUM DC OF
				576 DROP R5
				577
				578 MEND

580	*****		
581	*	PTTABLE Macro to generate table of pointers to individual tests	
582	*****		
583			
584		MACRO	
585		PTTABLE	
586		GBLA	&TNUM
587		LCLA	&CUR
588	&CUR	SETA	1
589	. *		
590	TTABLE	DS	OF
591	. LOOP	ANOP	
592	. *		
593		DC	A(T&CUR) address of test
594	. *		
595	&CUR	SETA	&CUR+1
596		AIF	(&CUR LE &TNUM) . LOOP
597	*		
598		DC	A(0) END OF TABLE
599		DC	A(0)
600	. *		
601		MEND	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				603 *****	
				604 * E6 VRR_K tests	
				605 *****	
00001188		00000000	00002397	606 ZVE6TST CSECT ,	
				607 DS 0F	
				609 PRINT DATA	
				610 *	
				611 * E651 VCLZDP - VECTOR COUNT LEADING ZERO DIGITS	
				612 * E654 VUPKZH - VECTOR UNPACK ZONED HIGH	
				613 * E65C VUPKZL - VECTOR UNPACK ZONED LOW	
				614 *	
				615 * VRR_K instr, m3	
				616 * followed by	
				617 * v1 - expected result (16 bytes)	
				618 * v2 - 16 byte packed decimal source	
				619	
				620 * -----	
				621 * VCLZDP - VECTOR COUNT LEADING ZERO DIGITS	
				622 * -----	
				623 * VCLZDP simple	m3= 1 (NV=0, NZ=0 , CS=1)
				624 *	m3= 3 (NV=0, NZ=1 , CS=1)
				625 *	m3= 5 (NV=1, NZ=0 , CS=1)
				626 *	m3= 7 (NV=1, NZ=1 , CS=1)
00001188				627 VRR_K VCLZDP, 1, 2	
00001188		00001188		628+ DS 0FD	
00001188				629+ USING *, R5	base for test data and test routine
00001188	000011A4			630+T1 DC A(X1)	address of test routine
0000118C	0001			631+ DC H' 1'	test number
0000118E	00			632+ DC XL1' 00'	
0000118F	01			633+ DC HL1' 1'	&MB
00001190	02			634+ DC HL1' 2'	cc
00001191	0D			635+ DC HL1' 13'	cc failed mask
00001192	E5C3D3E9 C4D74040			636+ DC CL8' VCLZDP'	instruction name
0000119C	00000010			637+ DC A(16)	result length
000011A0	000011C8			638+REA1 DC A(RE1)	result address
				639+*	INSTRUCTION UNDER TEST ROUTINE
000011A4				640+X1 DS 0F	
000011A4	E710 8F38 0006		00001138	641+ VL V1, V1FUDGE	pollute V1
000011AA	E720 5050 0006		000011D8	642+ VL V2, RE1+16	get V2 source
000011B0	E612 0010 0051			643+ VCLZDP V1, V2, 1	test instruction
000011B6	E710 8F00 000E		00001100	644+ VST V1, V10UTPUT	save
000011BC	B98D 0020			645+ EPSW R2, R0	extract psw
000011C0	5020 8ED8		000010D8	646+ ST R2, CCPSW	to save CC
000011C4	07FB			647+ BR R11	return
000011C8				648+RE1 DC 0F	
000011C8				649+ DROP R5	
000011C8	00000000 0000001D			650 DC XL16' 0000000000000001D000000000000000'	V1 result
000011D0	00000000 00000000				
000011D8	00000000 00000000			651 DC XL16' 000000000000000000000000000010C'	V2 source
000011E0	00000000 0000010C				
				652	
000011E8				653 VRR_K VCLZDP, 1, 2	
000011E8		000011E8		654+ DS 0FD	
				655+ USING *, R5	base for test data and test routine

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
000011E8	00001204			656+T2	DC	A(X2) address of test routine
000011EC	0002			657+	DC	H' 2' test number
000011EE	00			658+	DC	XL1' 00'
000011EF	01			659+	DC	HL1' 1' &MB
000011F0	02			660+	DC	HL1' 2' cc
000011F1	0D			661+	DC	HL1' 13' cc failed mask
000011F2	E5C3D3E9 C4D74040			662+	DC	CL8' VCLZDP' instruction name
000011FC	00000010			663+	DC	A(16) result length
00001200	00001228			664+REA2	DC	A(RE2) result address
				665+*		INSTRUCTION UNDER TEST ROUTINE
00001204				666+X2	DS	0F
00001204	E710 8F38 0006		00001138	667+	VL	V1, V1FUDGE pollute V1
0000120A	E720 9038 0006		00001238	668+	VL	V2, RE2+16 get V2 source
00001210	E612 0010 0051			669+	VCLZDP	V1, V2, 1 test instruction
00001216	E710 8F00 000E		00001100	670+	VST	V1, V10UTPUT save
0000121C	B98D 0020			671+	EPSW	R2, R0 exptract psw
00001220	5020 8ED8		000010D8	672+	ST	R2, CCPSW to save CC
00001224	07FB			673+	BR	R11 return
00001228				674+RE2	DC	0F
00001228				675+	DROP	R5
00001228	00000000 0000000F			676	DC	XL16' 0000000000000000F000000000000000' V1 result
00001230	00000000 00000000					
00001238	00000000 00000001			677	DC	XL16' 00000000000000001110000000000010C' V2 source
00001240	11000000 0000010C					
				678		
				679	VRR_K	VCLZDP, 1, 1
00001248				680+	DS	0FD
00001248		00001248		681+	USING	*, R5 base for test data and test routine
00001248	00001264			682+T3	DC	A(X3) address of test routine
0000124C	0003			683+	DC	H' 3' test number
0000124E	00			684+	DC	XL1' 00'
0000124F	01			685+	DC	HL1' 1' &MB
00001250	01			686+	DC	HL1' 1' cc
00001251	0B			687+	DC	HL1' 11' cc failed mask
00001252	E5C3D3E9 C4D74040			688+	DC	CL8' VCLZDP' instruction name
0000125C	00000010			689+	DC	A(16) result length
00001260	00001288			690+REA3	DC	A(RE3) result address
				691+*		INSTRUCTION UNDER TEST ROUTINE
00001264				692+X3	DS	0F
00001264	E710 8F38 0006		00001138	693+	VL	V1, V1FUDGE pollute V1
0000126A	E720 5050 0006		00001298	694+	VL	V2, RE3+16 get V2 source
00001270	E612 0010 0051			695+	VCLZDP	V1, V2, 1 test instruction
00001276	E710 8F00 000E		00001100	696+	VST	V1, V10UTPUT save
0000127C	B98D 0020			697+	EPSW	R2, R0 exptract psw
00001280	5020 8ED8		000010D8	698+	ST	R2, CCPSW to save CC
00001284	07FB			699+	BR	R11 return
00001288				700+RE3	DC	0F
00001288				701+	DROP	R5
00001288	00000000 0000000F			702	DC	XL16' 0000000000000000F000000000000000' V1 result
00001290	00000000 00000000					
00001298	00000000 00000001			703	DC	XL16' 00000000000000001110000000000010D' V2 source
000012A0	11000000 0000010D					
				704		
				705	VRR_K	VCLZDP, 1, 0
000012A8				706+	DS	0FD
000012A8		000012A8		707+	USING	*, R5 base for test data and test routine

