

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
-----	-------------	-------	-------	------

2				*****
3				*
4				* TRE instruction tests
5				*
6				* NOTE: This test is based the CLCL-et-al Test
7				* modified to only test the TRE instruction.
8				*
9				* James Wekel August 2022
10				*****
11				*****
12				*
13				* TRE basic instruction tests
14				*
15				*****
16				*
17				* This program tests proper functioning of the TRE
18				* instructions.
19				*
20				* PLEASE NOTE that the tests are very SIMPLE TESTS designed to catch
21				* obvious coding errors. None of the tests are thorough. They are
22				* NOT designed to test all aspects of any of the instructions.
23				*
24				*****
25				*
26				* Example Hercules Testcase:
27				*
28				*
29				* *Testcase TRE-01-basic (Test TRE instructions)
30				*
31				* archlvl 390
32				* mainsize 3
33				* numcpu 1
34				* sysclear
35				*
36				* loadcore "\$(testpath)/TRE-01-basic" 0x0
37				*
38				* runtest 1 # (NON-timing test duration)
39				*
40				* *Done
41				*
42				*
43				*****

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				45 PRINT OFF
				3426 PRINT ON
				3428 *****
				3429 * SATK prolog stuff...
				3430 *****
				3432 ARCHLVL ZARCH=NO,MNOTE=NO
				3434+\$AL OPSYN AL
				3435+\$ALR OPSYN ALR
				3436+\$B OPSYN B
				3437+\$BAS OPSYN BAS
				3438+\$BASR OPSYN BASR
				3439+\$BC OPSYN BC
				3440+\$BCTR OPSYN BCTR
				3441+\$BE OPSYN BE
				3442+\$BH OPSYN BH
				3443+\$BL OPSYN BL
				3444+\$BM OPSYN BM
				3445+\$BNE OPSYN BNE
				3446+\$BNH OPSYN BNH
				3447+\$BNL OPSYN BNL
				3448+\$BNM OPSYN BNM
				3449+\$BNO OPSYN BNO
				3450+\$BNP OPSYN BNP
				3451+\$BNZ OPSYN BNZ
				3452+\$BO OPSYN BO
				3453+\$BP OPSYN BP
				3454+\$BXLE OPSYN BXLE
				3455+\$BZ OPSYN BZ
				3456+\$CH OPSYN CH
				3457+\$L OPSYN L
				3458+\$LH OPSYN LH
				3459+\$LM OPSYN LM
				3460+\$LPSW OPSYN LPSW
				3461+\$LR OPSYN LR
				3462+\$LTR OPSYN LTR
				3463+\$NR OPSYN NR
				3464+\$SL OPSYN SL
				3465+\$SLR OPSYN SLR
				3466+\$SR OPSYN SR
				3467+\$ST OPSYN ST
				3468+\$STM OPSYN STM
				3469+\$X OPSYN X
				3470+\$AHI OPSYN AHI
				3471+\$B OPSYN J
				3472+\$BC OPSYN BRC
				3473+\$BE OPSYN JE
				3474+\$BH OPSYN JH
				3475+\$BL OPSYN JL
				3476+\$BM OPSYN JM
				3477+\$BNE OPSYN JNE
				3478+\$BNH OPSYN JNH
				3479+\$BNL OPSYN JNL
				3480+\$BNM OPSYN JNM
				3481+\$BNO OPSYN JNO

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
					3490 *****
					3491 * Initiate the TRE01TST CSECT in the CODE region
					3492 * with the location counter at 0
					3493 *****
					3495 TRE01TST ASALOAD REGION=CODE
			00000000	000021FF	3496+TRE01TST START 0, CODE
00000000	000A0000	00000008			3498+ PSW 0,0,2,0,X'008' 64-bit Restart ISR Trap New PSW
00000008			00000008	00000058	3499+ ORG TRE01TST+X'058'
00000058	000A0000	00000018			3501+ PSW 0,0,2,0,X'018' 64-bit External ISR Trap New PSW
00000060	000A0000	00000020			3502+ PSW 0,0,2,0,X'020' 64-bit Supervisor Call ISR Trap New PSW
00000068	000A0000	00000028			3503+ PSW 0,0,2,0,X'028' 64-bit Program ISR Trap New PSW
00000070	000A0000	00000030			3504+ PSW 0,0,2,0,X'030' 64-bit Machine Check Trap New PSW
00000078	000A0000	00000038			3505+ PSW 0,0,2,0,X'038' 64-bit Input/Output Trap New PSW
00000080			00000080	00000200	3506+ ORG TRE01TST+512
					3508 *****
					3509 * Create IPL (restart) PSW
					3510 *****
					3512 ASAIPL IA-BEGIN
			00000000	000021FF	3513+TRE01TST CSECT
00000200			00000200	00000000	3514+ ORG TRE01TST
00000000	00080000	00000200			3515+ PSW 0,0,0,0,BEGIN,24
00000008			00000008	00000200	3516+ ORG TRE01TST+512 Reset CSECT to end of assigned storage area
			00000000	000021FF	3517+TRE01TST CSECT

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				3519 *****	
				3520 *	The actual "TRE01TST" program itself...
				3521 *****	
				3522 *	
				3523 *	Architecture Mode: 390
				3524 *	Addressing Mode: 31-bit
				3525 *	Register Usage:
				3526 *	
				3527 *	R0 (work)
				3528 *	R1 I/O device used by ENADEV and RAWIO macros
				3529 *	R2 First base register
				3530 *	R3 IOCB pointer for ENADEV and RAWIO macros
				3531 *	R4 IO work register used by ENADEV and RAWIO
				3532 *	R5-R7 (work)
				3533 *	R8 ORB pointer
				3534 *	R9 Second base register
				3535 *	R10-R13 (work)
				3536 *	R14 Subroutine call
				3537 *	R15 Secondary Subroutine call or work
				3538 *	
				3539 *****	
00000200		00000000		3541	USING ASA,R0 Low core addressability
00000200		00000200		3542	USING BEGIN,R2 FIRST Base Register
00000200		00001200		3543	USING BEGIN+4096,R9 SECOND Base Register
00000200	0520			3545	BEGIN BALR R2,0 Initalize FIRST base register
00000202	0620			3546	BCTR R2,0 Initalize FIRST base register
00000204	0620			3547	BCTR R2,0 Initalize FIRST base register
00000206	5020 20CC		000002CC	3548	ST R2,SAVER2
0000020A	4190 2800		00000800	3550	LA R9,2048(,R2) Initalize SECOND base register
0000020E	4190 9800		00000800	3551	LA R9,2048(,R9) Initalize SECOND base register
				3553 *****	
				3554 *	Run the tests...
				3555 *****	
00000212	45E0 202C		0000022C	3556	BAL R14,TEST01 Test TRE instruction
				3558 *****	
				3559 *	Test for normal or unexpected test completion...
				3560 *****	
00000216	950A 9FFE		000021FE	3562	CLI TESTNUM,X'0A' Did we end on expected test?
0000021A	4770 2110		00000310	3563	BNE FAILTEST No?! Then FAIL the test!
0000021E	9502 9FFF		000021FF	3565	CLI SUBTEST,X'02' Did we end on expected SUB-test?
00000222	4770 2110		00000310	3566	BNE FAILTEST No?! Then FAIL the test!
00000226	47F0 20E0		000002E0	3568	B EOJ Yes, then normal completion!

