```
ASMA Ver. 0.2.1
                     CLCE-04-performance (Test CLCLE instructions)
                                                                           22 Sep 2022 12:06:32 Page
                                                                                                  1
 LOC
                       ADDR1
                              ADDR2
                                     STMT
         OBJECT CODE
                                       2 **********************
                                       3 *
                                       4 *
                                                   CLCLE instruction tests
                                       5 *
                                       6 *
                                                NOTE: This is based on the CLCL-et-al Test and modified
                                       7 *
                                                    to ONLY test CLCLE instruction performance.
                                       8 *
                                       9 *
                                                James Wekel August 2022
                                       12 *
                                       13 *
                                           This program ONY tests performancce of the CLCLE instructions.
                                       14 *
                                       15 ***********************
                                       18 *
                                       19 *
                                           Example Hercules Testcase:
                                       20 *
                                       21 *
                                                *Testcase CLCE-04-performance (Test CLCLE instructions)
                                       22 *
                                       23 *
                                                archlvl
                                                         390
                                       24 *
                                                mainsize
                                                         3
                                       25 *
                                                         1
                                                numcpu
                                       26 *
                                                sysclear
                                       27 *
                                       28 *
                                                loadcore
                                                         "CLCLE-04-performance.core" 0x0
                                       29 *
                                       30 *
                                                ##r
                                                          21fd=ff
                                                                 # (enable timing tests too!)
                                       31 *
                                                                  # (TIMING too test duration)
                                                          300
                                                ##runtest
                                       32 *
                                                runtest
                                                         1
                                                                # (NON-timing test duration)
                                       33 *
                                                *Done
                                       34 *
                                       35 ***********************
```

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT					
				37 3418	PRINT OFF PRINT ON				
						**********	******	****	
				3421 * 3422 *****	SATK prolog s: *********	cuff ************************	******	****	
				3424 3426+\$AL	ARCHLVL ZARCI OPSYN AL	H=NO, MNO I E=NO			
				3427+\$ALR	OPSYN ALR				
				3428+\$B 3429+\$BAS	OPSYN B OPSYN BAS				
				3430+\$BASR	OPSYN BASR				
				3431+\$BC	OPSYN BC				
				3432+\$BCTR 3433+\$BE	OPSYN BCTR OPSYN BE				
				3434+\$BH	OPSYN BH				
				3435+\$BL 3436+\$BM	OPSYN BL OPSYN BM				
				3437+\$BNE	OPSYN BNE				
				3438+\$BNH 3439+\$BNL	OPSYN BNH OPSYN BNL				
				3440+\$BNM	OPSYN BNM				
				3441+\$BNO	OPSYN BNO				
				3442+\$BNP 3443+\$BNZ	OPSYN BNP OPSYN BNZ				
				3444+\$B0	OPSYN BO				
				3445+\$BP 3446+\$BXLE	OPSYN BP OPSYN BXLE				
				3447+\$BZ	OPSYN BZ				
				3448+\$CH 3449+\$L	OPSYN CH OPSYN L				
				3450+\$LH	OPSYN LH				
				3451+\$LM 3452+\$LPSW	OPSYN LDCW				
				3452+\$LP3W	OPSYN LPSW OPSYN LR				
				3454+\$LTR	OPSYN LTR				
				3455+\$NR 3456+\$SL	OPSYN NR OPSYN SL				
				3457+\$SLR	OPSYN SLR				
				3458+\$SR 3459+\$ST	OPSYN SR OPSYN ST				
				3460+\$STM	OPSYN STM				