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000012A8	000012C4			708+T4	DC	A(X4)	address of test routine
000012AC	0004			709+	DC	H' 4'	test number
000012AE	00			710+	DC	XL1' 00'	
000012AF	01			711+	DC	HL1' 1'	&MB
000012B0	00			712+	DC	HL1' 0'	cc
000012B1	07			713+	DC	HL1' 7'	cc failed mask
000012B2	E5C3D3E9 C4D74040			714+	DC	CL8' VCLZDP'	instruction name
000012BC	00000010			715+	DC	A(16)	result length
000012C0	000012E8			716+REA4	DC	A(RE4)	result address
				717+*			INSTRUCTION UNDER TEST ROUTINE
000012C4				718+X4	DS	0F	
000012C4	E710 8F38 0006		00001138	719+	VL	V1, V1FUDGE	pollute V1
000012CA	E720 5050 0006		000012F8	720+	VL	V2, RE4+16	get V2 source
000012D0	E612 0010 0051			721+	VCLZDP	V1, V2, 1	test instruction
000012D6	E710 8F00 000E		00001100	722+	VST	V1, V10UTPUT	save
000012DC	B98D 0020			723+	EPSW	R2, R0	exptract psw
000012E0	5020 8ED8		000010D8	724+	ST	R2, CCPSW	to save CC
000012E4	07FB			725+	BR	R11	return
000012E8				726+RE4	DC	0F	
000012E8				727+	DROP	R5	
000012E8	00000000 0000001F			728	DC	XL16' 0000000000000001F000000000000000'	V1 result
000012F0	00000000 00000000						
000012F8	00000000 00000000			729	DC	XL16' 00000000000000000000000000000000C'	V2 source
00001300	00000000 0000000C						
				730			
				731	VRR_K	VCLZDP, 1, 0	
00001308				732+	DS	0FD	
00001308		00001308		733+	USING	*, R5	base for test data and test routine
00001308	00001324			734+T5	DC	A(X5)	address of test routine
0000130C	0005			735+	DC	H' 5'	test number
0000130E	00			736+	DC	XL1' 00'	
0000130F	01			737+	DC	HL1' 1'	&MB
00001310	00			738+	DC	HL1' 0'	cc
00001311	07			739+	DC	HL1' 7'	cc failed mask
00001312	E5C3D3E9 C4D74040			740+	DC	CL8' VCLZDP'	instruction name
0000131C	00000010			741+	DC	A(16)	result length
00001320	00001348			742+REA5	DC	A(RE5)	result address
				743+*			INSTRUCTION UNDER TEST ROUTINE
00001324				744+X5	DS	0F	
00001324	E710 8F38 0006		00001138	745+	VL	V1, V1FUDGE	pollute V1
0000132A	E720 5050 0006		00001358	746+	VL	V2, RE5+16	get V2 source
00001330	E612 0010 0051			747+	VCLZDP	V1, V2, 1	test instruction
00001336	E710 8F00 000E		00001100	748+	VST	V1, V10UTPUT	save
0000133C	B98D 0020			749+	EPSW	R2, R0	exptract psw
00001340	5020 8ED8		000010D8	750+	ST	R2, CCPSW	to save CC
00001344	07FB			751+	BR	R11	return
00001348				752+RE5	DC	0F	
00001348				753+	DROP	R5	
00001348	00000000 0000001F			754	DC	XL16' 0000000000000001F000000000000000'	V1 result
00001350	00000000 00000000						
00001358	00000000 00000000			755	DC	XL16' 00000000000000000000000000000000D'	V2 source
00001360	00000000 0000000D						
				756			
				757 * VCLZDP with		m3= 3 (NV=0, NZ=1 , CS=1)	
				758			
				759	VRR_K	VCLZDP, 3, 2	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001368				760+	DS	0FD	
00001368		00001368		761+	USING	*, R5	base for test data and test routine
00001368	00001384			762+T6	DC	A(X6)	address of test routine
0000136C	0006			763+	DC	H' 6'	test number
0000136E	00			764+	DC	XL1' 00'	
0000136F	03			765+	DC	HL1' 3'	&MB
00001370	02			766+	DC	HL1' 2'	cc
00001371	0D			767+	DC	HL1' 13'	cc failed mask
00001372	E5C3D3E9 C4D74040			768+	DC	CL8' VCLZDP'	instruction name
0000137C	00000010			769+	DC	A(16)	result length
00001380	000013A8			770+REA6	DC	A(RE6)	result address
				771+*			INSTRUCTION UNDER TEST ROUTINE
00001384				772+X6	DS	0F	
00001384	E710 8F38 0006		00001138	773+	VL	V1, V1FUDGE	pollute V1
0000138A	E720 5050 0006		000013B8	774+	VL	V2, RE6+16	get V2 source
00001390	E612 0030 0051			775+	VCLZDP	V1, V2, 3	test instruction
00001396	E710 8F00 000E		00001100	776+	VST	V1, V10UTPUT	save
0000139C	B98D 0020			777+	EPSW	R2, R0	exptract psw
000013A0	5020 8ED8		000010D8	778+	ST	R2, CCPSW	to save CC
000013A4	07FB			779+	BR	R11	return
000013A8				780+RE6	DC	0F	
000013A8				781+	DROP	R5	
000013A8	00000000 0000001D			782	DC	XL16' 0000000000000001D000000000000000'	V1 result
000013B0	00000000 00000000						
000013B8	00000000 00000000			783	DC	XL16' 0000000000000000000000000000010C'	V2 source
000013C0	00000000 0000010C						
				784			
				785	VRR_K	VCLZDP, 3, 2	
000013C8				786+	DS	0FD	
000013C8		000013C8		787+	USING	*, R5	base for test data and test routine
000013C8	000013E4			788+T7	DC	A(X7)	address of test routine
000013CC	0007			789+	DC	H' 7'	test number
000013CE	00			790+	DC	XL1' 00'	
000013CF	03			791+	DC	HL1' 3'	&MB
000013D0	02			792+	DC	HL1' 2'	cc
000013D1	0D			793+	DC	HL1' 13'	cc failed mask
000013D2	E5C3D3E9 C4D74040			794+	DC	CL8' VCLZDP'	instruction name
000013DC	00000010			795+	DC	A(16)	result length
000013E0	00001408			796+REA7	DC	A(RE7)	result address
				797+*			INSTRUCTION UNDER TEST ROUTINE
000013E4				798+X7	DS	0F	
000013E4	E710 8F38 0006		00001138	799+	VL	V1, V1FUDGE	pollute V1
000013EA	E720 5050 0006		00001418	800+	VL	V2, RE7+16	get V2 source
000013F0	E612 0030 0051			801+	VCLZDP	V1, V2, 3	test instruction
000013F6	E710 8F00 000E		00001100	802+	VST	V1, V10UTPUT	save
000013FC	B98D 0020			803+	EPSW	R2, R0	exptract psw
00001400	5020 8ED8		000010D8	804+	ST	R2, CCPSW	to save CC
00001404	07FB			805+	BR	R11	return
00001408				806+RE7	DC	0F	
00001408				807+	DROP	R5	
00001408	00000000 0000000F			808	DC	XL16' 0000000000000000F000000000000000'	V1 result
00001410	00000000 00000000						
00001418	00000000 00000001			809	DC	XL16' 000000000000000011100000000000010C'	V2 source
00001420	11000000 0000010C						
				810			
				811	VRR_K	VCLZDP, 3, 1	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001428				812+	DS	OFD	
00001428		00001428		813+	USING	*, R5	base for test data and test routine
00001428	00001444			814+T8	DC	A(X8)	address of test routine
0000142C	0008			815+	DC	H' 8'	test number
0000142E	00			816+	DC	XL1' 00'	
0000142F	03			817+	DC	HL1' 3'	&MB
00001430	01			818+	DC	HL1' 1'	cc
00001431	0B			819+	DC	HL1' 11'	cc failed mask
00001432	E5C3D3E9 C4D74040			820+	DC	CL8' VCLZDP'	instruction name
0000143C	00000010			821+	DC	A(16)	result length
00001440	00001468			822+REA8	DC	A(RE8)	result address
				823+*			INSTRUCTION UNDER TEST ROUTINE
00001444				824+X8	DS	OF	
00001444	E710 8F38 0006		00001138	825+	VL	V1, V1FUDGE	pollute V1
0000144A	E720 5050 0006		00001478	826+	VL	V2, RE8+16	get V2 source
00001450	E612 0030 0051			827+	VCLZDP	V1, V2, 3	test instruction
00001456	E710 8F00 000E		00001100	828+	VST	V1, V10UTPUT	save
0000145C	B98D 0020			829+	EPSW	R2, R0	exptract psw
00001460	5020 8ED8		000010D8	830+	ST	R2, CCPSW	to save CC
00001464	07FB			831+	BR	R11	return
00001468				832+RE8	DC	OF	
00001468				833+	DROP	R5	
00001468	00000000 0000000F			834	DC	XL16' 0000000000000000F000000000000000'	V1 result
00001470	00000000 00000000						
00001478	00000000 00000001			835	DC	XL16' 00000000000000001110000000000010D'	V2 source
00001480	11000000 0000010D						
				836			
				837	VRR_K	VCLZDP, 3, 0	
00001488				838+	DS	OFD	
00001488		00001488		839+	USING	*, R5	base for test data and test routine
00001488	000014A4			840+T9	DC	A(X9)	address of test routine
0000148C	0009			841+	DC	H' 9'	test number
0000148E	00			842+	DC	XL1' 00'	
0000148F	03			843+	DC	HL1' 3'	&MB
00001490	00			844+	DC	HL1' 0'	cc
00001491	07			845+	DC	HL1' 7'	cc failed mask
00001492	E5C3D3E9 C4D74040			846+	DC	CL8' VCLZDP'	instruction name
0000149C	00000010			847+	DC	A(16)	result length
000014A0	000014C8			848+REA9	DC	A(RE9)	result address
				849+*			INSTRUCTION UNDER TEST ROUTINE
000014A4				850+X9	DS	OF	
000014A4	E710 8F38 0006		00001138	851+	VL	V1, V1FUDGE	pollute V1
000014AA	E720 5050 0006		000014D8	852+	VL	V2, RE9+16	get V2 source
000014B0	E612 0030 0051			853+	VCLZDP	V1, V2, 3	test instruction
000014B6	E710 8F00 000E		00001100	854+	VST	V1, V10UTPUT	save
000014BC	B98D 0020			855+	EPSW	R2, R0	exptract psw
000014C0	5020 8ED8		000010D8	856+	ST	R2, CCPSW	to save CC
000014C4	07FB			857+	BR	R11	return
000014C8				858+RE9	DC	OF	
000014C8				859+	DROP	R5	
000014C8	00000000 0000001F			860	DC	XL16' 00000000000000001F000000000000000'	V1 result
000014D0	00000000 00000000						
000014D8	00000000 00000000			861	DC	XL16' 000000000000000000000000000000C'	V2 source
000014E0	00000000 0000000C						
				862			
				863	VRR_K	VCLZDP, 3, 1	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000014E8				864+	DS	0FD	
000014E8		000014E8		865+	USING	*, R5	base for test data and test routine
000014E8	00001504			866+T10	DC	A(X10)	address of test routine
000014EC	000A			867+	DC	H' 10'	test number
000014EE	00			868+	DC	XL1' 00'	
000014EF	03			869+	DC	HL1' 3'	&MB
000014F0	01			870+	DC	HL1' 1'	cc
000014F1	0B			871+	DC	HL1' 11'	cc failed mask
000014F2	E5C3D3E9 C4D74040			872+	DC	CL8' VCLZDP'	instruction name
000014FC	00000010			873+	DC	A(16)	result length
00001500	00001528			874+REA10	DC	A(RE10)	result address
				875+*			INSTRUCTION UNDER TEST ROUTINE
00001504				876+X10	DS	0F	
00001504	E710 8F38 0006		00001138	877+	VL	V1, V1FUDGE	pollute V1
0000150A	E720 5050 0006		00001538	878+	VL	V2, RE10+16	get V2 source
00001510	E612 0030 0051			879+	VCLZDP	V1, V2, 3	test instruction
00001516	E710 8F00 000E		00001100	880+	VST	V1, V10UTPUT	save
0000151C	B98D 0020			881+	EPSW	R2, R0	exptract psw
00001520	5020 8ED8		000010D8	882+	ST	R2, CCPSW	to save CC
00001524	07FB			883+	BR	R11	return
00001528				884+RE10	DC	0F	
00001528				885+	DROP	R5	
00001528	00000000 0000001F			886	DC	XL16' 0000000000000001F000000000000000'	V1 result
00001530	00000000 00000000						
00001538	00000000 00000000			887	DC	XL16' 000000000000000000000000000000D'	V2 source
00001540	00000000 0000000D						
				888			
				889 * VCLZDP with			m3= 5 (NV=1, NZ=0 , CS=1)
				890			
				891	VRR_K	VCLZDP, 5, 2	
00001548				892+	DS	0FD	
00001548		00001548		893+	USING	*, R5	base for test data and test routine
00001548	00001564			894+T11	DC	A(X11)	address of test routine
0000154C	000B			895+	DC	H' 11'	test number
0000154E	00			896+	DC	XL1' 00'	
0000154F	05			897+	DC	HL1' 5'	&MB
00001550	02			898+	DC	HL1' 2'	cc
00001551	0D			899+	DC	HL1' 13'	cc failed mask
00001552	E5C3D3E9 C4D74040			900+	DC	CL8' VCLZDP'	instruction name
0000155C	00000010			901+	DC	A(16)	result length
00001560	00001588			902+REA11	DC	A(RE11)	result address
				903+*			INSTRUCTION UNDER TEST ROUTINE
00001564				904+X11	DS	0F	
00001564	E710 8F38 0006		00001138	905+	VL	V1, V1FUDGE	pollute V1
0000156A	E720 5050 0006		00001598	906+	VL	V2, RE11+16	get V2 source
00001570	E612 0050 0051			907+	VCLZDP	V1, V2, 5	test instruction
00001576	E710 8F00 000E		00001100	908+	VST	V1, V10UTPUT	save
0000157C	B98D 0020			909+	EPSW	R2, R0	exptract psw
00001580	5020 8ED8		000010D8	910+	ST	R2, CCPSW	to save CC
00001584	07FB			911+	BR	R11	return
00001588				912+RE11	DC	0F	
00001588				913+	DROP	R5	
00001588	00000000 0000001D			914	DC	XL16' 0000000000000001D000000000000000'	V1 result
00001590	00000000 00000000						
00001598	00000000 00000000			915	DC	XL16' 000000000000000000000000000010C'	V2 source
000015A0	00000000 0000010C						

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
				916		
				917	VRR_K	VCLZDP, 5, 2
000015A8				918+	DS	OFD
000015A8		000015A8		919+	USING	*, R5
000015A8	000015C4			920+T12	DC	A(X12)
000015AC	000C			921+	DC	H' 12'
000015AE	00			922+	DC	XL1' 00'
000015AF	05			923+	DC	HL1' 5'
000015B0	02			924+	DC	HL1' 2'
000015B1	0D			925+	DC	HL1' 13'
000015B2	E5C3D3E9 C4D74040			926+	DC	CL8' VCLZDP'
000015BC	00000010			927+	DC	A(16)
000015C0	000015E8			928+REA12	DC	A(RE12)
				929+*		INSTRUCTION UNDER TEST ROUTINE
000015C4				930+X12	DS	OF
000015C4	E710 8F38 0006		00001138	931+	VL	V1, V1FUDGE
000015CA	E720 5050 0006		000015F8	932+	VL	V2, RE12+16
000015D0	E612 0050 0051			933+	VCLZDP	V1, V2, 5
000015D6	E710 8F00 000E		00001100	934+	VST	V1, V10OUTPUT
000015DC	B98D 0020			935+	EPSW	R2, R0
000015E0	5020 8ED8		000010D8	936+	ST	R2, CCPSW
000015E4	07FB			937+	BR	R11
000015E8				938+RE12	DC	OF
000015E8				939+	DROP	R5
000015E8	00000000 0000000F			940	DC	XL16' 0000000000000000F000000000000000' V1 result
000015F0	00000000 00000000					
000015F8	00000000 00000001			941	DC	XL16' 00000000000000001110000000000010C' V2 source
00001600	11000000 0000010C					
				942		
				943	VRR_K	VCLZDP, 5, 1
00001608				944+	DS	OFD
00001608		00001608		945+	USING	*, R5
00001608	00001624			946+T13	DC	A(X13)
0000160C	000D			947+	DC	H' 13'
0000160E	00			948+	DC	XL1' 00'
0000160F	05			949+	DC	HL1' 5'
00001610	01			950+	DC	HL1' 1'
00001611	0B			951+	DC	HL1' 11'
00001612	E5C3D3E9 C4D74040			952+	DC	CL8' VCLZDP'
0000161C	00000010			953+	DC	A(16)
00001620	00001648			954+REA13	DC	A(RE13)
				955+*		INSTRUCTION UNDER TEST ROUTINE
00001624				956+X13	DS	OF
00001624	E710 8F38 0006		00001138	957+	VL	V1, V1FUDGE
0000162A	E720 5050 0006		00001658	958+	VL	V2, RE13+16
00001630	E612 0050 0051			959+	VCLZDP	V1, V2, 5
00001636	E710 8F00 000E		00001100	960+	VST	V1, V10OUTPUT
0000163C	B98D 0020			961+	EPSW	R2, R0
00001640	5020 8ED8		000010D8	962+	ST	R2, CCPSW
00001644	07FB			963+	BR	R11
00001648				964+RE13	DC	OF
00001648				965+	DROP	R5
00001648	00000000 0000000F			966	DC	XL16' 0000000000000000F000000000000000' V1 result
00001650	00000000 00000000					
00001658	00000000 00000001			967	DC	XL16' 00000000000000001110000000000010D' V2 source
00001660	11000000 0000010D					

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
				968		
				969	VRR_K VCLZDP, 5, 0	
00001668				970+	DS OFD	
00001668		00001668		971+	USING *, R5	base for test data and test routine
00001668	00001684			972+T14	DC A(X14)	address of test routine
0000166C	000E			973+	DC H' 14'	test number
0000166E	00			974+	DC XL1' 00'	
0000166F	05			975+	DC HL1' 5'	&MB
00001670	00			976+	DC HL1' 0'	cc
00001671	07			977+	DC HL1' 7'	cc failed mask
00001672	E5C3D3E9 C4D74040			978+	DC CL8' VCLZDP'	instruction name
0000167C	00000010			979+	DC A(16)	result length
00001680	000016A8			980+REA14	DC A(RE14)	result address
				981+*		INSTRUCTION UNDER TEST ROUTINE
00001684				982+X14	DS OF	
00001684	E710 8F38 0006		00001138	983+	VL V1, V1FUDGE	pollute V1
0000168A	E720 5050 0006		000016B8	984+	VL V2, RE14+16	get V2 source
00001690	E612 0050 0051			985+	VCLZDP V1, V2, 5	test instruction
00001696	E710 8F00 000E		00001100	986+	VST V1, V10OUTPUT	save
0000169C	B98D 0020			987+	EPSW R2, R0	exptract psw
000016A0	5020 8ED8		000010D8	988+	ST R2, CCPSW	to save CC
000016A4	07FB			989+	BR R11	return
000016A8				990+RE14	DC OF	
000016A8				991+	DROP R5	
000016A8	00000000 0000001F			992	DC XL16' 00000000000000001F0000000000000000'	V1 result
000016B0	00000000 00000000					
000016B8	00000000 00000000			993	DC XL16' 0000000000000000000000000000000000C'	V2 source
000016C0	00000000 0000000C					
				994		
				995	VRR_K VCLZDP, 5, 0	
000016C8				996+	DS OFD	
000016C8		000016C8		997+	USING *, R5	base for test data and test routine
000016C8	000016E4			998+T15	DC A(X15)	address of test routine
000016CC	000F			999+	DC H' 15'	test number
000016CE	00			1000+	DC XL1' 00'	
000016CF	05			1001+	DC HL1' 5'	&MB
000016D0	00			1002+	DC HL1' 0'	cc
000016D1	07			1003+	DC HL1' 7'	cc failed mask
000016D2	E5C3D3E9 C4D74040			1004+	DC CL8' VCLZDP'	instruction name
000016DC	00000010			1005+	DC A(16)	result length
000016E0	00001708			1006+REA15	DC A(RE15)	result address
				1007+*		INSTRUCTION UNDER TEST ROUTINE
000016E4				1008+X15	DS OF	
000016E4	E710 8F38 0006		00001138	1009+	VL V1, V1FUDGE	pollute V1
000016EA	E720 5050 0006		00001718	1010+	VL V2, RE15+16	get V2 source
000016F0	E612 0050 0051			1011+	VCLZDP V1, V2, 5	test instruction
000016F6	E710 8F00 000E		00001100	1012+	VST V1, V10OUTPUT	save
000016FC	B98D 0020			1013+	EPSW R2, R0	exptract psw
00001700	5020 8ED8		000010D8	1014+	ST R2, CCPSW	to save CC
00001704	07FB			1015+	BR R11	return
00001708				1016+RE15	DC OF	
00001708				1017+	DROP R5	
00001708	00000000 0000001F			1018	DC XL16' 00000000000000001F0000000000000000'	V1 result
00001710	00000000 00000000					
00001718	00000000 00000000			1019	DC XL16' 0000000000000000000000000000000000D'	V2 source
00001720	00000000 0000000D					