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				3656 *****
				3657 * Normal completion or Abnormal termination PSWs
				3658 *****
000002E0				3660 EOJ DWAITEND LOAD=YES Normal completion
000002E0	8200 20E8		000002E8	3662+EOJ DS 0H
000002E8	000A0000 00000000			3663+ LPSW DWAT0008
				3664+DWAT0008 PSW 0,0,2,0,X'000000'
000002F0				3666 FAILDEV DWAIT LOAD=YES, CODE=01 ENADEV failed
000002F0	8200 20F8		000002F8	3667+FAILDEV DS 0H
000002F8	000A0000 00010001			3668+ LPSW DWAT0009
				3669+DWAT0009 PSW 0,0,2,0,X'010001'
00000300				3671 FAILIO DWAIT LOAD=YES, CODE=02 RAWIO failed
00000300	8200 2108		00000308	3672+FAILIO DS 0H
00000308	000A0000 00010002			3673+ LPSW DWAT0010
				3674+DWAT0010 PSW 0,0,2,0,X'010002'
00000310				3676 FAILTEST DWAIT LOAD=YES, CODE=BAD Abnormal termination
00000310	8200 2118		00000318	3677+FAILTEST DS 0H
00000318	000A0000 00010BAD			3678+ LPSW DWAT0011
				3679+DWAT0011 PSW 0,0,2,0,X'010BAD'
				3681 *****
				3682 * Working Storage
				3683 *****
00000320				3685 LTORG , Literals pool
00000320	00000100			3686 =A(OP2LEN)
00000324	00000004			3687 =F'4'
00000328	00000000			3688 =F'0'
		00000400	00000001	3690 K EQU 1024 One KB
		00001000	00000001	3691 PAGE EQU (4*K) Size of one page
		00010000	00000001	3692 K64 EQU (64*K) 64 KB
		00100000	00000001	3693 MB EQU (K*K) 1 MB
		000021FE	00000001	3695 TESTADDR EQU (2*PAGE+X'200'-2) Where test/subtest numbers will go

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				3724 *****
				3725 * TRE Testing Control tables (ref: TRETEST DSECT)
				3726 *****
				3727 PRINT DATA
0000032C		00000000	000021FF	3728 TRE01TST CSECT ,
				3729 TRECTL DC 0A(0) start of table
0000032C				3732 TRE1 DS 0F
0000032C	01000000			3733 DC X'01',X'00',X'00',X'00'
00000330	0000049C	00001894		3734 DC A(TRTOP10),A(TRTOP20)
00000338	00010000	00000001		3735 DC A(00+(1*K64)),A(001),A(MB+(1*K64))
00000340	00110000			
00000344	00000007			3736 DC A(7) CC0
00000348	00010001	00000000		3737 DC A(00+(1*K64)+01),X'00000000'
00000350				3739 TRE2 DS 0F
00000350	02000000			3740 DC X'02',X'00',X'00',X'00'
00000354	0000049C	00001894		3741 DC A(TRTOP10),A(TRTOP20)
0000035C	00020000	00000002		3742 DC A(00+(2*K64)),A(002),A(MB+(2*K64))
00000364	00120000			
00000368	00000007			3743 DC A(7) CC0
0000036C	00020002	00000000		3744 DC A(00+(2*K64)+02),X'00000000'
00000374				3746 TRE4 DS 0F
00000374	03000000			3747 DC X'03',X'00',X'00',X'00'
00000378	0000049C	00001894		3748 DC A(TRTOP10),A(TRTOP20)
00000380	00030000	00000004		3749 DC A(00+(3*K64)),A(004),A(MB+(3*K64))
00000388	00130000			
0000038C	00000007			3750 DC A(7) CC0
00000390	00030004	00000000		3751 DC A(00+(3*K64)+04),X'00000000'
00000398				3753 TRE8 DS 0F
00000398	04000000			3754 DC X'04',X'00',X'00',X'00'
0000039C	0000049C	00001894		3755 DC A(TRTOP10),A(TRTOP20)
000003A4	00040000	00000008		3756 DC A(00+(4*K64)),A(008),A(MB+(4*K64))
000003AC	00140000			
000003B0	00000007			3757 DC A(7) CC0
000003B4	00040008	00000000		3758 DC A(00+(4*K64)+08),X'00000000'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
000003BC				3760 TRE256	DS	0F
000003BC	05000000			3761	DC	X'05',X'00',X'00',X'00'
000003C0	0000049C	00001894		3762	DC	A(TRTOP10),A(TRTOP20)
000003C8	00050000	00000100		3763	DC	A(00+(5*K64)),A(256),A(MB+(5*K64))
000003D0	00150000					
000003D4	00000007			3764	DC	A(7) CC0
000003D8	00050100	00000000		3765	DC	A(00+(5*K64)+256),X'00000000'
000003E0				3767 TREBTH	DS	0F
000003E0	06110000			3768	DC	X'06',X'11',X'00',X'00'
000003E4	00001694	00001994		3769	DC	A(TRTOP111),A(TRTOP211)
000003EC	0005FFF4	00000100		3770	DC	A(00+(6*K64)-12),A(256),A(MB+(6*K64)-34) both cross page
000003F4	0015FFDE					
000003F8	0000000A			3771	DC	A(10) CC1 = stop, scan incomplete or CC=3
000003FC	00060005	00000000		3772	DC	A(00+(6*K64)-12+X'11'),X'00000000'
00000404				3774 TREOP1	DS	0F
00000404	07F00000			3775	DC	X'07',X'F0',X'00',X'00'
00000408	00001794	00001A94		3776	DC	A(TRTOP1F0),A(TRTOP2F0)
00000410	0006FFF4	00000100		3777	DC	A(00+(7*K64)-12),A(256),A(MB+(7*K64)) only op1 crosses
00000418	00170000					
0000041C	0000000A			3778	DC	A(10) CC1 = stopped on last byte or CC=3
00000420	000700F3	00000000		3779	DC	A(00+(7*K64)-12+255),X'00000000'
00000428				3781 TREOP2	DS	0F
00000428	08110000			3782	DC	X'08',X'11',X'00',X'00'
0000042C	00001694	00001994		3783	DC	A(TRTOP111),A(TRTOP211)
00000434	00080000	00000100		3784	DC	A(00+(8*K64)),A(256),A(MB+(8*K64)-34) only op2 crosses
0000043C	0017FFDE					
00000440	0000000A			3785	DC	A(10) CC1 = stop, scan incomplete or CC=3
00000444	00080011	00000000		3786	DC	A(00+(8*K64)+X'11'),X'00000000'