				3461+\$X 3462+\$AHI	OPSYN X OPSYN AHI				
				3463+\$B	OPSYN J				
				3464+\$BC	OPSYN BRC				
				3465+\$BE 3466+\$BH	OPSYN JE OPSYN JH				
				3467+\$BL	OPSYN JL				
				3468+\$BM 3469+\$BNE	OPSYN JM OPSYN JNE				
				2.02.45112	3.3 3				

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
				3470+\$BNH	OPSYN JNH		
				3471+\$BNL	OPSYN JNL		
				3472+\$BNM	OPSYN JNM OPSYN JNO		
				3474+\$BNP	OPSYN JNP		
				3475+\$BNZ	OPSYN JNZ		
				3476+\$B0 3477+\$BP	OPSYN JD		
				3477+3BF 3478+\$BXLE	OPSYN JXLE		
				3479+\$BZ	OPSYN JZ		
				3480+\$CHI	OPSYN CHI		

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
				3482 ******		******	**************************************
				3483 *			SECT in the CODE region
				3484 * 3485 ******	WILN (the location coun *********	**************************************
		00000000	00003000	3487 CLCLE04 3488+CLCLE04		AD REGION=CODE	
00000000	000A0000 00000008	0000000	00003000	3490+	PSW	0,CODE 0,0,2,0,X'008'	64-bit Restart ISR Trap New PSW
00000008	OUCAUCUU COCOUCUU	0000008	00000058	3491+		CLCLE04+X'058'	04 DIE RESEATE ISK Trap New TSW
	000A0000 00000018	0000000	0000000	3493+	PSW	0,0,2,0,X'018'	64-bit External ISR Trap New PSW
	000A0000 00000020			3494+		0,0,2,0,X'020'	64-bit Supervisor Call ISR Trap New PSW
	000A0000 00000028			3495+		0,0,2,0,X'028'	64-bit Program ISR Trap New PSW
00000070	000A0000 00000030			3496+	PSW	0,0,2,0,X'030'	64-bit Machine Check Trap New PSW
00000078	000A0000 00000038			3497+	PSW	0,0,2,0,X'038'	64-bit Input/Output Trap New PSW
00000080		00000080	00000200	3498+	ORG	CLCLE04+512	
				3500 ******* 3501 *			***********
				2502 ******		e IPL (restart) P ********	>W ************
				3302			
				3504	ASAIPI	_ IA=BEGIN	
		00000000	00003000	3505+CLCLE04			
00000200		00000200	00000000	3506+		CLCLE04	
00000000	00080000 00000200			3507+	PSW	0,0,0,0,BEGIN,24	
00000008		00000008 00000000		3508+ 3509+CLCLE04		CLCLE04+512	Reset CSECT to end of assigned storage area

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LOC	OBJECT CODE	ADDR1 ADDR	2 STMT				
			3512	* ****** * Archit * Addres * Regist	****** tecture	The actual "CLC ********** e Mode: 390 Mode: 31-bit	**************************************
			3519 3520 3521 3522 3523	* R0 * R1 * R2 * R3 * R4	Ì, Fi I(irst base registe OCB pointer for E O work register u	/ ENADEV and RAWIO macros er ENADEV and RAWIO macros used by ENADEV and RAWIO
			3524 3525 3526 3527 3528	* R8 * R9 * R10-I * R14	ÒF Se R13 (v Si	work) RB pointer econd base regist work) ubroutine call	
			3529 3530	*		econdary Subrouti	
			3531	*****	*****	*******	**********
00000200 00000200 00000200 00000200 00000200		0000000 00000200 00001200 0000000 0000000	3533 3534 3535 3536 3537		USING USING USING USING USING	BEGIN+4096,R9 IOCB,R3	Low core addressability FIRST Base Register SECOND Base Register SATK Device I/O Control Block ESA/390 Operation Request Block
00000200 00000202 00000204 00000206	0520 0620 0620 5020 203C	00000	3540 3541			R2,0	Initalize FIRST base register Initalize FIRST base register Initalize FIRST base register
0000020A 0000020E			300 3544 300 3545		LA LA	R9,2048(,R2) R9,2048(,R9)	Initalize SECOND base register Initalize SECOND base register
00000212	45E0 2A20	00000	20 3547 3548		BAL	R14,INIT	Initalize Program
00000216	45E0 2044	00000	3549 3550	** *	Run th	ne test R14,TEST91	Time CLCLE instruction (speed test)

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
				3555 *	Test	t for normal or u	**************************************
0000021A	95FF 9FFD		000021FD	3558	CLI	TIMEOPT,X'FF'	Normal (timing) run?
0000021E	4770 2A32		00000C32	3559	BNE	ЕОЈ	Not timing run; just go end normally
00000222	9595 9FFE		000021FE	3561	CLI	TESTNUM,X'95'	Did we end on expected test?
00000226	4770 2A60		00000C60	3562	BNE	FAILTEST	No?! Then FAIL the test!
0000022A	9500 9FFF		000021FF	3564	CLI	SUBTEST,X'00'	Did we end on expected SUB-test?
0000022E	4770 2A60		00000C60	3565	BNE	FAILTEST	No?! Then FAIL the test!
00000232	47F0 2A32		00000C32	3567	В	ЕОЈ	Yes, then normal completion!
00000238	0000000			3569 SAVER1	DC	F'0'	
0000023C	00000000			3570 SAVER2		F'0'	
00000240	00000000			3571 SAVER5	DC	F'0'	

	ASMA Ver.	0.2.1		CLCE-04-pe	rformance	(Test	CLCLE ins	structi	ions)	22 Sep 2022 12:06:32 Page	7
3573 ***********************************	1.00	ORIE	ECT CODE	ADDD1	ADDP2	СТМТ					
3574 TEST91 Time CLLLE instruction (speed test) 3575 3575 3575 3575 3575 3575 3575 3575 3575 3575 3575 3575 3575 3575 3576 3578 35	LUC	OBJE	LCT CODE	ADDRI	ADDRZ	31111					
00000214 91FF 9FFD						3573	*****	*****	*******	************	
000002144 91FF 9FFD						3574	*	TEST91	L T	Time CLCLE instruction (speed test)	
00000248 078E 00000000 3580						3575	*****	*****	*******	<*************************************	
00000248 078E 00000000 3580	00000244	91FF 9F	FD		000021FD	3577	TEST91	тм	TIMEOPT.X'FF' I	Is timing tests option enabled?	