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
				1020		
				1021	VRR_K VCLZDP, 5, 3	
00001728				1022+	DS OFD	
00001728		00001728		1023+	USING *, R5	base for test data and test routine
00001728	00001744			1024+T16	DC A(X16)	address of test routine
0000172C	0010			1025+	DC H' 16'	test number
0000172E	00			1026+	DC XL1' 00'	
0000172F	05			1027+	DC HL1' 5'	&MB
00001730	03			1028+	DC HL1' 3'	cc
00001731	0E			1029+	DC HL1' 14'	cc failed mask
00001732	E5C3D3E9 C4D74040			1030+	DC CL8' VCLZDP'	instruction name
0000173C	00000010			1031+	DC A(16)	result length
00001740	00001768			1032+REA16	DC A(RE16)	result address
				1033+*		INSTRUCTION UNDER TEST ROUTINE
00001744				1034+X16	DS OF	
00001744	E710 8F38 0006		00001138	1035+	VL V1, V1FUDGE	pollute V1
0000174A	E720 5050 0006		00001778	1036+	VL V2, RE16+16	get V2 source
00001750	E612 0050 0051			1037+	VCLZDP V1, V2, 5	test instruction
00001756	E710 8F00 000E		00001100	1038+	VST V1, V10OUTPUT	save
0000175C	B98D 0020			1039+	EPSW R2, R0	extract psw
00001760	5020 8ED8		000010D8	1040+	ST R2, CCPSW	to save CC
00001764	07FB			1041+	BR R11	return
00001768				1042+RE16	DC OF	
00001768				1043+	DROP R5	
00001768	00000000 00000002			1044	DC XL16' 00000000000000002000000000000000'	V1 result
00001770	00000000 00000000					
00001778	00AAA000 00000000			1045	DC XL16' 00AAA00000000000000000000000000D'	V2 source
00001780	00000000 0000000D					
				1046		
				1047 * VCLZDP with		m3= 7 (NV=1, NZ=1 , CS=1)
				1048		
				1049	VRR_K VCLZDP, 7, 2	
00001788				1050+	DS OFD	
00001788		00001788		1051+	USING *, R5	base for test data and test routine
00001788	000017A4			1052+T17	DC A(X17)	address of test routine
0000178C	0011			1053+	DC H' 17'	test number
0000178E	00			1054+	DC XL1' 00'	
0000178F	07			1055+	DC HL1' 7'	&MB
00001790	02			1056+	DC HL1' 2'	cc
00001791	0D			1057+	DC HL1' 13'	cc failed mask
00001792	E5C3D3E9 C4D74040			1058+	DC CL8' VCLZDP'	instruction name
0000179C	00000010			1059+	DC A(16)	result length
000017A0	000017C8			1060+REA17	DC A(RE17)	result address
				1061+*		INSTRUCTION UNDER TEST ROUTINE
000017A4				1062+X17	DS OF	
000017A4	E710 8F38 0006		00001138	1063+	VL V1, V1FUDGE	pollute V1
000017AA	E720 5050 0006		000017D8	1064+	VL V2, RE17+16	get V2 source
000017B0	E612 0070 0051			1065+	VCLZDP V1, V2, 7	test instruction
000017B6	E710 8F00 000E		00001100	1066+	VST V1, V10OUTPUT	save
000017BC	B98D 0020			1067+	EPSW R2, R0	extract psw
000017C0	5020 8ED8		000010D8	1068+	ST R2, CCPSW	to save CC
000017C4	07FB			1069+	BR R11	return
000017C8				1070+RE17	DC OF	
000017C8				1071+	DROP R5	
000017C8	00000000 0000001D			1072	DC XL16' 00000000000000001D000000000000000'	V1 result
000017D0	00000000 00000000					

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
000017D8	00000000 00000000			1073	DC	XL16' 000000000000000000000000000010C' V2 source
000017E0	00000000 0000010C					
				1074		
				1075	VRR_K	VCLZDP, 7, 2
000017E8				1076+	DS	OFD
000017E8		000017E8		1077+	USING	*, R5
000017E8	00001804			1078+T18	DC	A(X18)
000017EC	0012			1079+	DC	H' 18'
000017EE	00			1080+	DC	XL1' 00'
000017EF	07			1081+	DC	HL1' 7' &MB
000017F0	02			1082+	DC	HL1' 2' cc
000017F1	0D			1083+	DC	HL1' 13' cc failed mask
000017F2	E5C3D3E9 C4D74040			1084+	DC	CL8' VCLZDP' instruction name
000017FC	00000010			1085+	DC	A(16) result length
00001800	00001828			1086+REA18	DC	A(RE18) result address
				1087+*		INSTRUCTION UNDER TEST ROUTINE
00001804				1088+X18	DS	OF
00001804	E710 8F38 0006		00001138	1089+	VL	V1, V1FUDGE pollute V1
0000180A	E720 5050 0006		00001838	1090+	VL	V2, RE18+16 get V2 source
00001810	E612 0070 0051			1091+	VCLZDP	V1, V2, 7 test instruction
00001816	E710 8F00 000E		00001100	1092+	VST	V1, V10UTPUT save
0000181C	B98D 0020			1093+	EPSW	R2, R0 exptract psw
00001820	5020 8ED8		000010D8	1094+	ST	R2, CCPSW to save CC
00001824	07FB			1095+	BR	R11 return
00001828				1096+RE18	DC	OF
00001828				1097+	DROP	R5
00001828	00000000 0000000F			1098	DC	XL16' 000000000000000F000000000000000' V1 result
00001830	00000000 00000000					
00001838	00000000 00000001			1099	DC	XL16' 0000000000000001110000000000010C' V2 source
00001840	11000000 0000010C					
				1100		
				1101	VRR_K	VCLZDP, 7, 1
00001848				1102+	DS	OFD
00001848		00001848		1103+	USING	*, R5
00001848	00001864			1104+T19	DC	A(X19)
0000184C	0013			1105+	DC	H' 19'
0000184E	00			1106+	DC	XL1' 00'
0000184F	07			1107+	DC	HL1' 7' &MB
00001850	01			1108+	DC	HL1' 1' cc
00001851	0B			1109+	DC	HL1' 11' cc failed mask
00001852	E5C3D3E9 C4D74040			1110+	DC	CL8' VCLZDP' instruction name
0000185C	00000010			1111+	DC	A(16) result length
00001860	00001888			1112+REA19	DC	A(RE19) result address
				1113+*		INSTRUCTION UNDER TEST ROUTINE
00001864				1114+X19	DS	OF
00001864	E710 8F38 0006		00001138	1115+	VL	V1, V1FUDGE pollute V1
0000186A	E720 5050 0006		00001898	1116+	VL	V2, RE19+16 get V2 source
00001870	E612 0070 0051			1117+	VCLZDP	V1, V2, 7 test instruction
00001876	E710 8F00 000E		00001100	1118+	VST	V1, V10UTPUT save
0000187C	B98D 0020			1119+	EPSW	R2, R0 exptract psw
00001880	5020 8ED8		000010D8	1120+	ST	R2, CCPSW to save CC
00001884	07FB			1121+	BR	R11 return
00001888				1122+RE19	DC	OF
00001888				1123+	DROP	R5
00001888	00000000 0000000F			1124	DC	XL16' 000000000000000F000000000000000' V1 result
00001890	00000000 00000000					

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00001898	00000000 00000001			1125	DC	XL16' 00000000000000001110000000000010D' V2 source
000018A0	11000000 0000010D					
				1126		
				1127	VRR_K	VCLZDP, 7, 0
000018A8				1128+	DS	OFD
000018A8		000018A8		1129+	USING	*, R5
000018A8	000018C4			1130+T20	DC	A(X20)
000018AC	0014			1131+	DC	H' 20'
000018AE	00			1132+	DC	XL1' 00'
000018AF	07			1133+	DC	HL1' 7' &MB
000018B0	00			1134+	DC	HL1' 0' cc
000018B1	07			1135+	DC	HL1' 7' cc failed mask
000018B2	E5C3D3E9 C4D74040			1136+	DC	CL8' VCLZDP' instruction name
000018BC	00000010			1137+	DC	A(16) result length
000018C0	000018E8			1138+REA20	DC	A(RE20) result address
				1139+*		INSTRUCTION UNDER TEST ROUTINE
000018C4				1140+X20	DS	OF
000018C4	E710 8F38 0006		00001138	1141+	VL	V1, V1FUDGE pollute V1
000018CA	E720 5050 0006		000018F8	1142+	VL	V2, RE20+16 get V2 source
000018D0	E612 0070 0051			1143+	VCLZDP	V1, V2, 7 test instruction
000018D6	E710 8F00 000E		00001100	1144+	VST	V1, V10UTPUT save
000018DC	B98D 0020			1145+	EPSW	R2, R0 exptract psw
000018E0	5020 8ED8		000010D8	1146+	ST	R2, CCPSW to save CC
000018E4	07FB			1147+	BR	R11 return
000018E8				1148+RE20	DC	OF
000018E8				1149+	DROP	R5
000018E8	00000000 0000001F			1150	DC	XL16' 0000000000000001F000000000000000' V1 result
000018F0	00000000 00000000					
000018F8	00000000 00000000			1151	DC	XL16' 000000000000000000000000000000C' V2 source
00001900	00000000 0000000C					
				1152		
				1153	VRR_K	VCLZDP, 7, 1
00001908				1154+	DS	OFD
00001908		00001908		1155+	USING	*, R5
00001908	00001924			1156+T21	DC	A(X21)
0000190C	0015			1157+	DC	H' 21'
0000190E	00			1158+	DC	XL1' 00'
0000190F	07			1159+	DC	HL1' 7' &MB
00001910	01			1160+	DC	HL1' 1' cc
00001911	0B			1161+	DC	HL1' 11' cc failed mask
00001912	E5C3D3E9 C4D74040			1162+	DC	CL8' VCLZDP' instruction name
0000191C	00000010			1163+	DC	A(16) result length
00001920	00001948			1164+REA21	DC	A(RE21) result address
				1165+*		INSTRUCTION UNDER TEST ROUTINE
00001924				1166+X21	DS	OF
00001924	E710 8F38 0006		00001138	1167+	VL	V1, V1FUDGE pollute V1
0000192A	E720 5050 0006		00001958	1168+	VL	V2, RE21+16 get V2 source
00001930	E612 0070 0051			1169+	VCLZDP	V1, V2, 7 test instruction
00001936	E710 8F00 000E		00001100	1170+	VST	V1, V10UTPUT save
0000193C	B98D 0020			1171+	EPSW	R2, R0 exptract psw
00001940	5020 8ED8		000010D8	1172+	ST	R2, CCPSW to save CC
00001944	07FB			1173+	BR	R11 return
00001948				1174+RE21	DC	OF
00001948				1175+	DROP	R5
00001948	00000000 0000001F			1176	DC	XL16' 0000000000000001F000000000000000' V1 result
00001950	00000000 00000000					

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00001958	00000000 00000000			1177	DC	XL16' 000000000000000000000000000000D' V2 source
00001960	00000000 0000000D					
				1178		
				1179	VRR_K	VCLZDP, 7, 3
00001968				1180+	DS	OFD
00001968		00001968		1181+	USING	*, R5
00001968	00001984			1182+T22	DC	A(X22)
0000196C	0016			1183+	DC	H' 22'
0000196E	00			1184+	DC	XL1' 00'
0000196F	07			1185+	DC	HL1' 7' &MB
00001970	03			1186+	DC	HL1' 3' cc
00001971	0E			1187+	DC	HL1' 14' cc failed mask
00001972	E5C3D3E9 C4D74040			1188+	DC	CL8' VCLZDP' instruction name
0000197C	00000010			1189+	DC	A(16) result length
00001980	000019A8			1190+REA22	DC	A(RE22) result address
				1191+*		INSTRUCTION UNDER TEST ROUTINE
00001984				1192+X22	DS	OF
00001984	E710 8F38 0006		00001138	1193+	VL	V1, V1FUDGE pollute V1
0000198A	E720 5050 0006		000019B8	1194+	VL	V2, RE22+16 get V2 source
00001990	E612 0070 0051			1195+	VCLZDP	V1, V2, 7 test instruction
00001996	E710 8F00 000E		00001100	1196+	VST	V1, V10UTPUT save
0000199C	B98D 0020			1197+	EPSW	R2, R0 exptrect psw
000019A0	5020 8ED8		000010D8	1198+	ST	R2, CCPSW to save CC
000019A4	07FB			1199+	BR	R11 return
000019A8				1200+RE22	DC	OF
000019A8				1201+	DROP	R5
000019A8	00000000 00000002			1202	DC	XL16' 00000000000000020000000000000000' V1 result
000019B0	00000000 00000000					
000019B8	00AAA000 00000000			1203	DC	XL16' 00AAA0000000000000000000000000D' V2 source
000019C0	00000000 0000000D					
				1204		
				1205 *		
				1206 *	VUPKZH	- VECTOR UNPACK ZONED HIGH
				1207 *		
				1208 *		NOTE NOTE: VUPKZH does NOT set the condition code!
				1209 *		m3 bit 3 should be ZERO (which matches the CS bit of VCLZDP
				1210 *		so CC checking should be skipped!!)
				1211 *		
				1212 *	VUPKZH simple	m3= 0 (NSV=0, NV=0 , fake CS=0)
				1213 *		m3= 4 (NSV=0, NV=1 , fake CS=0)
				1214 *		m3= 8 (NSV=1, NV=0 , fake CS=0)
				1215 *		m3= 12 (NSV=1, NV=1 , fake CS=0)
				1216	VRR_K	VUPKZH, 0, 0
000019C8				1217+	DS	OFD
000019C8		000019C8		1218+	USING	*, R5
000019C8	000019E4			1219+T23	DC	A(X23)
000019CC	0017			1220+	DC	H' 23'
000019CE	00			1221+	DC	XL1' 00'
000019CF	00			1222+	DC	HL1' 0' &MB
000019D0	00			1223+	DC	HL1' 0' cc
000019D1	07			1224+	DC	HL1' 7' cc failed mask
000019D2	E5E4D7D2 E9C84040			1225+	DC	CL8' VUPKZH' instruction name
000019DC	00000010			1226+	DC	A(16) result length
000019E0	00001A08			1227+REA23	DC	A(RE23) result address
				1228+*		INSTRUCTION UNDER TEST ROUTINE
000019E4				1229+X23	DS	OF