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
					3805 *****
					3806 * TRE op1 scan data...
					3807 *****
0000049C	78125634	78125634			3809 TRTOP10 DC 1150XL4'78125634'
000004A4	78125634	78125634			
000004AC	78125634	78125634			
000004B4	78125634	78125634			
000004BC	78125634	78125634			
000004C4	78125634	78125634			
000004CC	78125634	78125634			
000004D4	78125634	78125634			
000004DC	78125634	78125634			
000004E4	78125634	78125634			
000004EC	78125634	78125634			
000004F4	78125634	78125634			
000004FC	78125634	78125634			
00000504	78125634	78125634			
0000050C	78125634	78125634			
00000514	78125634	78125634			
0000051C	78125634	78125634			
00000524	78125634	78125634			
0000052C	78125634	78125634			
00000534	78125634	78125634			
0000053C	78125634	78125634			
00000544	78125634	78125634			
0000054C	78125634	78125634			
00000554	78125634	78125634			
0000055C	78125634	78125634			
00000564	78125634	78125634			
0000056C	78125634	78125634			
00000574	78125634	78125634			
0000057C	78125634	78125634			
00000584	78125634	78125634			
0000058C	78125634	78125634			
00000594	78125634	78125634			
0000059C	78125634	78125634			
000005A4	78125634	78125634			
000005AC	78125634	78125634			
000005B4	78125634	78125634			
000005BC	78125634	78125634			
000005C4	78125634	78125634			
000005CC	78125634	78125634			
000005D4	78125634	78125634			
000005DC	78125634	78125634			
000005E4	78125634	78125634			
000005EC	78125634	78125634			
000005F4	78125634	78125634			
000005FC	78125634	78125634			
00000604	78125634	78125634			
0000060C	78125634	78125634			
00000614	78125634	78125634			
0000061C	78125634	78125634			
00000624	78125634	78125634			
0000062C	78125634	78125634			
00000634	78125634	78125634			

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
0000063C	78125634	78125634			
00000644	78125634	78125634			
0000064C	78125634	78125634			
00000654	78125634	78125634			
0000065C	78125634	78125634			
00000664	78125634	78125634			
0000066C	78125634	78125634			
00000674	78125634	78125634			
0000067C	78125634	78125634			
00000684	78125634	78125634			
0000068C	78125634	78125634			
00000694	78125634	78125634			
0000069C	78125634	78125634			
000006A4	78125634	78125634			
000006AC	78125634	78125634			
000006B4	78125634	78125634			
000006BC	78125634	78125634			
000006C4	78125634	78125634			
000006CC	78125634	78125634			
000006D4	78125634	78125634			
000006DC	78125634	78125634			
000006E4	78125634	78125634			
000006EC	78125634	78125634			
000006F4	78125634	78125634			
000006FC	78125634	78125634			
00000704	78125634	78125634			
0000070C	78125634	78125634			
00000714	78125634	78125634			
0000071C	78125634	78125634			
00000724	78125634	78125634			
0000072C	78125634	78125634			
00000734	78125634	78125634			
0000073C	78125634	78125634			
00000744	78125634	78125634			
0000074C	78125634	78125634			
00000754	78125634	78125634			
0000075C	78125634	78125634			
00000764	78125634	78125634			
0000076C	78125634	78125634			
00000774	78125634	78125634			
0000077C	78125634	78125634			
00000784	78125634	78125634			
0000078C	78125634	78125634			
00000794	78125634	78125634			
0000079C	78125634	78125634			
000007A4	78125634	78125634			
000007AC	78125634	78125634			
000007B4	78125634	78125634			
000007BC	78125634	78125634			
000007C4	78125634	78125634			
000007CC	78125634	78125634			
000007D4	78125634	78125634			
000007DC	78125634	78125634			
000007E4	78125634	78125634			
000007EC	78125634	78125634			
000007F4	78125634	78125634			

ASMA Ver. 0.2.1			TRE-01-basic (Test TRE instructions)			15 Oct 2022 14:27:03	Page	15
LOC	OBJECT	CODE	ADDR1	ADDR2	STMT			
000007FC	78125634	78125634						
00000804	78125634	78125634						
0000080C	78125634	78125634						
00000814	78125634	78125634						
0000081C	78125634	78125634						
00000824	78125634	78125634						
0000082C	78125634	78125634						
00000834	78125634	78125634						
0000083C	78125634	78125634						
00000844	78125634	78125634						
0000084C	78125634	78125634						
00000854	78125634	78125634						
0000085C	78125634	78125634						
00000864	78125634	78125634						
0000086C	78125634	78125634						
00000874	78125634	78125634						
0000087C	78125634	78125634						
00000884	78125634	78125634						
0000088C	78125634	78125634						
00000894	78125634	78125634						
0000089C	78125634	78125634						
000008A4	78125634	78125634						
000008AC	78125634	78125634						
000008B4	78125634	78125634						
000008BC	78125634	78125634						
000008C4	78125634	78125634						
000008CC	78125634	78125634						
000008D4	78125634	78125634						
000008DC	78125634	78125634						
000008E4	78125634	78125634						
000008EC	78125634	78125634						
000008F4	78125634	78125634						
000008FC	78125634	78125634						
00000904	78125634	78125634						
0000090C	78125634	78125634						
00000914	78125634	78125634						
0000091C	78125634	78125634						
00000924	78125634	78125634						
0000092C	78125634	78125634						
00000934	78125634	78125634						
0000093C	78125634	78125634						
00000944	78125634	78125634						
0000094C	78125634	78125634						
00000954	78125634	78125634						
0000095C	78125634	78125634						
00000964	78125634	78125634						
0000096C	78125634	78125634						
00000974	78125634	78125634						
0000097C	78125634	78125634						
00000984	78125634	78125634						
0000098C	78125634	78125634						
00000994	78125634	78125634						
0000099C	78125634	78125634						
000009A4	78125634	78125634						
000009AC	78125634	78125634						
000009B4	78125634	78125634						