B0000244 150 2000											
										, , , , , , , , , , , , , , , , , , ,	
	0000024A	4150 20	200		00000E00	3580					
0000024E 5050 2040 00000240 3583 TST91LOP EQU * 3585 SAVERS save current pref table base 00000252 4360 5000 00000256 4260 9FFE 000021FE 3587 ST R5, SAVERS SAVERS SAVE current pref table base 3585 * T R5, SAVERS SAVERS SAVE CURRENT PROFILE SAVE CURRENT	0000024E			00000000				USING	CLETEST,R5	What each table entry looks like	
00000252 4360 5000	00000045			0000024E			TST91LOP				
00000252 4360 5000 00000000 3586 IC R6,TNUM Set test number 00000256 24260 9FFF 000021FF 0000021FF 3587 STC R6,TSUBNUM Set sub test number 00000256 24260 9FFF 000021FF 3589 STC R6,SUBTEST STC R6,	0000024E	5050 26	040		00000240		4	SI	R5,SAVER5	save current pret table base	
00000256 4260 9FFF 000021FF 3587 STC R6, TESTNUM 00000256 4260 9FFF 000021FF 3589 STC R6, SUBTEST Set sub test number 00000256 4260 9FFF 000021FF 3589 STC R6, SUBTEST Set sub test number 00000256 4260 9FFF 000021FF 3589 STC R6, SUBTEST Set sub test number 00000256 S800 5014 00000014 3595 L R10, OPILMERE Where to move operand-1 data to 00000266 5880 5008 00000008 3596 L R11, OPILEN operand-1 length 00000265 S800 5008 00000004 3597 L R6, OPIDATA Where opl data is right now 00000265 S870 5008 00000006 S870 5008 0000000 S898 L R7, OPILEN How much of it there is 00000272 GEAG 3599 MCC R10, R6 S000 S870 5010 00000013 3601 L R13, OPILEN How much of it there is 00000272 S870 5010 00000013 3602 L R13, OPILEN How much of it there is 00000272 S870 5010 00000013 3602 L R13, OPILEN How much of it there is 000000276 S870 5010 00000013 3602 L R13, OPILEN How much of it there is 000000276 S870 5010 00000013 3602 L R13, OPILEN How much of it there is 000000280 S870 5010 00000001 3603 L R6, OPIDATA Where op 2 data is right now 000000280 S870 5010 00000001 3603 L R6, OPIDATA Where op 2 data is right now 000000280 S870 5010 00000001 3603 L R6, OPIDATA Where op 2 data is right now 000000280 S870 5010 00000001 3603 L R6, OPIDATA Where op 2 data is right now 000000280 S870 5010 00000001 3603 L R6, OPIDATA Where op 2 data is right now 000000280 S870 5010 00000001 3603 L R6, OPIDATA Where op 2 data is right now 00000000000000000000000000000000000	00000252	4260 E	200		0000000		•	TC	D.C. TALLIM	Cat tast numban	
00000254 4260 9FFF 0000011 3588 IC R6, SUBNUM Set sub test number 00000254 4260 9FFF 000021FF 3599 STC R6, SUBTEST S										set test number	
										Set sub test number	
3591 3592 ** First, make sure we start clean! 3593 ** Initialize operand data (move data to testing address) 3593 ** Initialize operand data (move data to testing address) 3594 ** Signature Sign										Set Sub test number	
3592 ** First, make sure we start clean! 3593 ** First, make sure we start clean! 3593 ** Sintialize operand data (move data to testing address) 3593 ** Sintialize operand data (move data to testing address) 3593 ** Sintialize operand data (move data to testing address) 3593 ** Sintialize operand	00000232	4200 51			00002111	3303		310	NO,3001231		
3592 ** First, make sure we start clean! 3593 ** First, make sure we start clean! 3593 ** Sintialize operand data (move data to testing address) 3593 ** Sintialize operand data (move data to testing address) 3593 ** Sintialize operand data (move data to testing address) 3593 ** Sintialize operand						3591					
3593 ** 3594 3694 3696							**	First,	, make sure we star	rt clean!	
00000262 58A0 5014 00000014 3595 L R10,OPINHERE Where to move operand-1 data to 00000026 58B0 5008 00000008 3596 L R11,OPILEN operand-1 length 0000026 58B0 5008 00000008 3597 L R6,OPIDATA Where op1 data is right now 0000026 58F0 5008 0000000 3599 MVCL R10,R6 3500 *** 00000274 0EA6 3500 MVCL R10,R6 3500 *** 00000275 58C0 501C 00000010 3601 L R12,OP2WHERE Where to move operand-2 data to 00000278 58D0 5010 00000000 3602 L R13,OP2LEN How much of it there is 00000278 58D0 5010 00000000 3602 L R13,OP2LEN How much of it there is 000000280 58F0 5010 00000000 3604 L R7,OP2LEN How much of it there is 000000280 58F0 5010 0000000 3604 L R7,OP2LEN How much of it there is 000000280 58F0 5010 0000000 3604 L R7,OP2LEN How much of it there is 000000280 58F0 5010 00000000 3604 L R7,OP2LEN How much of it there is 000000280 58F0 5010 00000000 3604 L R7,OP2LEN How much of it there is 000000280 58F0 5010 00000000 3604 L R7,OP2LEN How much of it there is 00000000000000000000000000000000000											
00000266 5880 5008 0000008 3596 L R11,0P1LEN operand-1 length 00000026 5860 5800 4 00000004 3597 L R5,0P1DATA Where op1 data is right now 00000272 0EA6							*				
0000026A S860 5004 0000004 3597	00000262							L			