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000019E4	E710 8F38 0006		00001138	1230+	VL	V1, V1FUDGE	pollute V1
000019EA	E720 5050 0006		00001A18	1231+	VL	V2, RE23+16	get V2 source
000019F0	E612 0000 0054			1232+	VUPKZH	V1, V2, 0	test instruction
000019F6	E710 8F00 000E		00001100	1233+	VST	V1, V10OUTPUT	save
000019FC	B98D 0020			1234+	EPSW	R2, R0	exptract psw
00001A00	5020 8ED8		000010D8	1235+	ST	R2, CCPSW	to save CC
00001A04	07FB			1236+	BR	R11	return
00001A08				1237+RE23	DC	0F	
00001A08				1238+	DROP	R5	
00001A08	F0F1F2F3 F4F5F6F7			1239	DC	XL16' F0F1F2F3F4F5F6F7F8F9F0F1F2F3F4F5'	V1 result
00001A10	F8F9F0F1 F2F3F4F5						
00001A18	12345678 90123456			1240	DC	XL16' 1234567890123456789012345678901C'	V2 source
00001A20	78901234 5678901C						
				1241			
				1242	VRR_K	VUPKZH, 0, 0	
00001A28				1243+	DS	0FD	
00001A28		00001A28		1244+	USING	*, R5	base for test data and test routine
00001A28	00001A44			1245+T24	DC	A(X24)	address of test routine
00001A2C	0018			1246+	DC	H' 24'	test number
00001A2E	00			1247+	DC	XL1' 00'	
00001A2F	00			1248+	DC	HL1' 0'	&MB
00001A30	00			1249+	DC	HL1' 0'	cc
00001A31	07			1250+	DC	HL1' 7'	cc failed mask
00001A32	E5E4D7D2 E9C84040			1251+	DC	CL8' VUPKZH'	instruction name
00001A3C	00000010			1252+	DC	A(16)	result length
00001A40	00001A68			1253+REA24	DC	A(RE24)	result address
				1254+*			INSTRUCTION UNDER TEST ROUTINE
00001A44				1255+X24	DS	0F	
00001A44	E710 8F38 0006		00001138	1256+	VL	V1, V1FUDGE	pollute V1
00001A4A	E720 5050 0006		00001A78	1257+	VL	V2, RE24+16	get V2 source
00001A50	E612 0000 0054			1258+	VUPKZH	V1, V2, 0	test instruction
00001A56	E710 8F00 000E		00001100	1259+	VST	V1, V10OUTPUT	save
00001A5C	B98D 0020			1260+	EPSW	R2, R0	exptract psw
00001A60	5020 8ED8		000010D8	1261+	ST	R2, CCPSW	to save CC
00001A64	07FB			1262+	BR	R11	return
00001A68				1263+RE24	DC	0F	
00001A68				1264+	DROP	R5	
00001A68	F0F5F6F7 F8F9F0F1			1265	DC	XL16' F0F5F6F7F8F9F0F1F2F3F4F5F6F7F8F9'	V1 result
00001A70	F2F3F4F5 F6F7F8F9						
00001A78	56789012 34567890			1266	DC	XL16' 5678901234567890123456789012345D'	V2 source
00001A80	12345678 9012345D						
				1267			
				1268 * VUPKZH			m3= 4 (NSV=0, NV=1 , fake CS=0)
				1269	VRR_K	VUPKZH, 4, 0	
00001A88				1270+	DS	0FD	
00001A88		00001A88		1271+	USING	*, R5	base for test data and test routine
00001A88	00001AA4			1272+T25	DC	A(X25)	address of test routine
00001A8C	0019			1273+	DC	H' 25'	test number
00001A8E	00			1274+	DC	XL1' 00'	
00001A8F	04			1275+	DC	HL1' 4'	&MB
00001A90	00			1276+	DC	HL1' 0'	cc
00001A91	07			1277+	DC	HL1' 7'	cc failed mask
00001A92	E5E4D7D2 E9C84040			1278+	DC	CL8' VUPKZH'	instruction name
00001A9C	00000010			1279+	DC	A(16)	result length
00001AA0	00001AC8			1280+REA25	DC	A(RE25)	result address
				1281+*			INSTRUCTION UNDER TEST ROUTINE

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001AA4				1282+X25	DS	0F	
00001AA4	E710 8F38 0006		00001138	1283+	VL	V1, V1FUDGE	pollute V1
00001AAA	E720 5050 0006		00001AD8	1284+	VL	V2, RE25+16	get V2 source
00001AB0	E612 0040 0054			1285+	VUPKZH	V1, V2, 4	test instruction
00001AB6	E710 8F00 000E		00001100	1286+	VST	V1, V10UTPUT	save
00001ABC	B98D 0020			1287+	EPSW	R2, R0	exptract psw
00001AC0	5020 8ED8		000010D8	1288+	ST	R2, CCPSW	to save CC
00001AC4	07FB			1289+	BR	R11	return
00001AC8				1290+RE25	DC	0F	
00001AC8				1291+	DROP	R5	
00001AC8	F0F1FFFF FFF5F6F7			1292	DC	XL16' F0F1FFFFFFFFF5F6F7F8F9F0F1F2F3F4F5'	V1 result
00001AD0	F8F9F0F1 F2F3F4F5						
00001AD8	1FFF5678 90123456			1293	DC	XL16' 1FFF567890123456789012345678901C'	V2 source
00001AE0	78901234 5678901C						
				1294			
				1295	VRR_K	VUPKZH, 4, 0	
00001AE8				1296+	DS	0FD	
00001AE8		00001AE8		1297+	USING	*, R5	base for test data and test routine
00001AE8	00001B04			1298+T26	DC	A(X26)	address of test routine
00001AEC	001A			1299+	DC	H' 26'	test number
00001AEE	00			1300+	DC	XL1' 00'	
00001AEF	04			1301+	DC	HL1' 4'	&MB
00001AF0	00			1302+	DC	HL1' 0'	cc
00001AF1	07			1303+	DC	HL1' 7'	cc failed mask
00001AF2	E5E4D7D2 E9C84040			1304+	DC	CL8' VUPKZH'	instruction name
00001AFC	00000010			1305+	DC	A(16)	result length
00001B00	00001B28			1306+REA26	DC	A(RE26)	result address
				1307+*			INSTRUCTION UNDER TEST ROUTINE
00001B04				1308+X26	DS	0F	
00001B04	E710 8F38 0006		00001138	1309+	VL	V1, V1FUDGE	pollute V1
00001B0A	E720 5050 0006		00001B38	1310+	VL	V2, RE26+16	get V2 source
00001B10	E612 0040 0054			1311+	VUPKZH	V1, V2, 4	test instruction
00001B16	E710 8F00 000E		00001100	1312+	VST	V1, V10UTPUT	save
00001B1C	B98D 0020			1313+	EPSW	R2, R0	exptract psw
00001B20	5020 8ED8		000010D8	1314+	ST	R2, CCPSW	to save CC
00001B24	07FB			1315+	BR	R11	return
00001B28				1316+RE26	DC	0F	
00001B28				1317+	DROP	R5	
00001B28	F0F5F6F7 F8F9F0F1			1318	DC	XL16' F0F5F6F7F8F9F0F1F2F3F4F5F6F7F8F9'	V1 result
00001B30	F2F3F4F5 F6F7F8F9						
00001B38	56789012 34567890			1319	DC	XL16' 56789012345678901234567890123459'	V2 source
00001B40	12345678 90123459						
				1320			
				1321 * VUPKZH			m3= 8 (NSV=1, NV=0 , fake CS=0)
				1322	VRR_K	VUPKZH, 8, 0	
00001B48				1323+	DS	0FD	
00001B48		00001B48		1324+	USING	*, R5	base for test data and test routine
00001B48	00001B64			1325+T27	DC	A(X27)	address of test routine
00001B4C	001B			1326+	DC	H' 27'	test number
00001B4E	00			1327+	DC	XL1' 00'	
00001B4F	08			1328+	DC	HL1' 8'	&MB
00001B50	00			1329+	DC	HL1' 0'	cc
00001B51	07			1330+	DC	HL1' 7'	cc failed mask
00001B52	E5E4D7D2 E9C84040			1331+	DC	CL8' VUPKZH'	instruction name
00001B5C	00000010			1332+	DC	A(16)	result length
00001B60	00001B88			1333+REA27	DC	A(RE27)	result address

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
					INSTRUCTION UNDER TEST ROUTINE		
00001B64				1334+*			
00001B64	E710 8F38 0006		00001138	1335+X27	DS	0F	
00001B6A	E720 5050 0006		00001B98	1336+	VL	V1, V1FUDGE	pollute V1
00001B70	E612 0080 0054			1337+	VL	V2, RE27+16	get V2 source
00001B76	E710 8F00 000E		00001100	1338+	VUPKZH	V1, V2, 8	test instruction
00001B7C	B98D 0020			1339+	VST	V1, V10UTPUT	save
00001B80	5020 8ED8		000010D8	1340+	EPSW	R2, R0	exptract psw
00001B84	07FB			1341+	ST	R2, CCPSW	to save CC
00001B88				1342+	BR	R11	return
00001B88				1343+RE27	DC	0F	
00001B88				1344+	DROP	R5	
00001B88	F0F1F2F3 F4F5F6F7			1345	DC	XL16' F0F1F2F3F4F5F6F7F8F9F0F1F2F3F4F5'	V1 result
00001B90	F8F9F0F1 F2F3F4F5						
00001B98	12345678 90123456			1346	DC	XL16' 1234567890123456789012345678901C'	V2 source
00001BA0	78901234 5678901C						
00001BA8				1347			
00001BA8		00001BA8		1348	VRR_K	VUPKZH, 8, 0	
00001BA8	00001BC4			1349+	DS	0FD	
00001BAC	001C			1350+	USING	*, R5	base for test data and test routine
00001BAE	00			1351+T28	DC	A(X28)	address of test routine
00001BAF	08			1352+	DC	H' 28'	test number
00001BB0	00			1353+	DC	XL1' 00'	
00001BB1	07			1354+	DC	HL1' 8'	&MB
00001BB2	E5E4D7D2 E9C84040			1355+	DC	HL1' 0'	cc
00001BB1	07			1356+	DC	HL1' 7'	cc failed mask
00001BB2	E5E4D7D2 E9C84040			1357+	DC	CL8' VUPKZH'	instruction name
00001BBC	00000010			1358+	DC	A(16)	result length
00001BC0	00001BE8			1359+REA28	DC	A(RE28)	result address
					INSTRUCTION UNDER TEST ROUTINE		
00001BC4				1360+*			
00001BC4	E710 8F38 0006		00001138	1361+X28	DS	0F	
00001BCA	E720 5050 0006		00001BF8	1362+	VL	V1, V1FUDGE	pollute V1
00001BD0	E612 0080 0054			1363+	VL	V2, RE28+16	get V2 source
00001BD6	E710 8F00 000E		00001100	1364+	VUPKZH	V1, V2, 8	test instruction
00001BDC	B98D 0020			1365+	VST	V1, V10UTPUT	save
00001BE0	5020 8ED8		000010D8	1366+	EPSW	R2, R0	exptract psw
00001BE4	07FB			1367+	ST	R2, CCPSW	to save CC
00001BE8				1368+	BR	R11	return
00001BE8				1369+RE28	DC	0F	
00001BE8				1370+	DROP	R5	
00001BE8	F0F5F6F7 F8F9F0F1			1371	DC	XL16' F0F5F6F7F8F9F0F1F2F3F4F5F6F7F8F9'	V1 result
00001BF0	F2F3F4F5 F6F7F8F9						
00001BF8	56789012 34567890			1372	DC	XL16' 56789012345678901234567890123459'	V2 source
00001C00	12345678 90123459						
00001C08				1373			
00001C08		00001C08		1374 * VUPKZH	m3= 12 (NSV=1, NV=1 , fake CS=0)		
00001C08	00001C24			1375	VRR_K	VUPKZH, 12, 0	
00001C0C	001D			1376+	DS	0FD	
00001C0E	00			1377+	USING	*, R5	base for test data and test routine
00001C0F	0C			1378+T29	DC	A(X29)	address of test routine
00001C10	00			1379+	DC	H' 29'	test number
00001C11	07			1380+	DC	XL1' 00'	
00001C12	E5E4D7D2 E9C84040			1381+	DC	HL1' 12'	&MB
00001C1C	00000010			1382+	DC	HL1' 0'	cc
				1383+	DC	HL1' 7'	cc failed mask
				1384+	DC	CL8' VUPKZH'	instruction name
				1385+	DC	A(16)	result length