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
000009BC	78125634	78125634			
000009C4	78125634	78125634			
000009CC	78125634	78125634			
000009D4	78125634	78125634			
000009DC	78125634	78125634			
000009E4	78125634	78125634			
000009EC	78125634	78125634			
000009F4	78125634	78125634			
000009FC	78125634	78125634			
00000A04	78125634	78125634			
00000A0C	78125634	78125634			
00000A14	78125634	78125634			
00000A1C	78125634	78125634			
00000A24	78125634	78125634			
00000A2C	78125634	78125634			
00000A34	78125634	78125634			
00000A3C	78125634	78125634			
00000A44	78125634	78125634			
00000A4C	78125634	78125634			
00000A54	78125634	78125634			
00000A5C	78125634	78125634			
00000A64	78125634	78125634			
00000A6C	78125634	78125634			
00000A74	78125634	78125634			
00000A7C	78125634	78125634			
00000A84	78125634	78125634			
00000A8C	78125634	78125634			
00000A94	78125634	78125634			
00000A9C	78125634	78125634			
00000AA4	78125634	78125634			
00000AAC	78125634	78125634			
00000AB4	78125634	78125634			
00000ABC	78125634	78125634			
00000AC4	78125634	78125634			
00000ACC	78125634	78125634			
00000AD4	78125634	78125634			
00000ADC	78125634	78125634			
00000AE4	78125634	78125634			
00000AEC	78125634	78125634			
00000AF4	78125634	78125634			
00000AFC	78125634	78125634			
00000B04	78125634	78125634			
00000B0C	78125634	78125634			
00000B14	78125634	78125634			
00000B1C	78125634	78125634			
00000B24	78125634	78125634			
00000B2C	78125634	78125634			
00000B34	78125634	78125634			
00000B3C	78125634	78125634			
00000B44	78125634	78125634			
00000B4C	78125634	78125634			
00000B54	78125634	78125634			
00000B5C	78125634	78125634			
00000B64	78125634	78125634			
00000B6C	78125634	78125634			
00000B74	78125634	78125634			

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
00000B7C	78125634	78125634			
00000B84	78125634	78125634			
00000B8C	78125634	78125634			
00000B94	78125634	78125634			
00000B9C	78125634	78125634			
00000BA4	78125634	78125634			
00000BAC	78125634	78125634			
00000BB4	78125634	78125634			
00000BBC	78125634	78125634			
00000BC4	78125634	78125634			
00000BCC	78125634	78125634			
00000BD4	78125634	78125634			
00000BDC	78125634	78125634			
00000BE4	78125634	78125634			
00000BEC	78125634	78125634			
00000BF4	78125634	78125634			
00000BFC	78125634	78125634			
00000C04	78125634	78125634			
00000C0C	78125634	78125634			
00000C14	78125634	78125634			
00000C1C	78125634	78125634			
00000C24	78125634	78125634			
00000C2C	78125634	78125634			
00000C34	78125634	78125634			
00000C3C	78125634	78125634			
00000C44	78125634	78125634			
00000C4C	78125634	78125634			
00000C54	78125634	78125634			
00000C5C	78125634	78125634			
00000C64	78125634	78125634			
00000C6C	78125634	78125634			
00000C74	78125634	78125634			
00000C7C	78125634	78125634			
00000C84	78125634	78125634			
00000C8C	78125634	78125634			
00000C94	78125634	78125634			
00000C9C	78125634	78125634			
00000CA4	78125634	78125634			
00000CAC	78125634	78125634			
00000CB4	78125634	78125634			
00000CBC	78125634	78125634			
00000CC4	78125634	78125634			
00000CCC	78125634	78125634			
00000CD4	78125634	78125634			
00000CDC	78125634	78125634			
00000CE4	78125634	78125634			
00000CEC	78125634	78125634			
00000CF4	78125634	78125634			
00000CFC	78125634	78125634			
00000D04	78125634	78125634			
00000D0C	78125634	78125634			
00000D14	78125634	78125634			
00000D1C	78125634	78125634			
00000D24	78125634	78125634			
00000D2C	78125634	78125634			
00000D34	78125634	78125634			

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
00000D3C	78125634	78125634			
00000D44	78125634	78125634			
00000D4C	78125634	78125634			
00000D54	78125634	78125634			
00000D5C	78125634	78125634			
00000D64	78125634	78125634			
00000D6C	78125634	78125634			
00000D74	78125634	78125634			
00000D7C	78125634	78125634			
00000D84	78125634	78125634			
00000D8C	78125634	78125634			
00000D94	78125634	78125634			
00000D9C	78125634	78125634			
00000DA4	78125634	78125634			
00000DAC	78125634	78125634			
00000DB4	78125634	78125634			
00000DBC	78125634	78125634			
00000DC4	78125634	78125634			
00000DCC	78125634	78125634			
00000DD4	78125634	78125634			
00000DDC	78125634	78125634			
00000DE4	78125634	78125634			
00000DEC	78125634	78125634			
00000DF4	78125634	78125634			
00000DFC	78125634	78125634			
00000E04	78125634	78125634			
00000E0C	78125634	78125634			
00000E14	78125634	78125634			
00000E1C	78125634	78125634			
00000E24	78125634	78125634			
00000E2C	78125634	78125634			
00000E34	78125634	78125634			
00000E3C	78125634	78125634			
00000E44	78125634	78125634			
00000E4C	78125634	78125634			
00000E54	78125634	78125634			
00000E5C	78125634	78125634			
00000E64	78125634	78125634			
00000E6C	78125634	78125634			
00000E74	78125634	78125634			
00000E7C	78125634	78125634			
00000E84	78125634	78125634			
00000E8C	78125634	78125634			
00000E94	78125634	78125634			
00000E9C	78125634	78125634			
00000EA4	78125634	78125634			
00000EAC	78125634	78125634			
00000EB4	78125634	78125634			
00000EBC	78125634	78125634			
00000EC4	78125634	78125634			
00000ECC	78125634	78125634			
00000ED4	78125634	78125634			
00000EDC	78125634	78125634			
00000EE4	78125634	78125634			
00000EEC	78125634	78125634			
00000EF4	78125634	78125634			

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
00000EFC	78125634	78125634			
00000F04	78125634	78125634			
00000F0C	78125634	78125634			
00000F14	78125634	78125634			
00000F1C	78125634	78125634			
00000F24	78125634	78125634			
00000F2C	78125634	78125634			
00000F34	78125634	78125634			
00000F3C	78125634	78125634			
00000F44	78125634	78125634			
00000F4C	78125634	78125634			
00000F54	78125634	78125634			
00000F5C	78125634	78125634			
00000F64	78125634	78125634			
00000F6C	78125634	78125634			
00000F74	78125634	78125634			
00000F7C	78125634	78125634			
00000F84	78125634	78125634			
00000F8C	78125634	78125634			
00000F94	78125634	78125634			
00000F9C	78125634	78125634			
00000FA4	78125634	78125634			
00000FAC	78125634	78125634			
00000FB4	78125634	78125634			
00000FBC	78125634	78125634			
00000FC4	78125634	78125634			
00000FCC	78125634	78125634			
00000FD4	78125634	78125634			
00000FDC	78125634	78125634			
00000FE4	78125634	78125634			
00000FEC	78125634	78125634			
00000FF4	78125634	78125634			
00000FFC	78125634	78125634			
00001004	78125634	78125634			
0000100C	78125634	78125634			
00001014	78125634	78125634			
0000101C	78125634	78125634			
00001024	78125634	78125634			
0000102C	78125634	78125634			
00001034	78125634	78125634			
0000103C	78125634	78125634			
00001044	78125634	78125634			
0000104C	78125634	78125634			
00001054	78125634	78125634			
0000105C	78125634	78125634			
00001064	78125634	78125634			
0000106C	78125634	78125634			
00001074	78125634	78125634			
0000107C	78125634	78125634			
00001084	78125634	78125634			
0000108C	78125634	78125634			
00001094	78125634	78125634			
0000109C	78125634	78125634			
000010A4	78125634	78125634			
000010AC	78125634	78125634			
000010B4	78125634	78125634			