0000026E S870 5008 000000083 3559 MVCL R10,R6 How much of it there is 00000274 58C0 501C 00000010 3601 L R12,OP2WHERE Where to move operand-2 data to 00000276 58C0 5010 00000010 3602 L R13,OP2LEN How much of it there is 00000276 58C0 500C 00000000 3603 L R6,OP2DATA Where op2 data is right now 00000284 0EC6 3605 MVCL R12,R6 How much of it there is 00000286 5870 5010 00000010 3604 L R7,OP2LEN How much of it there is 00000286 5870 5010 000000000 3604 L R7,OP2LEN How much of it there is 00000286 5870 2868 00000000 3609 Next, time the overhead 00000280 5870 000000000 3611 STCK BEGCLOCK 00000280 98AD 5014 00000000000000 3614 LM								L			
00000274								L			
3600 * 00000274 58C0 501C 000001C 3601 L R12,OP2WHERE Where to move operand-2 data to 00000278 58D0 5010 00000010 3602 L R13,OP2LEN How much of it there is 0000027C 5860 500C 0000000C 3603 L R6,OP2DATA Where op2 data is right now 00000284 0EC6 3605 MVCL R12,R6 00000284 0EC6 8605 MVCL R12,R6 00000286 5870 2B68 00000068 3610 L R7,NUMLOOPS 00000287 0EEE 0 00000070 3611 STCK BEGCLOCK 00000288 0EEE 0 00000070 3611 STCK BEGCLOCK 00000289 0EEE 0 00000014 3614 LM R10,R13,OPSWHERE 00000290 98AD 5014 0000014 3614 LM R10,R13,OPSWHERE 00000290 98AD 5014 0000014 3616 LM R10,R13,OPSWHERE 00000290 4710 2080 00000280 3617 BC B'0001',*+4 include not finished 00000290 4710 2080 00000280 3618			908		00000008			L		How much of it there is	
00000274 58C0 501C 0000001C 3601 L R12,0P2WHERE Where to move operand-2 data to 00000278 58D0 5010 00000010 3602 L R13,0P2LEN How much of it there is 00000280 5870 5010 00000010 3604 L R7,0P2LEN How much of it there is 00000284 0EC6 3605 MVCL R12,R6 00000284 0EC6 3609 * MVCL R12,R6 00000284 0EC6 3609 * Next, time the overhead 00000286 5870 2B68 0000058 3611 STCK BEGCLOCK 00000280 0EC6 3611 STCK BEGCLOCK BALR R6,0 00000280 0EC6 3612 BALR R6,0 00000280 0EC6 3613 L R7,NUMLOOPS 00000280 0EC6 3611 STCK BEGCLOCK 00000280 0EC6 3613 L R12,R6 00000290 98AD 5014 0000014 3614 LM R10,R13,0PSWHERE include not finished </td <td>00000272</td> <td>0EA6</td> <td></td> <td></td> <td></td> <td></td> <td>*</td> <td>MVCL</td> <td>R10, R6</td> <td></td> <td></td>	00000272	0EA6					*	MVCL	R10, R6		
00000278 58D0 5010 00000000 3602 L R13,0P2LEN How much of it there is 00000280 5870 5010 00000000 3603 L R7,0P2LEN How much of it there is 00000284 0EC6 00000000 3603 L R7,0P2LEN How much of it there is 00000284 NCL R7,0P2LEN How much of it there is 00000284 NCL R7,0P2LEN How much of it there is 00000284 NCL R7,0P2LEN How much of it there is 00000284 NCL R7,0P2LEN How much of it there is 00000284 NCL R7,0P2LEN How much of it there is 00000284 NCL R7,NP2LEN How much of it there is 00000284 NCL R7,NP2LEN How much of it there is 00000284 NCL R7,NP2LEN How much of it there is 00000284 NCL R7,NP2LEN How much of it there is 00000284 NCL R7,NP2LEN How much of it there is 00000284 NCL R7,NP2LEN How much of it there is 00000284 NCL R7,NP2LEN How much of it there is 00000284 NCL R7,NP2LEN How much of it there is 00000284 NCL R7,NP2LEN How much of it there is 00000284 NCL R7,NP2LEN How much of it there is 00000284 NCL R7,NP2LEN How much of it there is 00000088** Next time the overhead STCK BEGCLOCK BALR R6,0 BALR R6,0 BALR R6,0 BYOND SHERE 0000014 S614 NCL R12,R6 BYOND STCK BEGCLOCK BALR R6,0 BALR R6,0 BYOND SHERE 0000014 NCL R12,R6 NEXT TIME THE OVERHEAL INCLUDENCE HOW MUCH OF IT IS NOW MICH OF IT IS NOW MICH OF IT IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW MICH OF IT IS NOW MICH OF IT IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW MICH OF IT IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW MICH OF IT IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF IT THE IS NOW NCL R12,R6 NOW MICH OF	00000274	5800 50	210		00000010			1	D12 OD2WHEDE	Whene to move openand 2 data to	
00000284 0EC6 0000010 3604 L R6, OP2DATA Where op2 data is right now 00000284 0EC6 3605 MVCL R12, R6 00000284 0EC6 8606 3607 * 3608 ** Next, time the overhead 3608 ** Next, time the overhead 3609 * 00000286 5870 2B68 0000007 3611 STCK BEGCLOCK BALR R6, 0 00000286 0560 0000007 3612 STCK BEGCLOCK BALR R6, 0 00000290 98AD 5014 0000014 3614 LM R10,R13,OPSWHERE 00000294 4710 2098 0000024 0000014 3616 LM R10,R13,OPSWHERE 00000298 98AD 5014 0000014 3616 LM R10,R13,OPSWHERE 00000294 4710 2000 0000014 3616 LM R10,R13,OPSWHERE 00000294 4710 2000 0000014 3616 LM R10,R13,OPSWHERE 00000294 4710 2000 0000014 3616 LM R10,R13,OPSWHERE 00000296 4710 2000 0000014 3616 LM R10,R13,OPSWHERE 0000014 3618 *								L			
00000284 0EC6								L			
00000284 0EC6 3605 3606 3607 * 3608 ** Next, time the overhead 00000286 5870 2B68 00000D70 3611 5TCK BEGCLOCK 00000288 0560 80000D70 3612 5TCK BEGCLOCK 00000290 98AD 5014 0000014 3614 LM R10,R13,OPSWHERE 00000294 4710 2098 00000298 3615 BC B'0001',*+4 include not finished 00000296 98AD 5014 00000014 3616 LM R10,R13,OPSWHERE 00000290 4710 20AO 0000014 3616 LM R10,R13,OPSWHERE 00000290 98AD 5014 00000014 3617 BC B'0001',*+4 include not finished 00000290 98AD 5014 00000014 3617 BC B'0001',*+4 include not finished 00000290 98AD 5014 00000014 3818 LM R10,R13,OPSWHERE 000005AC 4710 23BO 000005BO 3819 BC B'0001',*+4 include not finished								ī			