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001C20	00001C48			1386+REA29	DC	A(RE29)	result address
				1387+*			INSTRUCTION UNDER TEST ROUTINE
00001C24				1388+X29	DS	0F	
00001C24	E710 8F38 0006		00001138	1389+	VL	V1, V1FUDGE	pollute V1
00001C2A	E720 5050 0006		00001C58	1390+	VL	V2, RE29+16	get V2 source
00001C30	E612 00C0 0054			1391+	VUPKZH	V1, V2, 12	test instruction
00001C36	E710 8F00 000E		00001100	1392+	VST	V1, V10UTPUT	save
00001C3C	B98D 0020			1393+	EPSW	R2, R0	exptract psw
00001C40	5020 8ED8		000010D8	1394+	ST	R2, CCPSW	to save CC
00001C44	07FB			1395+	BR	R11	return
00001C48				1396+RE29	DC	0F	
00001C48				1397+	DROP	R5	
00001C48	F0F1FFFF FFF5F6F7			1398	DC	XL16' F0F1FFFFFFFFF5F6F7F8F9F0F1F2F3F4F5'	V1 result
00001C50	F8F9F0F1 F2F3F4F5						
00001C58	1FFF5678 90123456			1399	DC	XL16' 1FFF567890123456789012345678901C'	V2 source
00001C60	78901234 5678901C						
				1400			
00001C68				1401	VRR_K	VUPKZH, 12, 0	
00001C68		00001C68		1402+	DS	0FD	
00001C68	00001C84			1403+	USING	*, R5	base for test data and test routine
00001C6C	001E			1404+T30	DC	A(X30)	address of test routine
00001C6E	00			1405+	DC	H' 30'	test number
00001C6E	00			1406+	DC	XL1' 00'	
00001C6F	0C			1407+	DC	HL1' 12'	&MB
00001C70	00			1408+	DC	HL1' 0'	cc
00001C71	07			1409+	DC	HL1' 7'	cc failed mask
00001C72	E5E4D7D2 E9C84040			1410+	DC	CL8' VUPKZH'	instruction name
00001C7C	00000010			1411+	DC	A(16)	result length
00001C80	00001CA8			1412+REA30	DC	A(RE30)	result address
				1413+*			INSTRUCTION UNDER TEST ROUTINE
00001C84				1414+X30	DS	0F	
00001C84	E710 8F38 0006		00001138	1415+	VL	V1, V1FUDGE	pollute V1
00001C8A	E720 5050 0006		00001CB8	1416+	VL	V2, RE30+16	get V2 source
00001C90	E612 00C0 0054			1417+	VUPKZH	V1, V2, 12	test instruction
00001C96	E710 8F00 000E		00001100	1418+	VST	V1, V10UTPUT	save
00001C9C	B98D 0020			1419+	EPSW	R2, R0	exptract psw
00001CA0	5020 8ED8		000010D8	1420+	ST	R2, CCPSW	to save CC
00001CA4	07FB			1421+	BR	R11	return
00001CA8				1422+RE30	DC	0F	
00001CA8				1423+	DROP	R5	
00001CA8	F0F5F6F7 F8F9F0F1			1424	DC	XL16' F0F5F6F7F8F9F0F1F2F3F4F5F6F7F8F9'	V1 result
00001CB0	F2F3F4F5 F6F7F8F9						
00001CB8	56789012 34567890			1425	DC	XL16' 56789012345678901234567890123459'	V2 source
00001CC0	12345678 90123459						
				1426			
				1427 *			
				1428 *	VUPKZL	- VECTOR UNPACK ZONED LOW	
				1429 *			
				1430 *	NOTE NOTE: VUPKZL does NOT set the condition code!		
				1431 *	m3 bit 3 should be ZERO (which matches the CS bit of VCLZDP		
				1432 *	so CC checking should be skipped!!)		
				1433 *			
				1434 *	VUPKZL simple	m3= 0 (NSV=0, NV=0 , P1=0, fake CS=0)	
				1435 *		m3= 2 (NSV=0, NV=1 , P1=1, fake CS=0)	
				1436 *		m3= 4 (NSV=0, NV=1 , P1=0, fake CS=0)	
				1437 *		m3= 6 (NSV=0, NV=1 , P1=1, fake CS=0)	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				1438 *	m3= 8 (NSV=1, NV=0 , P1=0, fake CS=0)
				1439 *	m3= 10 (NSV=1, NV=0 , P1=1, fake CS=0)
				1440 *	m3= 12 (NSV=1, NV=1 , P1=0, fake CS=0)
				1441 *	m3= 14 (NSV=1, NV=1 , P1=1, fake CS=0)
				1442	VRR_K VUPKZL, 0, 0
00001CC8				1443+	DS OFD
00001CC8		00001CC8		1444+	USING *, R5
00001CC8	00001CE4			1445+T31	DC A(X31)
00001CCC	001F			1446+	DC H' 31'
00001CCE	00			1447+	DC XL1' 00'
00001CCF	00			1448+	DC HL1' 0'
00001CD0	00			1449+	DC HL1' 0'
00001CD1	07			1450+	DC HL1' 7'
00001CD2	E5E4D7D2 E9D34040			1451+	DC CL8' VUPKZL'
00001CDC	00000010			1452+	DC A(16)
00001CE0	00001D08			1453+REA31	DC A(RE31)
				1454+*	INSTRUCTION UNDER TEST ROUTINE
00001CE4				1455+X31	DS OF
00001CE4	E710 8F38 0006		00001138	1456+	VL V1, V1FUDGE
00001CEA	E720 5050 0006		00001D18	1457+	VL V2, RE31+16
00001CF0	E612 0000 005C			1458+	VUPKZL V1, V2, 0
00001CF6	E710 8F00 000E		00001100	1459+	VST V1, V10UTPUT
00001CFC	B98D 0020			1460+	EPSW R2, R0
00001D00	5020 8ED8		000010D8	1461+	ST R2, CCPSW
00001D04	07FB			1462+	BR R11
00001D08				1463+RE31	DC OF
00001D08				1464+	DROP R5
00001D08	F6F7F8F9 F0F1F2F3			1465	DC XL16' F6F7F8F9F0F1F2F3F4F5F6F7F8F9F0C1'
00001D10	F4F5F6F7 F8F9F0C1				V1 result
00001D18	12345678 90123456			1466	DC XL16' 1234567890123456789012345678901C'
00001D20	78901234 5678901C				V2 source
				1467	
				1468	VRR_K VUPKZL, 0, 0
00001D28				1469+	DS OFD
00001D28		00001D28		1470+	USING *, R5
00001D28	00001D44			1471+T32	DC A(X32)
00001D2C	0020			1472+	DC H' 32'
00001D2E	00			1473+	DC XL1' 00'
00001D2F	00			1474+	DC HL1' 0'
00001D30	00			1475+	DC HL1' 0'
00001D31	07			1476+	DC HL1' 7'
00001D32	E5E4D7D2 E9D34040			1477+	DC CL8' VUPKZL'
00001D3C	00000010			1478+	DC A(16)
00001D40	00001D68			1479+REA32	DC A(RE32)
				1480+*	INSTRUCTION UNDER TEST ROUTINE
00001D44				1481+X32	DS OF
00001D44	E710 8F38 0006		00001138	1482+	VL V1, V1FUDGE
00001D4A	E720 5050 0006		00001D78	1483+	VL V2, RE32+16
00001D50	E612 0000 005C			1484+	VUPKZL V1, V2, 0
00001D56	E710 8F00 000E		00001100	1485+	VST V1, V10UTPUT
00001D5C	B98D 0020			1486+	EPSW R2, R0
00001D60	5020 8ED8		000010D8	1487+	ST R2, CCPSW
00001D64	07FB			1488+	BR R11
00001D68				1489+RE32	DC OF
00001D68				1490+	DROP R5
00001D68	F0F1F2F3 F4F5F6F7			1491	DC XL16' F0F1F2F3F4F5F6F7F8F9F0F1F2F3F4D5'
					V1 result