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
000010BC	78125634	78125634			
000010C4	78125634	78125634			
000010CC	78125634	78125634			
000010D4	78125634	78125634			
000010DC	78125634	78125634			
000010E4	78125634	78125634			
000010EC	78125634	78125634			
000010F4	78125634	78125634			
000010FC	78125634	78125634			
00001104	78125634	78125634			
0000110C	78125634	78125634			
00001114	78125634	78125634			
0000111C	78125634	78125634			
00001124	78125634	78125634			
0000112C	78125634	78125634			
00001134	78125634	78125634			
0000113C	78125634	78125634			
00001144	78125634	78125634			
0000114C	78125634	78125634			
00001154	78125634	78125634			
0000115C	78125634	78125634			
00001164	78125634	78125634			
0000116C	78125634	78125634			
00001174	78125634	78125634			
0000117C	78125634	78125634			
00001184	78125634	78125634			
0000118C	78125634	78125634			
00001194	78125634	78125634			
0000119C	78125634	78125634			
000011A4	78125634	78125634			
000011AC	78125634	78125634			
000011B4	78125634	78125634			
000011BC	78125634	78125634			
000011C4	78125634	78125634			
000011CC	78125634	78125634			
000011D4	78125634	78125634			
000011DC	78125634	78125634			
000011E4	78125634	78125634			
000011EC	78125634	78125634			
000011F4	78125634	78125634			
000011FC	78125634	78125634			
00001204	78125634	78125634			
0000120C	78125634	78125634			
00001214	78125634	78125634			
0000121C	78125634	78125634			
00001224	78125634	78125634			
0000122C	78125634	78125634			
00001234	78125634	78125634			
0000123C	78125634	78125634			
00001244	78125634	78125634			
0000124C	78125634	78125634			
00001254	78125634	78125634			
0000125C	78125634	78125634			
00001264	78125634	78125634			
0000126C	78125634	78125634			
00001274	78125634	78125634			

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
0000127C	78125634	78125634			
00001284	78125634	78125634			
0000128C	78125634	78125634			
00001294	78125634	78125634			
0000129C	78125634	78125634			
000012A4	78125634	78125634			
000012AC	78125634	78125634			
000012B4	78125634	78125634			
000012BC	78125634	78125634			
000012C4	78125634	78125634			
000012CC	78125634	78125634			
000012D4	78125634	78125634			
000012DC	78125634	78125634			
000012E4	78125634	78125634			
000012EC	78125634	78125634			
000012F4	78125634	78125634			
000012FC	78125634	78125634			
00001304	78125634	78125634			
0000130C	78125634	78125634			
00001314	78125634	78125634			
0000131C	78125634	78125634			
00001324	78125634	78125634			
0000132C	78125634	78125634			
00001334	78125634	78125634			
0000133C	78125634	78125634			
00001344	78125634	78125634			
0000134C	78125634	78125634			
00001354	78125634	78125634			
0000135C	78125634	78125634			
00001364	78125634	78125634			
0000136C	78125634	78125634			
00001374	78125634	78125634			
0000137C	78125634	78125634			
00001384	78125634	78125634			
0000138C	78125634	78125634			
00001394	78125634	78125634			
0000139C	78125634	78125634			
000013A4	78125634	78125634			
000013AC	78125634	78125634			
000013B4	78125634	78125634			
000013BC	78125634	78125634			
000013C4	78125634	78125634			
000013CC	78125634	78125634			
000013D4	78125634	78125634			
000013DC	78125634	78125634			
000013E4	78125634	78125634			
000013EC	78125634	78125634			
000013F4	78125634	78125634			
000013FC	78125634	78125634			
00001404	78125634	78125634			
0000140C	78125634	78125634			
00001414	78125634	78125634			
0000141C	78125634	78125634			
00001424	78125634	78125634			
0000142C	78125634	78125634			
00001434	78125634	78125634			

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
0000143C	78125634	78125634			
00001444	78125634	78125634			
0000144C	78125634	78125634			
00001454	78125634	78125634			
0000145C	78125634	78125634			
00001464	78125634	78125634			
0000146C	78125634	78125634			
00001474	78125634	78125634			
0000147C	78125634	78125634			
00001484	78125634	78125634			
0000148C	78125634	78125634			
00001494	78125634	78125634			
0000149C	78125634	78125634			
000014A4	78125634	78125634			
000014AC	78125634	78125634			
000014B4	78125634	78125634			
000014BC	78125634	78125634			
000014C4	78125634	78125634			
000014CC	78125634	78125634			
000014D4	78125634	78125634			
000014DC	78125634	78125634			
000014E4	78125634	78125634			
000014EC	78125634	78125634			
000014F4	78125634	78125634			
000014FC	78125634	78125634			
00001504	78125634	78125634			
0000150C	78125634	78125634			
00001514	78125634	78125634			
0000151C	78125634	78125634			
00001524	78125634	78125634			
0000152C	78125634	78125634			
00001534	78125634	78125634			
0000153C	78125634	78125634			
00001544	78125634	78125634			
0000154C	78125634	78125634			
00001554	78125634	78125634			
0000155C	78125634	78125634			
00001564	78125634	78125634			
0000156C	78125634	78125634			
00001574	78125634	78125634			
0000157C	78125634	78125634			
00001584	78125634	78125634			
0000158C	78125634	78125634			
00001594	78125634	78125634			
0000159C	78125634	78125634			
000015A4	78125634	78125634			
000015AC	78125634	78125634			
000015B4	78125634	78125634			
000015BC	78125634	78125634			
000015C4	78125634	78125634			
000015CC	78125634	78125634			
000015D4	78125634	78125634			
000015DC	78125634	78125634			
000015E4	78125634	78125634			
000015EC	78125634	78125634			
000015F4	78125634	78125634			