3606			J 10		00000010			MVCL		now mach of it there is	
3607 * 3608 ** 3609 * 00000286 5870 2B68 00000D68 3610 L R7,NUMLOOPS 0000028A B205 2B70 00000D70 3611 STCK BEGCLOCK 0000028E 0560 3612 BALR R6,0 00000290 98AD 5014 00000014 3614 LM R10,R13,OPSWHERE 00000294 4710 2098 00000298 3615 BC B'0001',*+4 include not finished 00000298 98AD 5014 00000014 3616 LM R10,R13,OPSWHERE 0000029C 4710 20AO 000002AO 3617 BC B'0001',*+4 include not finished 0000029C 4710 20AO 000002AO 3617 BC B'0001',*+4 include not finished 0000029C 4710 20AO 000002AO 3617 BC B'0001',*+4 include not finished 000002AO 3619 PRINT ON 3816 PRINT ON 3817 * 000005AS 98AD 5014 0000014 3818 LM R10,R13,OPSWHERE 000005AC 4710 23BO 000005BO 3819 BC B'0001',*+4 include not finished		0_00							,		
3609 8							*				
00000286 5870 2B68 00000D68 3610 L R7,NUMLOOPS 0000028E 0560 00000D70 3611 STCK BEGCLOCK 00000290 98AD 5014 00000014 3614 LM R10,R13,OPSWHERE 00000294 4710 2098 00000014 3616 LM R10,R13,OPSWHERE 00000290 98AD 5014 00000014 3616 LM R10,R13,OPSWHERE 00000290 4710 20A0 0000014 3616 LM R10,R13,OPSWHERE 00000290 4710 20A0 000002A0 3617 BC B'0001',*+4 include not finished 000002A0 3618 *ETC 3619 PRINT OFF 3816 PRINT ON 3817 * 000005A8 98AD 5014 0000014 3818 LM R10,R13,OPSWHERE 000005AC 4710 23B0 000005B0 3819 BC B'0001',*+4 include not finished								Next,	time the overhead.	••	
0000028A B205 2B70							*				
0000028E 0560 3612 3613 00000290 98AD 5014 0000014 3614 LM R10,R13,OPSWHERE 00000294 4710 2098 00000298 3615 BC B'0001',*+4 include not finished 00000298 98AD 5014 0000014 3616 LM R10,R13,OPSWHERE 0000029C 4710 20A0 00002A0 3617 BC B'0001',*+4 include not finished 3618 *ETC								L			
3613 00000290 98AD 5014 0000014 3614 LM R10,R13,OPSWHERE 00000294 4710 2098 00000298 3615 BC B'0001',*+4 include not finished 00000298 98AD 5014 0000014 3616 LM R10,R13,OPSWHERE 0000029C 4710 20AO 000002AO 3617 BC B'0001',*+4 include not finished 3618 *ETC 3619 PRINT OFF 3816 PRINT ON 3817 * 000005A8 98AD 5014 0000014 3818 LM R10,R13,OPSWHERE 000005AC 4710 23BO 000005BO 3819 BC B'0001',*+4 include not finished			3/0		00000D70						
00000290 98AD 5014 00000014 3614 LM R10,R13,OPSWHERE 00000294 4710 2098 00000298 3615 BC B'0001',*+4 include not finished 00000298 98AD 5014 00000014 3616 LM R10,R13,OPSWHERE 0000029C 4710 20AO 000002AO 3617 BC B'0001',*+4 include not finished	0000028E	0560						RALK	К 0,0		
00000294 4710 2098 00000298 3615 BC B'0001',*+4 include not finished 00000298 98AD 5014 0000014 3616 LM R10,R13,OPSWHERE 0000029C 4710 20A0 000002AO 3617 BC B'0001',*+4 include not finishedETC	00000200	9840 50	21/		00000011			I M	R10 R13 ODCIJUEDE		
00000298 98AD 5014 0000014 3616 LM R10,R13,OPSWHERE 0000029C 4710 20A0 000002A0 3617 BC B'0001',*+4 include not finished								BC	R'0001' *+4	include not finished	
0000029C 4710 20A0 000002A0 3617 BC B'0001',*+4 include not finished 3618 *ETC 3619 PRINT OFF 3816 PRINT ON 3817 * 000005A8 98AD 5014 0000014 3818 LM R10,R13,OPSWHERE 000005AC 4710 23B0 000005B0 3819 BC B'0001',*+4 include not finished									R10.R13.OPSWHERE	THETAGE HOE ITHISHED	
3618 *ETC 3619 PRINT OFF 3816 PRINT ON 3817 * 000005A8 98AD 5014 0000014 3818 LM R10,R13,OPSWHERE 000005AC 4710 23B0 000005B0 3819 BC B'0001',*+4 include not finished									B'0001'.*+4	include not finished	
3619 PRINT OFF 3816 PRINT ON 3817 * 000005A8 98AD 5014 0000014 3818 LM R10,R13,OPSWHERE 000005AC 4710 23B0 000005B0 3819 BC B'0001',*+4 include not finished					- - -		*		ETC		
3817 * 000005A8						3619		PRINT	OFF		
000005A8 98AD 5014 00000014 3818 LM R10,R13,OPSWHERE 000005AC 4710 23B0 000005B0 3819 BC B'0001',*+4 include not finished								PRINT	ON		
000005AC 4710 23B0							*				
	000005A8										
0000014 3820 LM R10,R13,OPSWHERE										include not finished	
	00000280	98AD 56	014		00000014	3820		LM	KI0,KI3,UPSWHERE		

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
000005B4	4710 23B8		000005B8	3821 3822	ВС	B'0001',*+4	include not finished	
000005B8 000005BA 000005BE 000005C2	0676 B205 2B78 45F0 2994 D207 2B88 2B80	00000D88	00000D78 00000B94 00000D80	3823 3824 3825 3826 3827 *		R7,R6 ENDCLOCK R15,CALCDUR OVERHEAD,DURATION		
				3828 * 3829 *		o the actual timing	run	
000005C8 000005CC	5870 2B68 B205 2B70		00000D68 00000D70	3830 3831	L STCK	R7,NUMLOOPS BEGCLOCK		
000005D0 000005D2 000005D6	0560 98AD 5014 A9AC 0000		00000014 00000000	3832 3833 3834	BALR LM CLCLE	R6,0 R10,R13,OPSWHERE R10,R12,0		
000005DA 000005DE 000005E2	4710 23D6 98AD 5014 A9AC 0000		000005D6 00000014	3835 3836 3837	BC LM	B'0001',*-4 R10,R13,OPSWHERE	not finished?	