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001D70	F8F9F0F1 F2F3F4D5						
00001D78	56789012 34567890			1492	DC	XL16' 5678901234567890123456789012345D'	V2 source
00001D80	12345678 9012345D						
				1493			
				1494 *	VUPKZL	m3= 2 (NSV=0, NV=1 , P1=1, fake CS=0)	
				1495	VRR_K	VUPKZL, 2, 0	
00001D88				1496+	DS	OFD	
00001D88		00001D88		1497+	USING	*, R5	base for test data and test routine
00001D88	00001DA4			1498+T33	DC	A(X33)	address of test routine
00001D8C	0021			1499+	DC	H' 33'	test number
00001D8E	00			1500+	DC	XL1' 00'	
00001D8F	02			1501+	DC	HL1' 2'	&MB
00001D90	00			1502+	DC	HL1' 0'	cc
00001D91	07			1503+	DC	HL1' 7'	cc failed mask
00001D92	E5E4D7D2 E9D34040			1504+	DC	CL8' VUPKZL'	instruction name
00001D9C	00000010			1505+	DC	A(16)	result length
00001DA0	00001DC8			1506+REA33	DC	A(RE33)	result address
				1507+*			INSTRUCTION UNDER TEST ROUTINE
00001DA4				1508+X33	DS	OF	
00001DA4	E710 8F38 0006		00001138	1509+	VL	V1, V1FUDGE	pollute V1
00001DAA	E720 5050 0006		00001DD8	1510+	VL	V2, RE33+16	get V2 source
00001DB0	E612 0020 005C			1511+	VUPKZL	V1, V2, 2	test instruction
00001DB6	E710 8F00 000E		00001100	1512+	VST	V1, V10UTPUT	save
00001DBC	B98D 0020			1513+	EPSW	R2, R0	exptract psw
00001DC0	5020 8ED8		000010D8	1514+	ST	R2, CCPSW	to save CC
00001DC4	07FB			1515+	BR	R11	return
00001DC8				1516+RE33	DC	OF	
00001DC8				1517+	DROP	R5	
00001DC8	F6F7F8F9 F0F1F2F3			1518	DC	XL16' F6F7F8F9F0F1F2F3F4F5F6F7F8F9F0F1'	V1 result
00001DD0	F4F5F6F7 F8F9F0F1						
00001DD8	12345678 90123456			1519	DC	XL16' 1234567890123456789012345678901C'	V2 source
00001DE0	78901234 5678901C						
				1520			
				1521	VRR_K	VUPKZL, 2, 0	
00001DE8				1522+	DS	OFD	
00001DE8		00001DE8		1523+	USING	*, R5	base for test data and test routine
00001DE8	00001E04			1524+T34	DC	A(X34)	address of test routine
00001DEC	0022			1525+	DC	H' 34'	test number
00001DEE	00			1526+	DC	XL1' 00'	
00001DEF	02			1527+	DC	HL1' 2'	&MB
00001DF0	00			1528+	DC	HL1' 0'	cc
00001DF1	07			1529+	DC	HL1' 7'	cc failed mask
00001DF2	E5E4D7D2 E9D34040			1530+	DC	CL8' VUPKZL'	instruction name
00001DFC	00000010			1531+	DC	A(16)	result length
00001E00	00001E28			1532+REA34	DC	A(RE34)	result address
				1533+*			INSTRUCTION UNDER TEST ROUTINE
00001E04				1534+X34	DS	OF	
00001E04	E710 8F38 0006		00001138	1535+	VL	V1, V1FUDGE	pollute V1
00001E0A	E720 5050 0006		00001E38	1536+	VL	V2, RE34+16	get V2 source
00001E10	E612 0020 005C			1537+	VUPKZL	V1, V2, 2	test instruction
00001E16	E710 8F00 000E		00001100	1538+	VST	V1, V10UTPUT	save
00001E1C	B98D 0020			1539+	EPSW	R2, R0	exptract psw
00001E20	5020 8ED8		000010D8	1540+	ST	R2, CCPSW	to save CC
00001E24	07FB			1541+	BR	R11	return
00001E28				1542+RE34	DC	OF	
00001E28				1543+	DROP	R5	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001E28	F0F1F2F3 F4F5F6F7			1544	DC	XL16' F0F1F2F3F4F5F6F7F8F9F0F1F2F3F4F5'	V1 result
00001E30	F8F9F0F1 F2F3F4F5						
00001E38	56789012 34567890			1545	DC	XL16' 5678901234567890123456789012345D'	V2 source
00001E40	12345678 9012345D						
				1546			
				1547 * VUPKZL		m3= 4 (NSV=0, NV=1 , P1=0, fake CS=0)	
				1548	VRR_K	VUPKZL, 4, 0	
00001E48				1549+	DS	OFD	
00001E48		00001E48		1550+	USING	*, R5	base for test data and test routine
00001E48	00001E64			1551+T35	DC	A(X35)	address of test routine
00001E4C	0023			1552+	DC	H' 35'	test number
00001E4E	00			1553+	DC	XL1' 00'	
00001E4F	04			1554+	DC	HL1' 4'	&MB
00001E50	00			1555+	DC	HL1' 0'	cc
00001E51	07			1556+	DC	HL1' 7'	cc failed mask
00001E52	E5E4D7D2 E9D34040			1557+	DC	CL8' VUPKZL'	instruction name
00001E5C	00000010			1558+	DC	A(16)	result length
00001E60	00001E88			1559+REA35	DC	A(RE35)	result address
				1560+*			INSTRUCTION UNDER TEST ROUTINE
00001E64				1561+X35	DS	OF	
00001E64	E710 8F38 0006		00001138	1562+	VL	V1, V1FUDGE	pollute V1
00001E6A	E720 5050 0006		00001E98	1563+	VL	V2, RE35+16	get V2 source
00001E70	E612 0040 005C			1564+	VUPKZL	V1, V2, 4	test instruction
00001E76	E710 8F00 000E		00001100	1565+	VST	V1, V10UTPUT	save
00001E7C	B98D 0020			1566+	EPSW	R2, R0	exptract psw
00001E80	5020 8ED8		000010D8	1567+	ST	R2, CCPSW	to save CC
00001E84	07FB			1568+	BR	R11	return
00001E88				1569+RE35	DC	OF	
00001E88				1570+	DROP	R5	
00001E88	F6F7F8F9 F0F1F2F3			1571	DC	XL16' F6F7F8F9F0F1F2F3F4F5F6F7F8F9F091'	V1 result
00001E90	F4F5F6F7 F8F9F091						
00001E98	12345678 90123456			1572	DC	XL16' 12345678901234567890123456789019'	V2 source
00001EA0	78901234 56789019						
				1573			
				1574	VRR_K	VUPKZL, 4, 0	
00001EA8				1575+	DS	OFD	
00001EA8		00001EA8		1576+	USING	*, R5	base for test data and test routine
00001EA8	00001EC4			1577+T36	DC	A(X36)	address of test routine
00001EAC	0024			1578+	DC	H' 36'	test number
00001EAE	00			1579+	DC	XL1' 00'	
00001EAF	04			1580+	DC	HL1' 4'	&MB
00001EB0	00			1581+	DC	HL1' 0'	cc
00001EB1	07			1582+	DC	HL1' 7'	cc failed mask
00001EB2	E5E4D7D2 E9D34040			1583+	DC	CL8' VUPKZL'	instruction name
00001EBC	00000010			1584+	DC	A(16)	result length
00001EC0	00001EE8			1585+REA36	DC	A(RE36)	result address
				1586+*			INSTRUCTION UNDER TEST ROUTINE
00001EC4				1587+X36	DS	OF	
00001EC4	E710 8F38 0006		00001138	1588+	VL	V1, V1FUDGE	pollute V1
00001ECA	E720 5050 0006		00001EF8	1589+	VL	V2, RE36+16	get V2 source
00001ED0	E612 0040 005C			1590+	VUPKZL	V1, V2, 4	test instruction
00001ED6	E710 8F00 000E		00001100	1591+	VST	V1, V10UTPUT	save
00001EDC	B98D 0020			1592+	EPSW	R2, R0	exptract psw
00001EE0	5020 8ED8		000010D8	1593+	ST	R2, CCPSW	to save CC
00001EE4	07FB			1594+	BR	R11	return
00001EE8				1595+RE36	DC	OF	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00001EE8				1596+	DROP R5	
00001EE8	F0F1F2F3 F4F5F6F7			1597	DC	XL16' F0F1F2F3F4F5F6F7F8F9FFF1F2F3F4D5' V1 result
00001EF0	F8F9FFF1 F2F3F4D5					
00001EF8	56789012 34567890			1598	DC	XL16' 5678901234567890123456789F12345D' V2 source
00001F00	12345678 9F12345D					
				1599		
				1600 * VUPKZL		m3= 6 (NSV=0, NV=1 , P1=1, fake CS=0
				1601	VRR_K VUPKZL, 6, 0	
00001F08				1602+	DS	OFD
00001F08		00001F08		1603+	USING *, R5	base for test data and test routine
00001F08	00001F24			1604+T37	DC	A(X37) address of test routine
00001F0C	0025			1605+	DC	H' 37' test number
00001F0E	00			1606+	DC	XL1' 00'
00001F0F	06			1607+	DC	HL1' 6' &MB
00001F10	00			1608+	DC	HL1' 0' cc
00001F11	07			1609+	DC	HL1' 7' cc failed mask
00001F12	E5E4D7D2 E9D34040			1610+	DC	CL8' VUPKZL' instruction name
00001F1C	00000010			1611+	DC	A(16) result length
00001F20	00001F48			1612+REA37	DC	A(RE37) result address
				1613+*		INSTRUCTION UNDER TEST ROUTINE
00001F24				1614+X37	DS	OF
00001F24	E710 8F38 0006		00001138	1615+	VL	V1, V1FUDGE pollute V1
00001F2A	E720 5050 0006		00001F58	1616+	VL	V2, RE37+16 get V2 source
00001F30	E612 0060 005C			1617+	VUPKZL V1, V2, 6	test instruction
00001F36	E710 8F00 000E		00001100	1618+	VST	V1, V10UTPUT save
00001F3C	B98D 0020			1619+	EPSW	R2, R0 exptract psw
00001F40	5020 8ED8		000010D8	1620+	ST	R2, CCPSW to save CC
00001F44	07FB			1621+	BR	R11 return
00001F48				1622+RE37	DC	OF
00001F48				1623+	DROP	R5
00001F48	F6F7F8F9 F0F1F2F3			1624	DC	XL16' F6F7F8F9F0F1F2F3F4F5F6F7F8F9F0F1' V1 result
00001F50	F4F5F6F7 F8F9F0F1					
00001F58	12345678 90123456			1625	DC	XL16' 12345678901234567890123456789019' V2 source
00001F60	78901234 56789019					
				1626		
				1627	VRR_K VUPKZL, 6, 0	
00001F68				1628+	DS	OFD
00001F68		00001F68		1629+	USING *, R5	base for test data and test routine
00001F68	00001F84			1630+T38	DC	A(X38) address of test routine
00001F6C	0026			1631+	DC	H' 38' test number
00001F6E	00			1632+	DC	XL1' 00'
00001F6F	06			1633+	DC	HL1' 6' &MB
00001F70	00			1634+	DC	HL1' 0' cc
00001F71	07			1635+	DC	HL1' 7' cc failed mask
00001F72	E5E4D7D2 E9D34040			1636+	DC	CL8' VUPKZL' instruction name
00001F7C	00000010			1637+	DC	A(16) result length
00001F80	00001FA8			1638+REA38	DC	A(RE38) result address
				1639+*		INSTRUCTION UNDER TEST ROUTINE
00001F84				1640+X38	DS	OF
00001F84	E710 8F38 0006		00001138	1641+	VL	V1, V1FUDGE pollute V1
00001F8A	E720 5050 0006		00001FB8	1642+	VL	V2, RE38+16 get V2 source
00001F90	E612 0060 005C			1643+	VUPKZL V1, V2, 6	test instruction
00001F96	E710 8F00 000E		00001100	1644+	VST	V1, V10UTPUT save
00001F9C	B98D 0020			1645+	EPSW	R2, R0 exptract psw
00001FA0	5020 8ED8		000010D8	1646+	ST	R2, CCPSW to save CC
00001FA4	07FB			1647+	BR	R11 return

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001FA8				1648+RE38	DC	0F	
00001FA8				1649+	DROP	R5	
00001FA8	F0F1F2F3 F4F5F6F7			1650	DC	XL16' F0F1F2F3F4F5F6F7F8F9FFF1F2F3F4F5'	V1 result
00001FB0	F8F9FFF1 F2F3F4F5						
00001FB8	56789012 34567890			1651	DC	XL16' 5678901234567890123456789F12345D'	V2 source
00001FC0	12345678 9F12345D						
				1652			
				1653 * VUPKZL		m3= 8 (NSV=1, NV=0 , P1=0, fake CS=0)	
				1654	VRR_K	VUPKZL, 8, 0	
00001FC8				1655+	DS	0FD	
00001FC8		00001FC8		1656+	USING	*, R5	base for test data and test routine
00001FC8	00001FE4			1657+T39	DC	A(X39)	address of test routine
00001FCC	0027			1658+	DC	H' 39'	test number
00001FCE	00			1659+	DC	XL1' 00'	
00001FCF	08			1660+	DC	HL1' 8'	&MB
00001FD0	00			1661+	DC	HL1' 0'	cc
00001FD1	07			1662+	DC	HL1' 7'	cc failed mask
00001FD2	E5E4D7D2 E9D34040			1663+	DC	CL8' VUPKZL'	instruction name
00001FDC	00000010			1664+	DC	A(16)	result length
00001FE0	00002008			1665+REA39	DC	A(RE39)	result address
				1666+*			INSTRUCTION UNDER TEST ROUTINE
00001FE4				1667+X39	DS	0F	
00001FE4	E710 8F38 0006		00001138	1668+	VL	V1, V1FUDGE	pollute V1
00001FEA	E720 5050 0006		00002018	1669+	VL	V2, RE39+16	get V2 source
00001FF0	E612 0080 005C			1670+	VUPKZL	V1, V2, 8	test instruction
00001FF6	E710 8F00 000E		00001100	1671+	VST	V1, V10OUTPUT	save
00001FFC	B98D 0020			1672+	EPSW	R2, R0	extract psw
00002000	5020 8ED8		000010D8	1673+	ST	R2, CCPSW	to save CC
00002004	07FB			1674+	BR	R11	return
00002008				1675+RE39	DC	0F	
00002008				1676+	DROP	R5	
00002008	F6F7F8F9 F0F1F2F3			1677	DC	XL16' F6F7F8F9F0F1F2F3F4F5F6F7F8F9F091'	V1 result
00002010	F4F5F6F7 F8F9F091						
00002018	12345678 90123456			1678	DC	XL16' 12345678901234567890123456789019'	V2 source
00002020	78901234 56789019						
				1679			
				1680	VRR_K	VUPKZL, 8, 0	
00002028				1681+	DS	0FD	
00002028		00002028		1682+	USING	*, R5	base for test data and test routine
00002028	00002044			1683+T40	DC	A(X40)	address of test routine
0000202C	0028			1684+	DC	H' 40'	test number
0000202E	00			1685+	DC	XL1' 00'	
0000202F	08			1686+	DC	HL1' 8'	&MB
00002030	00			1687+	DC	HL1' 0'	cc
00002031	07			1688+	DC	HL1' 7'	cc failed mask
00002032	E5E4D7D2 E9D34040			1689+	DC	CL8' VUPKZL'	instruction name
0000203C	00000010			1690+	DC	A(16)	result length
00002040	00002068			1691+REA40	DC	A(RE40)	result address
				1692+*			INSTRUCTION UNDER TEST ROUTINE
00002044				1693+X40	DS	0F	
00002044	E710 8F38 0006		00001138	1694+	VL	V1, V1FUDGE	pollute V1
0000204A	E720 5050 0006		00002078	1695+	VL	V2, RE40+16	get V2 source
00002050	E612 0080 005C			1696+	VUPKZL	V1, V2, 8	test instruction
00002056	E710 8F00 000E		00001100	1697+	VST	V1, V10OUTPUT	save
0000205C	B98D 0020			1698+	EPSW	R2, R0	extract psw
00002060	5020 8ED8		000010D8	1699+	ST	R2, CCPSW	to save CC

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00002064	07FB			1700+	BR	R11	return
00002068				1701+RE40	DC	0F	
00002068				1702+	DROP	R5	
00002068	F0F1F2F3 F4F5F6F7			1703	DC	XL16' F0F1F2F3F4F5F6F7F8F9F0F1F2F3F4A5'	V1 result
00002070	F8F9F0F1 F2F3F4A5						
00002078	56789012 34567890			1704	DC	XL16' 5678901234567890123456789012345A'	V2 source
00002080	12345678 9012345A						
				1705			
				1706 * VUPKZL			m3= 10 (NSV=1, NV=0 , P1=1, fake CS=0)
				1707	VRR_K	VUPKZL, 10, 0	
00002088				1708+	DS	0FD	
00002088		00002088		1709+	USING	*, R5	base for test data and test routine
00002088	000020A4			1710+T41	DC	A(X41)	address of test routine
0000208C	0029			1711+	DC	H' 41'	test number
0000208E	00			1712+	DC	XL1' 00'	
0000208F	0A			1713+	DC	HL1' 10'	&MB
00002090	00			1714+	DC	HL1' 0'	cc
00002091	07			1715+	DC	HL1' 7'	cc failed mask
00002092	E5E4D7D2 E9D34040			1716+	DC	CL8' VUPKZL'	instruction name
0000209C	00000010			1717+	DC	A(16)	result length
000020A0	000020C8			1718+REA41	DC	A(RE41)	result address
				1719+*			INSTRUCTION UNDER TEST ROUTINE
000020A4				1720+X41	DS	0F	
000020A4	E710 8F38 0006		00001138	1721+	VL	V1, V1FUDGE	pollute V1
000020AA	E720 5050 0006		000020D8	1722+	VL	V2, RE41+16	get V2 source
000020B0	E612 00A0 005C			1723+	VUPKZL	V1, V2, 10	test instruction
000020B6	E710 8F00 000E		00001100	1724+	VST	V1, V10UTPUT	save
000020BC	B98D 0020			1725+	EPSW	R2, R0	exptract psw
000020C0	5020 8ED8		000010D8	1726+	ST	R2, CCPSW	to save CC
000020C4	07FB			1727+	BR	R11	return
000020C8				1728+RE41	DC	0F	
000020C8				1729+	DROP	R5	
000020C8	F6F7F8F9 F0F1F2F3			1730	DC	XL16' F6F7F8F9F0F1F2F3F4F5F6F7F8F9F0F1'	V1 result
000020D0	F4F5F6F7 F8F9F0F1						
000020D8	12345678 90123456			1731	DC	XL16' 12345678901234567890123456789019'	V2 source
000020E0	78901234 56789019						
				1732			
				1733	VRR_K	VUPKZL, 10, 0	
000020E8				1734+	DS	0FD	
000020E8		000020E8		1735+	USING	*, R5	base for test data and test routine
000020E8	00002104			1736+T42	DC	A(X42)	address of test routine
000020EC	002A			1737+	DC	H' 42'	test number
000020EE	00			1738+	DC	XL1' 00'	
000020EF	0A			1739+	DC	HL1' 10'	&MB
000020F0	00			1740+	DC	HL1' 0'	cc
000020F1	07			1741+	DC	HL1' 7'	cc failed mask
000020F2	E5E4D7D2 E9D34040			1742+	DC	CL8' VUPKZL'	instruction name
000020FC	00000010			1743+	DC	A(16)	result length
00002100	00002128			1744+REA42	DC	A(RE42)	result address
				1745+*			INSTRUCTION UNDER TEST ROUTINE
00002104				1746+X42	DS	0F	
00002104	E710 8F38 0006		00001138	1747+	VL	V1, V1FUDGE	pollute V1
0000210A	E720 5050 0006		00002138	1748+	VL	V2, RE42+16	get V2 source
00002110	E612 00A0 005C			1749+	VUPKZL	V1, V2, 10	test instruction
00002116	E710 8F00 000E		00001100	1750+	VST	V1, V10UTPUT	save
0000211C	B98D 0020			1751+	EPSW	R2, R0	exptract psw