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
000015FC	78125634	78125634			
00001604	78125634	78125634			
0000160C	78125634	78125634			
00001614	78125634	78125634			
0000161C	78125634	78125634			
00001624	78125634	78125634			
0000162C	78125634	78125634			
00001634	78125634	78125634			
0000163C	78125634	78125634			
00001644	78125634	78125634			
0000164C	78125634	78125634			
00001654	78125634	78125634			
0000165C	78125634	78125634			
00001664	78125634	78125634			
0000166C	78125634	78125634			
00001674	78125634	78125634			
0000167C	78125634	78125634			
00001684	78125634	78125634			
0000168C	78125634	78125634			
00001694	78125634	78125634			3811 TRTOP111 DC 04XL4'78125634',X'00110000',59XL4'78125634' (CC1)
0000169C	78125634	78125634			
000016A4	00110000	78125634			
000016AC	78125634	78125634			
000016B4	78125634	78125634			
000016BC	78125634	78125634			
000016C4	78125634	78125634			
000016CC	78125634	78125634			
000016D4	78125634	78125634			
000016DC	78125634	78125634			
000016E4	78125634	78125634			
000016EC	78125634	78125634			
000016F4	78125634	78125634			
000016FC	78125634	78125634			
00001704	78125634	78125634			
0000170C	78125634	78125634			
00001714	78125634	78125634			
0000171C	78125634	78125634			
00001724	78125634	78125634			
0000172C	78125634	78125634			
00001734	78125634	78125634			
0000173C	78125634	78125634			
00001744	78125634	78125634			
0000174C	78125634	78125634			
00001754	78125634	78125634			
0000175C	78125634	78125634			
00001764	78125634	78125634			
0000176C	78125634	78125634			
00001774	78125634	78125634			
0000177C	78125634	78125634			
00001784	78125634	78125634			
0000178C	78125634	78125634			
00001794	78125634	78125634			3813 TRTOP1F0 DC 63XL4'78125634',X'000000F0' (CC1)
0000179C	78125634	78125634			
000017A4	78125634	78125634			

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
					3817 *****
					3818 * TRE op2 stop tables...
					3819 *****
00001894	00000000	00000000			3821 TRTOP20 DC 256X'00' no stop
0000189C	00000000	00000000			
000018A4	00000000	00000000			
000018AC	00000000	00000000			
000018B4	00000000	00000000			
000018BC	00000000	00000000			
000018C4	00000000	00000000			
000018CC	00000000	00000000			
000018D4	00000000	00000000			
000018DC	00000000	00000000			
000018E4	00000000	00000000			
000018EC	00000000	00000000			
000018F4	00000000	00000000			
000018FC	00000000	00000000			
00001904	00000000	00000000			
0000190C	00000000	00000000			
00001914	00000000	00000000			
0000191C	00000000	00000000			
00001924	00000000	00000000			
0000192C	00000000	00000000			
00001934	00000000	00000000			
0000193C	00000000	00000000			
00001944	00000000	00000000			
0000194C	00000000	00000000			
00001954	00000000	00000000			
0000195C	00000000	00000000			
00001964	00000000	00000000			
0000196C	00000000	00000000			
00001974	00000000	00000000			
0000197C	00000000	00000000			
00001984	00000000	00000000			
0000198C	00000000	00000000			
00001994	00000000	00000000			3823 TRTOP211 DC 17X'00',X'11',238X'00' stop on X'11'
0000199C	00000000	00000000			
000019A4	00110000	00000000			
000019AC	00000000	00000000			
000019B4	00000000	00000000			
000019BC	00000000	00000000			
000019C4	00000000	00000000			
000019CC	00000000	00000000			
000019D4	00000000	00000000			
000019DC	00000000	00000000			
000019E4	00000000	00000000			
000019EC	00000000	00000000			
000019F4	00000000	00000000			
000019FC	00000000	00000000			
00001A04	00000000	00000000			
00001A0C	00000000	00000000			
00001A14	00000000	00000000			
00001A1C	00000000	00000000			
00001A24	00000000	00000000			

ASMA Ver. 0.2.1			TRE-01-basic (Test TRE instructions)			15 Oct 2022 14:27:03		Page	26
LOC	OBJECT	CODE	ADDR1	ADDR2	STMT				
00001A2C	00000000	00000000							
00001A34	00000000	00000000							
00001A3C	00000000	00000000							
00001A44	00000000	00000000							
00001A4C	00000000	00000000							
00001A54	00000000	00000000							
00001A5C	00000000	00000000							
00001A64	00000000	00000000							
00001A6C	00000000	00000000							
00001A74	00000000	00000000							
00001A7C	00000000	00000000							
00001A84	00000000	00000000							
00001A8C	00000000	00000000							
00001A94	00000000	00000000			3825 TRTOP2F0 DC	240X'00',X'F0',15X'00'	stop on X'F0'		
00001A9C	00000000	00000000							
00001AA4	00000000	00000000							
00001AAC	00000000	00000000							
00001AB4	00000000	00000000							
00001ABC	00000000	00000000							
00001AC4	00000000	00000000							
00001ACC	00000000	00000000							
00001AD4	00000000	00000000							
00001ADC	00000000	00000000							
00001AE4	00000000	00000000							
00001AEC	00000000	00000000							
00001AF4	00000000	00000000							
00001AFC	00000000	00000000							
00001B04	00000000	00000000							
00001B0C	00000000	00000000							
00001B14	00000000	00000000							
00001B1C	00000000	00000000							
00001B24	00000000	00000000							
00001B2C	00000000	00000000							
00001B34	00000000	00000000							
00001B3C	00000000	00000000							
00001B44	00000000	00000000							
00001B4C	00000000	00000000							
00001B54	00000000	00000000							
00001B5C	00000000	00000000							
00001B64	00000000	00000000							
00001B6C	00000000	00000000							
00001B74	00000000	00000000							
00001B7C	00000000	00000000							
00001B84	F0000000	00000000							
00001B8C	00000000	00000000							
00001B94	FF000000	00000000			3827 TRELOP20 DC	X'FF',255X'00'			
00001B9C	00000000	00000000							
00001BA4	00000000	00000000							
00001BAC	00000000	00000000							
00001BB4	00000000	00000000							
00001BBC	00000000	00000000							
00001BC4	00000000	00000000							
00001BCC	00000000	00000000							
00001BD4	00000000	00000000							