000005E6	4710 23E2		00000000 000005E2	3838 3839 *	BC	R10,R12,0 B'0001',*-4 ETC	not finished?	
000005EA	98AD 5014		00000014	3840 * 3841 * 3842		OFF R10,R13,OPSWHERE	96 LM; CLCLE; BC instruction sets	
000003EA 000005EE 000005F2	A9AC 0000 4710 23EE		00000014 00000000 000005EE	3843 3844		R10,R12,0 B'0001',*-4		
000005F6 000005FA 000005FE	98AD 5014 A9AC 0000 4710 23FA		00000014 00000000 000005FA	3845 3846 3847	LM CLCLE BC	R10,R13,OPSWHERE R10,R12,0 B'0001',*-4		
000003FE 00000602 00000606	98AD 5014 A9AC 0000		000003FA 000000014 000000000	3848 3849	LM	R10,R13,OPSWHERE R10,R12,0		
0000060A 0000060E 00000612	4710 2406 98AD 5014 A9AC 0000		00000606 00000014 00000000	3850 3851 3852	BC LM CLCLE	B'0001',*-4 R10,R13,OPSWHERE R10,R12,0		
00000616 0000061A	4710 2412 98AD 5014		00000612 00000014	3853 3854	BC LM	B'0001',*-4 R10,R13,OPSWHERE		
0000061E 00000622 00000626	A9AC 0000 4710 241E 98AD 5014		00000000 0000061E 00000014	3855 3856 3857	BC LM	R10,R12,0 B'0001',*-4 R10,R13,OPSWHERE		
0000062A 0000062E	A9AC 0000 4710 242A		00000000 0000062A	3858 3859	CLCLE BC	R10,R12,0 B'0001',*-4		
00000632 00000636 0000063A	98AD 5014 A9AC 0000 4710 2436		00000014 00000000 00000636	3860 3861 3862	LM CLCLE BC	R10,R13,OPSWHERE R10,R12,0 B'0001',*-4		
0000063E 00000642	98AD 5014 A9AC 0000		00000014 00000000	3863 3864	LM CLCLE	R10,R13,OPSWHERE R10,R12,0		
00000646 0000064A 0000064E	4710 2442 98AD 5014 A9AC 0000		00000642 00000014 00000000	3865 3866 3867	BC LM CLCLE	B'0001',*-4 R10,R13,OPSWHERE R10,R12,0		
00000652 00000656	4710 244E 98AD 5014		0000064E 00000014	3868 3869	BC LM	B'0001',*-4 R10,R13,OPSWHERE		
0000065A 0000065E 00000662	A9AC 0000 4710 245A 98AD 5014		00000000 0000065A 00000014	3870 3871 3872	BC LM	R10,R12,0 B'0001',*-4 R10,R13,OPSWHERE		
						· •		

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LOC	OBJECT CODE	ADDR1 ADDR2	STMT				
00000736	4710 2532	00000732					
0000073A	98AD 5014	00000014					
0000073E	A9AC 0000	0000000					
00000742	4710 253E	00000731		•			
00000746	98AD 5014	00000014					
0000074A	A9AC 0000	0000000					
0000074E 00000752	4710 254A 98AD 5014	0000074 <i>i</i> 00000014					
00000756	A9AC 0000	00000012					
0000075A	4710 2556	00000756					
0000075E	98AD 5014	00000014					
00000752	A9AC 0000	0000000					
00000766	4710 2562	00000762					
0000076A	98AD 5014	00000014					
0000076E	A9AC 0000	0000000					
00000772	4710 256E	00000761					
00000776	98AD 5014	00000014	3941	LM R10,R13,OPSWHERE			
0000077A	A9AC 0000	0000000					
0000077E	4710 257A	0000077		BC B'0001',*-4			
00000782	98AD 5014	00000014					
00000786	A9AC 0000	0000000					
0000078A	4710 2586	00000786		•			
0000078E	98AD 5014	00000014					
00000792	A9AC 0000	0000000					
00000796	4710 2592	00000792					
0000079A 0000079E	98AD 5014 A9AC 0000	00000014 00000000					
0000073E	4710 259E	00000791					
000007A2	98AD 5014	00000014					
000007A0	A9AC 0000	0000000					
000007AE	4710 25AA	000007A					
000007B2	98AD 5014	00000014					
000007B6	A9AC 0000	0000000					
000007BA	4710 25B6	000007B6	3958	BC B'0001',*-4			
000007BE	98AD 5014	00000014	3959				
000007C2	A9AC 0000	0000000					
000007C6	4710 25C2	00000702		•			
000007CA	98AD 5014	00000014					
000007CE	A9AC 0000	0000000					
000007D2	4710 25CE	000007CI					
000007D6	98AD 5014	00000014					
000007DA 000007DE	A9AC 0000 4710 25DA	00000000 000007DA					
000007DE	98AD 5014	0000014					
000007E2	A9AC 0000	0000001					
000007E0	4710 25E6	000007E					
000007EE	98AD 5014	00000014					
000007F2	A9AC 0000	0000000					
000007F6	4710 25F2	000007F2					
000007FA	98AD 5014	00000014					
000007FE	A9AC 0000	0000000					