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00002120	5020 8ED8		000010D8	1752+	ST	R2, CCPSW	to save CC
00002124	07FB			1753+	BR	R11	return
00002128				1754+RE42	DC	0F	
00002128				1755+	DROP	R5	
00002128	F0F1F2F3 F4F5F6F7			1756	DC	XL16' F0F1F2F3F4F5F6F7F8F9F0F1F2F3F4F5'	V1 result
00002130	F8F9F0F1 F2F3F4F5						
00002138	56789012 34567890			1757	DC	XL16' 5678901234567890123456789012345A'	V2 source
00002140	12345678 9012345A						
				1758			
				1759 * VUPKZL			m3= 12 (NSV=1, NV=1 , P1=0, fake CS=0)
				1760	VRR_K	VUPKZL, 12, 0	
00002148				1761+	DS	0FD	
00002148		00002148		1762+	USING	*, R5	base for test data and test routine
00002148	00002164			1763+T43	DC	A(X43)	address of test routine
0000214C	002B			1764+	DC	H' 43'	test number
0000214E	00			1765+	DC	XL1' 00'	
0000214F	0C			1766+	DC	HL1' 12'	&MB
00002150	00			1767+	DC	HL1' 0'	cc
00002151	07			1768+	DC	HL1' 7'	cc failed mask
00002152	E5E4D7D2 E9D34040			1769+	DC	CL8' VUPKZL'	instruction name
0000215C	00000010			1770+	DC	A(16)	result length
00002160	00002188			1771+REA43	DC	A(RE43)	result address
				1772+*			INSTRUCTION UNDER TEST ROUTINE
00002164				1773+X43	DS	0F	
00002164	E710 8F38 0006		00001138	1774+	VL	V1, V1FUDGE	pollute V1
0000216A	E720 5050 0006		00002198	1775+	VL	V2, RE43+16	get V2 source
00002170	E612 00C0 005C			1776+	VUPKZL	V1, V2, 12	test instruction
00002176	E710 8F00 000E		00001100	1777+	VST	V1, V10OUTPUT	save
0000217C	B98D 0020			1778+	EPSW	R2, R0	extract psw
00002180	5020 8ED8		000010D8	1779+	ST	R2, CCPSW	to save CC
00002184	07FB			1780+	BR	R11	return
00002188				1781+RE43	DC	0F	
00002188				1782+	DROP	R5	
00002188	F6F7F8F9 FDF1F2F3			1783	DC	XL16' F6F7F8F9FDF1F2F3F4F5F6F7F8F9F091'	V1 result
00002190	F4F5F6F7 F8F9F091						
00002198	12345678 90123456			1784	DC	XL16' 1234567890123456789D123456789019'	V2 source
000021A0	789D1234 56789019						
				1785			
				1786	VRR_K	VUPKZL, 12, 0	
000021A8				1787+	DS	0FD	
000021A8		000021A8		1788+	USING	*, R5	base for test data and test routine
000021A8	000021C4			1789+T44	DC	A(X44)	address of test routine
000021AC	002C			1790+	DC	H' 44'	test number
000021AE	00			1791+	DC	XL1' 00'	
000021AF	0C			1792+	DC	HL1' 12'	&MB
000021B0	00			1793+	DC	HL1' 0'	cc
000021B1	07			1794+	DC	HL1' 7'	cc failed mask
000021B2	E5E4D7D2 E9D34040			1795+	DC	CL8' VUPKZL'	instruction name
000021BC	00000010			1796+	DC	A(16)	result length
000021C0	000021E8			1797+REA44	DC	A(RE44)	result address
				1798+*			INSTRUCTION UNDER TEST ROUTINE
000021C4				1799+X44	DS	0F	
000021C4	E710 8F38 0006		00001138	1800+	VL	V1, V1FUDGE	pollute V1
000021CA	E720 5050 0006		000021F8	1801+	VL	V2, RE44+16	get V2 source
000021D0	E612 00C0 005C			1802+	VUPKZL	V1, V2, 12	test instruction
000021D6	E710 8F00 000E		00001100	1803+	VST	V1, V10OUTPUT	save

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000021DC	B98D 0020			1804+	EPSW	R2, R0	exptract psw
000021E0	5020 8ED8		000010D8	1805+	ST	R2, CCPSW	to save CC
000021E4	07FB			1806+	BR	R11	return
000021E8				1807+RE44	DC	0F	
000021E8				1808+	DROP	R5	
000021E8	F0F1F2F3 F4F5F6F7			1809	DC	XL16' F0F1F2F3F4F5F6F7F8F9FBF1F2F3F415'	V1 result
000021F0	F8F9FBF1 F2F3F415						
000021F8	56789012 34567890			1810	DC	XL16' 5678901234567890123456789B123451'	V2 source
00002200	12345678 9B123451						
				1811			
				1812 * VUPKZL			m3= 14 (NSV=1, NV=1 , P1=1, fake CS=0)
				1813	VRR_K	VUPKZL, 14, 0	
00002208				1814+	DS	0FD	
00002208		00002208		1815+	USING	*, R5	base for test data and test routine
00002208	00002224			1816+T45	DC	A(X45)	address of test routine
0000220C	002D			1817+	DC	H' 45'	test number
0000220E	00			1818+	DC	XL1' 00'	
0000220F	0E			1819+	DC	HL1' 14'	&MB
00002210	00			1820+	DC	HL1' 0'	cc
00002211	07			1821+	DC	HL1' 7'	cc failed mask
00002212	E5E4D7D2 E9D34040			1822+	DC	CL8' VUPKZL'	instruction name
0000221C	00000010			1823+	DC	A(16)	result length
00002220	00002248			1824+REA45	DC	A(RE45)	result address
				1825+*			INSTRUCTION UNDER TEST ROUTINE
00002224				1826+X45	DS	0F	
00002224	E710 8F38 0006		00001138	1827+	VL	V1, V1FUDGE	pollute V1
0000222A	E720 5050 0006		00002258	1828+	VL	V2, RE45+16	get V2 source
00002230	E612 00E0 005C			1829+	VUPKZL	V1, V2, 14	test instruction
00002236	E710 8F00 000E		00001100	1830+	VST	V1, V10UTPUT	save
0000223C	B98D 0020			1831+	EPSW	R2, R0	exptract psw
00002240	5020 8ED8		000010D8	1832+	ST	R2, CCPSW	to save CC
00002244	07FB			1833+	BR	R11	return
00002248				1834+RE45	DC	0F	
00002248				1835+	DROP	R5	
00002248	F6F7F8F9 FDF1F2F3			1836	DC	XL16' F6F7F8F9FDF1F2F3F4F5F6F7F8F9F0F1'	V1 result
00002250	F4F5F6F7 F8F9F0F1						
00002258	12345678 90123456			1837	DC	XL16' 1234567890123456789D123456789019'	V2 source
00002260	789D1234 56789019						
				1838			
				1839	VRR_K	VUPKZL, 14, 0	
00002268				1840+	DS	0FD	
00002268		00002268		1841+	USING	*, R5	base for test data and test routine
00002268	00002284			1842+T46	DC	A(X46)	address of test routine
0000226C	002E			1843+	DC	H' 46'	test number
0000226E	00			1844+	DC	XL1' 00'	
0000226F	0E			1845+	DC	HL1' 14'	&MB
00002270	00			1846+	DC	HL1' 0'	cc
00002271	07			1847+	DC	HL1' 7'	cc failed mask
00002272	E5E4D7D2 E9D34040			1848+	DC	CL8' VUPKZL'	instruction name
0000227C	00000010			1849+	DC	A(16)	result length
00002280	000022A8			1850+REA46	DC	A(RE46)	result address
				1851+*			INSTRUCTION UNDER TEST ROUTINE
00002284				1852+X46	DS	0F	
00002284	E710 8F38 0006		00001138	1853+	VL	V1, V1FUDGE	pollute V1
0000228A	E720 5050 0006		000022B8	1854+	VL	V2, RE46+16	get V2 source
00002290	E612 00E0 005C			1855+	VUPKZL	V1, V2, 14	test instruction

LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
00002296	E710 8F00 000E		00001100	1856+	VST	V1, V10	OUTPUT	save
0000229C	B98D 0020			1857+	EPSW	R2, R0		extract psw
000022A0	5020 8ED8		000010D8	1858+	ST	R2, CCPSW		to save CC
000022A4	07FB			1859+	BR	R11		return
000022A8				1860+RE46	DC	0F		
000022A8				1861+	DROP	R5		
000022A8	F0F1F2F3 F4F5F6F7			1862	DC	XL16' F0F1F2F3F4F5F6F7F8F9FBF1F2F3F4F5'		V1 result
000022B0	F8F9FBF1 F2F3F4F5							
000022B8	56789012 34567890			1863	DC	XL16' 5678901234567890123456789B123451'		V2 source
000022C0	12345678 9B123451							
				1864				
000022C8	00000000			1865	DC	F' 0'	END OF TABLE	
000022CC	00000000			1866	DC	F' 0'		
				1867 *				
				1868 *		table of pointers to individual load test		
				1869 *				
000022D0				1870 E6TESTS	DS	0F		
				1871	PTTABLE			
000022D0				1872+TTABLE	DS	0F		
000022D0	00001188			1873+	DC	A(T1)	address of test	
000022D4	000011E8			1874+	DC	A(T2)	address of test	
000022D8	00001248			1875+	DC	A(T3)	address of test	
000022DC	000012A8			1876+	DC	A(T4)	address of test	
000022E0	00001308			1877+	DC	A(T5)	address of test	
000022E4	00001368			1878+	DC	A(T6)	address of test	
000022E8	000013C8			1879+	DC	A(T7)	address of test	
000022EC	00001428			1880+	DC	A(T8)	address of test	
000022F0	00001488			1881+	DC	A(T9)	address of test	
000022F4	000014E8			1882+	DC	A(T10)	address of test	
000022F8	00001548			1883+	DC	A(T11)	address of test	
000022FC	000015A8			1884+	DC	A(T12)	address of test	
00002300	00001608			1885+	DC	A(T13)	address of test	
00002304	00001668			1886+	DC	A(T14)	address of test	
00002308	000016C8			1887+	DC	A(T15)	address of test	
0000230C	00001728			1888+	DC	A(T16)	address of test	
00002310	00001788			1889+	DC	A(T17)	address of test	
00002314	000017E8			1890+	DC	A(T18)	address of test	
00002318	00001848			1891+	DC	A(T19)	address of test	
0000231C	000018A8			1892+	DC	A(T20)	address of test	
00002320	00001908			1893+	DC	A(T21)	address of test	
00002324	00001968			1894+	DC	A(T22)	address of test	
00002328	000019C8			1895+	DC	A(T23)	address of test	
0000232C	00001A28			1896+	DC	A(T24)	address of test	
00002330	00001A88			1897+	DC	A(T25)	address of test	
00002334	00001AE8			1898+	DC	A(T26)	address of test	
00002338	00001B48			1899+	DC	A(T27)	address of test	
0000233C	00001BA8			1900+	DC	A(T28)	address of test	
00002340	00001C08			1901+	DC	A(T29)	address of test	
00002344	00001C68			1902+	DC	A(T30)	address of test	
00002348	00001CC8			1903+	DC	A(T31)	address of test	
0000234C	00001D28			1904+	DC	A(T32)	address of test	
00002350	00001D88			1905+	DC	A(T33)	address of test	
00002354	00001DE8			1906+	DC	A(T34)	address of test	
00002358	00001E48			1907+	DC	A(T35)	address of test	
0000235C	00001EA8			1908+	DC	A(T36)	address of test	
00002360	00001F08			1909+	DC	A(T37)	address of test	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
				1926	*****		
				1927	* Register equates		
				1928	*****		
		00000000	00000001	1930 R0	EQU	0	
		00000001	00000001	1931 R1	EQU	1	
		00000002	00000001	1932 R2	EQU	2	
		00000003	00000001	1933 R3	EQU	3	
		00000004	00000001	1934 R4	EQU	4	
		00000005	00000001	1935 R5	EQU	5	
		00000006	00000001	1936 R6	EQU	6	
		00000007	00000001	1937 R7	EQU	7	
		00000008	00000001	1938 R8	EQU	8	
		00000009	00000001	1939 R9	EQU	9	
		0000000A	00000001	1940 R10	EQU	10	
		0000000B	00000001	1941 R11	EQU	11	
		0000000C	00000001	1942 R12	EQU	12	
		0000000D	00000001	1943 R13	EQU	13	
		0000000E	00000001	1944 R14	EQU	14	
		0000000F	00000001	1945 R15	EQU	15	
				1947	*****		
				1948	* Register equates		
				1949	*****		
		00000000	00000001	1951 V0	EQU	0	
		00000001	00000001	1952 V1	EQU	1	
		00000002	00000001	1953 V2	EQU	2	
		00000003	00000001	1954 V3	EQU	3	
		00000004	00000001	1955 V4	EQU	4	
		00000005	00000001	1956 V5	EQU	5	
		00000006	00000001	1957 V6	EQU	6	
		00000007	00000001	1958 V7	EQU	7	
		00000008	00000001	1959 V8	EQU	8	
		00000009	00000001	1960 V9	EQU	9	
		0000000A	00000001	1961 V10	EQU	10	
		0000000B	00000001	1962 V11	EQU	11	
		0000000C	00000001	1963 V12	EQU	12	
		0000000D	00000001	1964 V13	EQU	13	
		0000000E	00000001	1965 V14	EQU	14	
		0000000F	00000001	1966 V15	EQU	15	
		00000010	00000001	1967 V16	EQU	16	
		00000011	00000001	1968 V17	EQU	17	
		00000012	00000001	1969 V18	EQU	18	
		00000013	00000001	1970 V19	EQU	19	
		00000014	00000001	1971 V20	EQU	20	
		00000015	00000001	1972 V21	EQU	21	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES															
BEGIN	I	00000200	2	153	118	149	150	151												
CC	U	00000008	1	514	264															
CCFOUND	X	000010E0	1	486	251	271														
CCMASK	U	00000009	1	515	222															
CCMSG	U	0000033A	1	240	234															
CCPRTEXP	C	0000108A	1	466	268															
CCPRTGOT	C	0000109A	1	469	275															
CCPRTLNE	C	00001047	16	461	471	278														
CCPRTLNG	U	00000055	1	471	277															
CCPRTNAME	C	00001074	8	464	261															
CCPRTNUM	C	00001057	3	462	259															
CCPSW	F	000010D8	4	485	248	646	672	698	724	750	778	804	830	856	882	910	936			
					962	988	1014	1040	1068	1094	1120	1146	1172	1198	1235	1261	1288			
					1314	1341	1367	1394	1420	1461	1487	1514	1540	1567	1593	1620	1646			
					1673	1699	1726	1752	1779	1805	1832	1858								
CTLRO	F	0000054C	4	407	163	164	165	166												
DECNUM	C	000010C8	16	481	256	258	265	267	272	274	290	292	299	301						
E6TEST	4	00000000	28	509	214															
E6TESTS	F	000022D0	4	1870	205															
EDIT	X	0000109C	18	476	257	266	273	291	300											
ENDTEST	U	00000424	1	321	210															
EOJ	I	00000530	4	397	198	324														
EOJPSW	D	00000520	8	395	397															
FAILCONT	U	00000414	1	311	281															
FAILED	F	00001000	4	437	313	322														
FAILMSG	U	000003CA	1	288	229															
FAILPSW	D	00000538	8	399	401															
FAILTEST	I	00000548	4	401	325															
FB0001	F	000002A0	8	182	186	187	189													
IMAGE	1	00000000	9112	0																
K	U	00000400	1	420	421	422	423													
K64	U	00010000	1	422																
MB	U	00000007	1	513	242	298														
MB	U	00100000	1	423																
MSG	I	00000468	4	357	197	340														
MSGCMD	C	000004B6	9	387	370	371														
MSGMSG	C	000004BF	95	388	364	385	362													
MSGMVC	I	000004B0	6	385	368															
MSGOK	I	0000047E	2	366	363															
MSGRET	I	0000049E	4	381	374	377														
MSGSAVE	F	000004A4	4	384	360	381														
NEXTE6	U	000002F4	1	207	232	316														
OPNAME	C	0000000A	8	517	261	295														
PAGE	U	00001000	1	421																
PRT3	C	000010B2	18	479	257	258	259	266	267	268	273	274	275	291	292	293	300			
					301	302														
PRTLNE	C	00001008	16	446	453	305														
PRTLNG	U	0000003F	1	453	304															
PRTMB	C	00001044	2	451	302															
PRTNAME	C	00001033	8	449	295															
PRTNUM	C	00001018	3	447	293															
RO	U	00000000	1	1930	112	163	166	186	188	189	190	195	212	216	217	277	304			
					312	313	339	341	357	360	362	364	366	381	645	671	697			
					723	749	777	803	829	855	881	909	935	961	987	1013	1039			
					1067	1093	1119	1145	1171	1197	1234	1260	1287	1313	1340	1366	1393			
					1419	1460	1486	1513	1539	1566	1592	1619	1645	1672	1698	1725	1751			