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT
00001BDC	00000000	00000000			
00001BE4	00000000	00000000			
00001BEC	00000000	00000000			
00001BF4	00000000	00000000			
00001BFC	00000000	00000000			
00001C04	00000000	00000000			
00001C0C	00000000	00000000			
00001C14	00000000	00000000			
00001C1C	00000000	00000000			
00001C24	00000000	00000000			
00001C2C	00000000	00000000			
00001C34	00000000	00000000			
00001C3C	00000000	00000000			
00001C44	00000000	00000000			
00001C4C	00000000	00000000			
00001C54	00000000	00000000			
00001C5C	00000000	00000000			
00001C64	00000000	00000000			
00001C6C	00000000	00000000			
00001C74	00000000	00000000			
00001C7C	00000000	00000000			
00001C84	00000000	00000000			
00001C8C	00000000	00000000			
00001C94	FFFFFFFF	FFFFFFFF	3829	TRELOP21 DC	256X'FF'
00001C9C	FFFFFFFF	FFFFFFFF			
00001CA4	FFFFFFFF	FFFFFFFF			
00001CAC	FFFFFFFF	FFFFFFFF			
00001CB4	FFFFFFFF	FFFFFFFF			
00001CBC	FFFFFFFF	FFFFFFFF			
00001CC4	FFFFFFFF	FFFFFFFF			
00001CCC	FFFFFFFF	FFFFFFFF			
00001CD4	FFFFFFFF	FFFFFFFF			
00001CDC	FFFFFFFF	FFFFFFFF			
00001CE4	FFFFFFFF	FFFFFFFF			
00001CEC	FFFFFFFF	FFFFFFFF			
00001CF4	FFFFFFFF	FFFFFFFF			
00001CFC	FFFFFFFF	FFFFFFFF			
00001D04	FFFFFFFF	FFFFFFFF			
00001D0C	FFFFFFFF	FFFFFFFF			
00001D14	FFFFFFFF	FFFFFFFF			
00001D1C	FFFFFFFF	FFFFFFFF			
00001D24	FFFFFFFF	FFFFFFFF			
00001D2C	FFFFFFFF	FFFFFFFF			
00001D34	FFFFFFFF	FFFFFFFF			
00001D3C	FFFFFFFF	FFFFFFFF			
00001D44	FFFFFFFF	FFFFFFFF			
00001D4C	FFFFFFFF	FFFFFFFF			
00001D54	FFFFFFFF	FFFFFFFF			
00001D5C	FFFFFFFF	FFFFFFFF			
00001D64	FFFFFFFF	FFFFFFFF			
00001D6C	FFFFFFFF	FFFFFFFF			
00001D74	FFFFFFFF	FFFFFFFF			
00001D7C	FFFFFFFF	FFFFFFFF			
00001D84	FFFFFFFF	FFFFFFFF			
00001D8C	FFFFFFFF	FFFFFFFF			

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT	
					3831	*****
					3832	* Fixed storage locations
					3833	*****
00001D94			00001D94	000021FE	3835	ORG TRE01TST+TESTADDR (s/b @ X'21FE', X'21FF')
000021FE	00				3837	TESTNUM DC X'00' Test number of active test
000021FF	00				3838	SUBTEST DC X'00' Active test sub-test number
					3840	*****
					3841	* (other DSECTS needed by SATK)
					3842	*****
					3844	DSECTS PRINT=OFF,NAME=(ASA,SCHIB,CCW0,CCW1,CSW)
					4120	PRINT ON
					4121	*****
					4122	* Register equates
					4123	*****
			00000000	00000001	4125	R0 EQU 0
			00000001	00000001	4126	R1 EQU 1
			00000002	00000001	4127	R2 EQU 2
			00000003	00000001	4128	R3 EQU 3
			00000004	00000001	4129	R4 EQU 4
			00000005	00000001	4130	R5 EQU 5
			00000006	00000001	4131	R6 EQU 6
			00000007	00000001	4132	R7 EQU 7
			00000008	00000001	4133	R8 EQU 8
			00000009	00000001	4134	R9 EQU 9
			0000000A	00000001	4135	R10 EQU 10
			0000000B	00000001	4136	R11 EQU 11
			0000000C	00000001	4137	R12 EQU 12
			0000000D	00000001	4138	R13 EQU 13
			0000000E	00000001	4139	R14 EQU 14
			0000000F	00000001	4140	R15 EQU 15
					4142	END