00000802	4710 25FE	000007FI	3976	BC B'0001',*-4			

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LOC	OBJECT CODE	ADDR1 ADDR2	STMT				
00000806	98AD 5014	00000014		LM R10,R13,OPSWHERE			
0000080A	A9AC 0000	0000000		CLCLE R10,R12,0			
0000080E	4710 260A	0000080A		BC B'0001',*-4			
00000812	98AD 5014	00000014		LM R10,R13,OPSWHERE			
00000816	A9AC 0000	0000000		CLCLE R10,R12,0			
0000081A	4710 2616	00000816		BC B'0001',*-4			
0000081E	98AD 5014	00000014		LM R10,R13,OPSWHERE			
00000822	A9AC 0000	0000000		CLCLE R10,R12,0			
00000826	4710 2622	00000822		BC B'0001',*-4			
0000082A	98AD 5014	00000014		LM R10,R13,OPSWHERE			
0000082E	A9AC 0000	0000000		CLCLE R10,R12,0			
00000832	4710 262E	0000082E		BC B'0001',*-4			
00000836	98AD 5014	00000014		LM R10,R13,OPSWHERE			
0000083A	A9AC 0000	0000000		CLCLE R10,R12,0			
0000083E	4710 263A	0000083A		BC B'0001',*-4			
00000842	98AD 5014	00000014		LM R10,R13,OPSWHERE			
00000846	A9AC 0000	0000000		CLCLE R10,R12,0			
0000084A	4710 2646	00000846		BC B'0001',*-4			
0000084E	98AD 5014	00000014		LM R10,R13,OPSWHERE			
00000852	A9AC 0000	0000000		CLCLE R10,R12,0			
00000856	4710 2652	00000852		BC B'0001',*-4			
0000085A	98AD 5014	00000014		LM R10,R13,OPSWHERE			
0000085E	A9AC 0000	0000000		CLCLE R10,R12,0			
00000862	4710 265E	0000085E		BC B'0001',*-4			
00000866	98AD 5014	00000014		LM R10,R13,OPSWHERE			
0000086A	A9AC 0000	0000000		CLCLE R10,R12,0			
0000086E	4710 266A	0000086A		BC B'0001',*-4			
00000872	98AD 5014	00000014		LM R10,R13,OPSWHERE			
00000876	A9AC 0000	0000000		CLCLE R10,R12,0			
0000087A	4710 2676	00000876		BC B'0001',*-4			
0000087E	98AD 5014	00000014		LM R10,R13,OPSWHERE			
00000882	A9AC 0000	0000000		CLCLE R10, R12, 0			
00000886	4710 2682	00000882		BC B'0001',*-4			
0000088A	98AD 5014	00000014		LM R10,R13,OPSWHERE			
	A9AC 0000	0000000		CLCLE R10,R12,0			
00000892		0000088E 00000014		BC B'0001',*-4			
00000896 0000089A		00000014		LM R10,R13,OPSWHERE			
0000089E		0000089A		CLCLE R10,R12,0 BC B'0001',*-4			
0000089E	98AD 5014	00000014		BC B'0001',*-4 LM R10,R13,OPSWHERE			
000008A2		00000014		CLCLE R10,R12,0			
000008A6		0000000		BC B'0001',*-4			
000008AE		00000014		LM R10,R13,OPSWHERE			
000008AE	A9AC 0000	00000014		CLCLE R10,R12,0			
000008B2		00000882		BC B'0001',*-4			
000008BA	98AD 5014	00000014		LM R10,R13,OPSWHERE			
000008BE		00000019		CLCLE R10,R12,0			
000008E2	4710 26BE	000008BE		BC B'0001',*-4			
000008C2	98AD 5014	00000014		LM R10,R13,OPSWHERE			
000008CA	A9AC 0000	00000014		CLCLE R10,R12,0			
000008CE	4710 26CA	000008CA		BC B'0001',*-4			
000008C2	98AD 5014	00000014		LM R10,R13,OPSWHERE			
5555552	20/15 3011	0000011	.020	L. Krojnirojoi Smillie			

LOC OBJECT CODE ADDR1 ADDR2 STMT	Page	12
100 ODDECT CODE ADDITE STITE		
000008D6 A9AC 0000 00000000 4029 CLCLE R10,R12,0		
000008DA 4710 26D6 000008D6 4030 BC B'0001',*-4		
000008DE 98AD 5014 00000014 4031 LM R10,R13,OPSWHERE		
000008E2 A9AC 0000 00000000 4032 CLCLE R10,R12,0		
000008E6 4710 26E2 000008E2 4033 BC B'0001',*-4 000008EA 98AD 5014 00000014 4034 LM R10,R13,OPSWHERE		
000008EA 98AD 5014		
000008F2 4710 26EE 000008EE 4036 BC B'0001',*-4		
000008F6 98AD 5014 00000014 4037 LM R10,R13,OPSWHERE		
000008FA A9AC 0000 00000000 4038 CLCLE R10,R12,0		
000008FE 4710 26FA 000008FA 4039 BC B'0001',*-4		
00000902 98AD 5014 00000014 4040 LM R10,R13,OPSWHERE		
00000906 A9AC 0000 00000000 4041 CLCLE R10, R12, 0		
0000090A 4710 2706 00000906 4042 BC B'0001',*-4		
0000090E 98AD 5014 00000014 4043 LM R10,R13,OPSWHERE		
00000912 A9AC 0000 00000000 4044 CLCLE R10,R12,0		
00000916 4710 2712 00000912 4045 BC B'0001',*-4		