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
RE26	F	00001B28	4	1316	1306 1310
RE27	F	00001B88	4	1343	1333 1337
RE28	F	00001BE8	4	1369	1359 1363
RE29	F	00001C48	4	1396	1386 1390
RE3	F	00001288	4	700	690 694
RE30	F	00001CA8	4	1422	1412 1416
RE31	F	00001D08	4	1463	1453 1457
RE32	F	00001D68	4	1489	1479 1483
RE33	F	00001DC8	4	1516	1506 1510
RE34	F	00001E28	4	1542	1532 1536
RE35	F	00001E88	4	1569	1559 1563
RE36	F	00001EE8	4	1595	1585 1589
RE37	F	00001F48	4	1622	1612 1616
RE38	F	00001FA8	4	1648	1638 1642
RE39	F	00002008	4	1675	1665 1669
RE4	F	000012E8	4	726	716 720
RE40	F	00002068	4	1701	1691 1695
RE41	F	000020C8	4	1728	1718 1722
RE42	F	00002128	4	1754	1744 1748
RE43	F	00002188	4	1781	1771 1775
RE44	F	000021E8	4	1807	1797 1801
RE45	F	00002248	4	1834	1824 1828
RE46	F	000022A8	4	1860	1850 1854
RE5	F	00001348	4	752	742 746
RE6	F	000013A8	4	780	770 774
RE7	F	00001408	4	806	796 800
RE8	F	00001468	4	832	822 826
RE9	F	000014C8	4	858	848 852
REA1	A	000011A0	4	638	
REA10	A	00001500	4	874	
REA11	A	00001560	4	902	
REA12	A	000015C0	4	928	
REA13	A	00001620	4	954	
REA14	A	00001680	4	980	
REA15	A	000016E0	4	1006	
REA16	A	00001740	4	1032	
REA17	A	000017A0	4	1060	
REA18	A	00001800	4	1086	
REA19	A	00001860	4	1112	
REA2	A	00001200	4	664	
REA20	A	000018C0	4	1138	
REA21	A	00001920	4	1164	
REA22	A	00001980	4	1190	
REA23	A	000019E0	4	1227	
REA24	A	00001A40	4	1253	
REA25	A	00001AA0	4	1280	
REA26	A	00001B00	4	1306	
REA27	A	00001B60	4	1333	
REA28	A	00001BC0	4	1359	
REA29	A	00001C20	4	1386	
REA3	A	00001260	4	690	
REA30	A	00001C80	4	1412	
REA31	A	00001CE0	4	1453	
REA32	A	00001D40	4	1479	
REA33	A	00001DA0	4	1506	
REA34	A	00001E00	4	1532	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES	
REA35	A	00001E60	4	1559		
REA36	A	00001EC0	4	1585		
REA37	A	00001F20	4	1612		
REA38	A	00001F80	4	1638		
REA39	A	00001FE0	4	1665		
REA4	A	000012C0	4	716		
REA40	A	00002040	4	1691		
REA41	A	000020A0	4	1718		
REA42	A	00002100	4	1744		
REA43	A	00002160	4	1771		
REA44	A	000021C0	4	1797		
REA45	A	00002220	4	1824		
REA46	A	00002280	4	1850		
REA5	A	00001320	4	742		
REA6	A	00001380	4	770		
REA7	A	000013E0	4	796		
REA8	A	00001440	4	822		
REA9	A	000014A0	4	848		
READDR	A	00000018	4	520	227	
REG2LOW	U	000000DD	1	427		
REG2PATT	U	AABBCCDD	1	426		
RELEN	A	00000014	4	519		
RPTDWSAV	D	00000458	8	350	339	341
RPTERROR	I	00000432	4	334	279	306
RPTSAVE	F	00000450	4	347	334	344
RPTSVR5	F	00000454	4	348	335	343
SKL0001	U	0000006B	1	179	195	
SKT0001	C	0000022A	26	176	179	196
SVOLDPSW	U	00000140	0	114		
T1	A	00001188	4	630	1873	
T10	A	000014E8	4	866	1882	
T11	A	00001548	4	894	1883	
T12	A	000015A8	4	920	1884	
T13	A	00001608	4	946	1885	
T14	A	00001668	4	972	1886	
T15	A	000016C8	4	998	1887	
T16	A	00001728	4	1024	1888	
T17	A	00001788	4	1052	1889	
T18	A	000017E8	4	1078	1890	
T19	A	00001848	4	1104	1891	
T2	A	000011E8	4	656	1874	
T20	A	000018A8	4	1130	1892	
T21	A	00001908	4	1156	1893	
T22	A	00001968	4	1182	1894	
T23	A	000019C8	4	1219	1895	
T24	A	00001A28	4	1245	1896	
T25	A	00001A88	4	1272	1897	
T26	A	00001AE8	4	1298	1898	
T27	A	00001B48	4	1325	1899	
T28	A	00001BA8	4	1351	1900	
T29	A	00001C08	4	1378	1901	
T3	A	00001248	4	682	1875	
T30	A	00001C68	4	1404	1902	
T31	A	00001CC8	4	1445	1903	
T32	A	00001D28	4	1471	1904	
T33	A	00001D88	4	1498	1905	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES													
T34	A	00001DE8	4	1524	1906													
T35	A	00001E48	4	1551	1907													
T36	A	00001EA8	4	1577	1908													
T37	A	00001F08	4	1604	1909													
T38	A	00001F68	4	1630	1910													
T39	A	00001FC8	4	1657	1911													
T4	A	000012A8	4	708	1876													
T40	A	00002028	4	1683	1912													
T41	A	00002088	4	1710	1913													
T42	A	000020E8	4	1736	1914													
T43	A	00002148	4	1763	1915													
T44	A	000021A8	4	1789	1916													
T45	A	00002208	4	1816	1917													
T46	A	00002268	4	1842	1918													
T5	A	00001308	4	734	1877													
T6	A	00001368	4	762	1878													
T7	A	000013C8	4	788	1879													
T8	A	00001428	4	814	1880													
T9	A	00001488	4	840	1881													
TESTCC	I	00000336	4	234	224													
TESTING	F	00001004	4	438	217													
TESTREST	U	0000031E	1	226	244													
TNUM	H	00000004	2	511	216	255	289											
TSUB	A	00000000	4	510	219													
TTABLE	F	000022D0	4	1872														
V0	U	00000000	1	1951														
V1	U	00000001	1	1952	641	643	644	667	669	670	693	695	696	719	721	722	745	
					747	748	773	775	776	799	801	802	825	827	828	851	853	
					854	877	879	880	905	907	908	931	933	934	957	959	960	
					983	985	986	1009	1011	1012	1035	1037	1038	1063	1065	1066	1089	
					1091	1092	1115	1117	1118	1141	1143	1144	1167	1169	1170	1193	1195	
					1196	1230	1232	1233	1256	1258	1259	1283	1285	1286	1309	1311	1312	
					1336	1338	1339	1362	1364	1365	1389	1391	1392	1415	1417	1418	1456	
					1458	1459	1482	1484	1485	1509	1511	1512	1535	1537	1538	1562	1564	
					1565	1588	1590	1591	1615	1617	1618	1641	1643	1644	1668	1670	1671	
					1694	1696	1697	1721	1723	1724	1747	1749	1750	1774	1776	1777	1800	
					1802	1803	1827	1829	1830	1853	1855	1856						
V10	U	0000000A	1	1961														
V11	U	0000000B	1	1962														
V12	U	0000000C	1	1963														
V13	U	0000000D	1	1964														
V14	U	0000000E	1	1965														
V15	U	0000000F	1	1966														
V16	U	00000010	1	1967														
V17	U	00000011	1	1968														
V18	U	00000012	1	1969														
V19	U	00000013	1	1970														
V1FUDGE	X	00001138	16	498	641	667	693	719	745	773	799	825	851	877	905	931	957	
					983	1009	1035	1063	1089	1115	1141	1167	1193	1230	1256	1283	1309	
					1336	1362	1389	1415	1456	1482	1509	1535	1562	1588	1615	1641	1668	
					1694	1721	1747	1774	1800	1827	1853							
V1FUDGEB	X	00001148	16	499														
V1INPUT	C	00001158	16	500														
V1OUTPUT	X	00001100	16	494	228	644	670	696	722	748	776	802	828	854	880	908	934	
					960	986	1012	1038	1066	1092	1118	1144	1170	1196	1233	1259	1286	
					1312	1339	1365	1392	1418	1459	1485	1512	1538	1565	1591	1618	1644	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES					
X34	F	00001E04	4	1534	1524					
X35	F	00001E64	4	1561	1551					
X36	F	00001EC4	4	1587	1577					
X37	F	00001F24	4	1614	1604					
X38	F	00001F84	4	1640	1630					
X39	F	00001FE4	4	1667	1657					
X4	F	000012C4	4	718	708					
X40	F	00002044	4	1693	1683					
X41	F	000020A4	4	1720	1710					
X42	F	00002104	4	1746	1736					
X43	F	00002164	4	1773	1763					
X44	F	000021C4	4	1799	1789					
X45	F	00002224	4	1826	1816					
X46	F	00002284	4	1852	1842					
X5	F	00001324	4	744	734					
X6	F	00001384	4	772	762					
X7	F	000013E4	4	798	788					
X8	F	00001444	4	824	814					
X9	F	000014A4	4	850	840					
XC0001	U	000002F0	1	199	191					
ZVE6TST	J	00000000	9112	111	114	116	120	124	436	112
=A(E6TESTS)	A	00000558	4	412	205					
=AL2(L' MSGMSG)	R	00000566	2	416	362					
=F' 1'	F	0000055C	4	413	243	312				
=F' 128'	F	00000554	4	411	190					
=H' 0'	H	00000564	2	415	357					
=XL4' 3'	X	00000560	4	414	250					

DESC	SYMBOL	SIZE	POS	ADDR
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Entry: 0

Image	IMAGE	9112	0000- 2397	0000- 2397
Regi on		9112	0000- 2397	0000- 2397
CSECT	ZVE6TST	9112	0000- 2397	0000- 2397

STMT	FILE NAME
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1	/home/tn529/sharedvfp/tests/zvector-e6-12-countzonedhighlow.asm
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**** NO ERRORS FOUND ****