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
ASA	4	000000	512	3848	3541
ASBEGIN	U	000000	1	3849	3854 3896 3932 3941 3959 3966 3972 3976 3980 3986 4003
ASEND	U	000200	1	4002	4003
ASLENGTH	U	000200	1	4003	
BCEXTCOD	H	00001A	2	3866	
BCIOCOD	H	00003A	2	3874	
BCMCKCOD	H	000032	2	3872	
BCPGMCOD	H	00002A	2	3870	
BCSVCCOD	H	000022	2	3868	
BEGIN	I	000200	2	3545	3515 3542 3543 3580 3654
CAW	F	000048	4	3878	
CAWADDR	R	000049	3	3881	
CAWKEY	X	000048	1	3879	
CAWSUSP	U	000008	1	3880	
CCW0	4	000000	8	4007	4013
CCW0ADDR	R	000001	3	4009	
CCW0CNT	H	000006	2	4012	
CCW0CODE	X	000000	1	4008	
CCW0FLGS	X	000004	1	4010	
CCW0L	U	000008	1	4013	
CCW1	4	000000	8	4025	4030
CCW1ADDR	A	000004	4	4029	
CCW1CNT	H	000002	2	4028	
CCW1CODE	X	000000	1	4026	
CCW1FLGS	X	000001	1	4027	
CCW1L	U	000008	1	4030	
CCWCC	U	000040	1	4017	
CCWCD	U	000080	1	4016	
CCWIDA	U	000004	1	4021	
CCWPCI	U	000008	1	4020	
CCWSKIP	U	000010	1	4019	
CCWSLI	U	000020	1	4018	
CCWSUSP	U	000002	1	4022	
CHANID	F	0000A8	4	3933	
CODE	2	000000	8704	3496	
CPUID	U	00031B	1	4005	
CSW	F	000040	8	3877	
CSWATTN	U	000080	1	4047	
CSWBUSY	U	000010	1	4050	
CSWCCTL	U	000004	1	4062	
CSWCCW	R	000001	3	4044	
CSWCDAT	U	000008	1	4061	
CSWCE	U	000008	1	4051	
CSWCHNG	U	000001	1	4064	
CSWCNT	H	000006	2	4066	
CSWCS	X	000005	1	4056	
CSWCUE	U	000020	1	4049	
CSWDCC0	U	000000	1	4040	
CSWDCC1	U	000001	1	4041	
CSWDCC3	U	000003	1	4042	
CSWDCCM	U	000003	1	4039	
CSWDE	U	000004	1	4052	
CSWFLAG	X	000000	1	4034	
CSWFMT	4	000000	8	4033	4067
CSWFMTL	U	000008	1	4067	
CSWICTL	U	000002	1	4063	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
MKLOGOUT	F	000100	4	3958	
MKMODEL	F	0000FC	4	3957	
MKXSAA	F	0000D4	4	3949	
MONCLS	H	000094	2	3914	
MONCODE	F	00009C	4	3921	
MONNUMBR	X	000095	1	3916	
MPGACCID	X	0000A2	1	3924	
NKGRS	F	000180	4	3969	
OP1DATA	A	000004	4	3708	3594
OP1LEN	F	000010	4	3713	3593 3595
OP1WHERE	A	00000C	4	3712	3592
OP2DATA	A	000008	4	3709	3600
OP2LEN	U	000100	1	3715	3599
OP2WHERE	A	000014	4	3714	3598
OPSWHERE	U	00000C	1	3711	3614
PAGE	U	001000	1	3691	3695
PCFETO	A	0000C4	4	3945	
PERACCID	X	0000A1	1	3923	
PERADDR	F	000098	4	3920	
PERCODE	X	000096	1	3917	
PERCODMK	U	0000F0	1	3918	
PGMACCID	X	0000A0	1	3922	
PGMDXC	F	000090	4	3912	
PGMICODE	H	00008E	2	3911	
PGMIID	F	00008C	4	3907	
PGMIILC	X	00008D	1	3909	
PGMIILCM	U	00000C	1	3910	
PGMNPSW	F	000068	8	3889	
PGMOPSW	F	000028	8	3861	3869
PGMTRX	F	000090	4	3913	
PMCW1_0	X	000004	1	4074	
PMCW1_8	X	000005	1	4077	
PMCW1	U	000004	1	4109	
PMCWCHP0	X	000010	1	4098	
PMCWCHP1	X	000011	1	4099	
PMCWCHP2	X	000012	1	4100	
PMCWCHP3	X	000013	1	4101	
PMCWCHP4	X	000014	1	4102	
PMCWCHP5	X	000015	1	4103	
PMCWCHP6	X	000016	1	4104	
PMCWCHP7	X	000017	1	4105	
PMCWNUM	H	000006	2	4089	
PMCWE	U	000080	1	4078	
PMCWEXC	X	00001B	1	4108	
PMCWIP	F	000000	4	4073	
PMCWISCM	U	000038	1	4075	
PMCWLM	U	000060	1	4079	
PMCWLMG	U	000020	1	4080	
PMCWMLL	U	000040	1	4081	
PMCWLP	X	000008	1	4091	
PMCWLPUM	X	00000A	1	4093	
PMCWM	U	000004	1	4085	
PMCWMBI	H	00000C	2	4095	
PMCWMM	U	000018	1	4082	
PMCWMMC	U	000008	1	4084	
PMCWME	U	000010	1	4083	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
SVCII LC	X	000089	1	3903	
SVCII LCM	U	00000C	1	3904	
SVCNPSW	F	000060	8	3888	
SVCOPSW	F	000020	8	3860	3867
TBYTE	X	000001	1	3704	3604
TEST01	F	00022C	4	3574	3556
TESTADDR	U	0021FE	1	3695	3835
TESTNUM	X	0021FE	1	3837	3562 3588
TIMER	F	000050	4	3884	
TNUM	X	000000	1	3703	3587
TRE01TST	J	000000	8704	3496	3499 3506 3514 3516 3835
TRE1	F	00032C	4	3732	
TRE2	F	000350	4	3739	
TRE256	F	0003BC	4	3760	
TRE4	F	000374	4	3746	
TRE8	F	000398	4	3753	
TREBC	I	0002C2	4	3645	3616
TREBTH	F	0003E0	4	3767	
TRECTL	A	00032C	4	3729	3582
TREDONE	I	0002BA	4	3641	3638
TREFAIL	I	0002B6	4	3640	3627 3633 3645
TRELOP1	F	00044C	4	3788	
TRELOP2	F	000470	4	3795	
TRELOP20	X	001B94	1	3827	3790
TRELOP21	X	001C94	1	3829	3797
TREMORE	I	000276	4	3615	3617
TRENEXT	U	000024	1	3722	3635
TREOP1	F	000404	4	3774	
TREOP2	F	000428	4	3781	
TRETEST	4	000000	36	3701	3583
TRTOP10	X	00049C	4	3809	3734 3741 3748 3755 3762 3790 3797
TRTOP111	X	001694	4	3811	3769 3783
TRTOP1F0	X	001794	4	3813	3776
TRTOP20	X	001894	1	3821	3734 3741 3748 3755 3762
TRTOP211	X	001994	1	3823	3769 3783
TRTOP2F0	X	001A94	1	3825	3776
TST1LOOP	U	000236	1	3585	3637
TTDES	F	000054	4	3885	
UA0	F	000010	8	3857	
UA1	F	00004C	4	3882	
UA2	F	0000A4	4	3927	
UA3	F	0000B4	4	3936	
UA4	X	0000B8	1	3937	
UA5	X	0000CC	8	3947	
UA6	X	0000EC	8	3953	
UA7	F	000118	8	3964	
UA8	X	000180	32	3993	
ZBRKADDR	A	000110	8	3963	
ZEMONCNT	F	00010C	4	3962	
ZEMONCTR	A	000100	8	3960	
ZEMONSIZ	F	000108	4	3961	
ZEXTNPSW	X	0001B0	16	3996	
ZEXTOPSW	X	000130	16	3988	
ZIONPSW	X	0001F0	16	4000	
ZIOOPSW	X	000170	16	3992	
ZMCKNPSW	X	0001E0	16	3999	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES	
ZMCKOPSW	X	000160	16	3991		
ZMKFAILA	F	0000F8	8	3955		
ZMONCODE	F	0000B0	8	3930		
ZPGMNPSW	X	0001D0	16	3998		
ZPGMOPSW	X	000150	16	3990		
ZPGMTRX	F	0000A8	8	3929		
ZRSTNPSW	X	0001A0	16	3995		
ZRSTOPSW	X	000120	16	3987		
ZSASDISP	U	0011C0	1	4001		
ZSVCNPSW	X	0001C0	16	3997		
ZSVCOPSW	X	000140	16	3989		
=A(OP2LEN)	A	000320	4	3686	3599	3601
=F'0'	F	000328	4	3688	3636	
=F'4'	F	000324	4	3687	3631	

DESC	SYMBOL	SIZE	POS	ADDR
------	--------	------	-----	------

Entry: 0

Image	IMAGE	8704	0000-21FF	0000-21FF
Region	CODE	8704	0000-21FF	0000-21FF
CSECT	TRE01TST	8704	0000-21FF	0000-21FF

STMT	FILE NAME
1	c:\Users\Fish\Documents\Visual Studio 2008\Projects\MyProjects\ASMA-0\TRE-01-basic\TRE-01-basic.asm
2	C:\Users\Fish\Documents\Visual Studio 2008\Projects\Hercules_Git_Harold\SATK-0\srcasm\satk.mac

** NO ERRORS FOUND **