0000091A 98AD 5014 00000014 4046 LM R10,R13,OPSWHERE		
0000091E A9AC 0000 00000000 4047 CLCLE R10,R12,0		
00000922 4710 271E 0000091E 4048 BC B'0001',*-4		
00000926 98AD 5014 00000014 4049 LM R10,R13,OPSWHERE		
0000092A A9AC 0000 00000000 4050 CLCLE R10,R12,0		
0000092E 4710 272A 0000092A 4051 BC B'0001',*-4 00000932 98AD 5014 00000014 4052 LM R10,R13,OPSWHERE		
00000936 A9AC 0000 00000000 4053 CLCLE R10,R12,0		
0000093A 4710 2736 00000936 4054 BC B'0001',*-4		
0000093E 98AD 5014 00000014 4055 LM R10,R13,OPSWHERE		
00000942 A9AC 0000 00000000 4056 CLCLE R10,R12,0		
00000946 4710 2742 00000942 4057 BC B'0001',*-4		
0000094A 98AD 5014 00000014 4058 LM R10,R13,OPSWHERE		
0000094E A9AC 0000 00000000 4059 CLCLE R10,R12,0		
00000952 4710 274E 0000094E 4060 BC B'0001',*-4		
00000956 98AD 5014 00000014 4061 LM R10,R13,OPSWHERE		
0000095A A9AC 0000 00000000 4062 CLCLE R10,R12,0		
0000095E 4710 275A 0000095A 4063 BC B'0001',*-4		
00000962 98AD 5014 00000014 4064 LM R10,R13,OPSWHERE		
00000966 A9AC 0000		
0000096E 98AD 5014 00000014 4067 LM R10,R13,OPSWHERE		
00000972 A9AC 0000 00000000 4068 CLCLE R10,R12,0		
00000976 4710 2772 00000972 4069 BC B'0001',*-4		
0000097A 98AD 5014 00000014 4070 LM R10,R13,OPSWHERE		
0000097E A9AC 0000 00000000 4071 CLCLE R10,R12,0		
00000982 4710 277E 0000097E 4072 BC B'0001',*-4		
00000986 98AD 5014 00000014 4073 LM R10,R13,OPSWHERE		
0000098A A9AC 0000 00000000 4074 CLCLE R10,R12,0		
0000098E 4710 278A 0000098A 4075 BC B'0001',*-4		
00000992 98AD 5014 00000014 4076 LM R10,R13,OPSWHERE		
00000996 A9AC 0000 00000000 4077 CLCLE R10,R12,0		
0000099A 4710 2796		
0000099E 98AD 5014		
DUDUUJAZ AJAC UUUU UUUU 4000 4000 CECEE KIU, KIZ, U		

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LOC	OBJECT	CODE ADDR1	ADDR2	STMT				
		7.55.1.2						
000009A6	4710 27A2		000009A2	4081	BC B'0001',*-4			
000009AA	98AD 5014		00000014	4082	LM R10,R13,OPSWHERE			
000009AE	A9AC 0000		00000000	4083	CLCLE R10,R12,0			
	4710 27AE		000009AE	4084	BC B'0001',*-4			
000009B6	98AD 5014		00000014	4085	LM R10,R13,OPSWHERE			
	A9AC 0000		00000000	4086	CLCLE R10,R12,0			
000009BE	4710 27BA		000009BA	4087	BC B'0001',*-4			
000009C2	98AD 5014		00000014	4088	LM R10,R13,OPSWHERE			
000009C6	A9AC 0000		00000000	4089	CLCLE R10,R12,0			
000009CA	4710 27C6		000009C6	4090	BC B'0001',*-4			
000009CE	98AD 5014		00000014	4091	LM R10,R13,OPSWHERE			
000009D2	A9AC 0000		00000000	4092	CLCLE R10,R12,0			
000009D6	4710 27D2		000009D2	4093	BC B'0001',*-4			
000009DA	98AD 5014		00000014	4094	LM R10,R13,OPSWHERE			
	A9AC 0000		00000000	4095	CLCLE R10,R12,0			
000009E2	4710 27DE		000009DE	4096	BC B'0001',*-4			
000009E6	98AD 5014		00000014	4097	LM R10,R13,OPSWHERE			
000009EA	A9AC 0000		0000000	4098	CLCLE R10,R12,0			
	4710 27EA		000009EA	4099	BC B'0001',*-4			
000009F2	98AD 5014		00000014	4100	LM R10,R13,OPSWHERE			
000009F6	A9AC 0000		00000000	4101	CLCLE R10,R12,0			
000009FA	4710 27F6		000009F6	4102	BC B'0001',*-4			
000009FE	98AD 5014		00000014	4103	LM R10,R13,OPSWHERE			
00000A02	A9AC 0000		00000000	4104	CLCLE R10,R12,0			
00000A06	4710 2802		00000A02	4105	BC B'0001',*-4			
A0A0000	98AD 5014		00000014	4106	LM R10,R13,OPSWHERE			
00000A0E	A9AC 0000		00000000	4107	CLCLE R10,R12,0			
00000A12	4710 280E		00000A0E	4108	BC B'0001',*-4			
00000A16	98AD 5014		00000014	4109	LM R10,R13,OPSWHERE			
00000A1A	A9AC 0000		00000000	4110	CLCLE R10,R12,0			
00000A1E	4710 281A		00000A1A	4111	BC B'0001',*-4			
00000A22	98AD 5014		00000014	4112	LM R10,R13,OPSWHERE			
00000A26	A9AC 0000		00000000	4113	CLCLE R10,R12,0			
00000A2A	4710 2826		00000A26	4114	BC B'0001',*-4			
00000A2E	98AD 5014		00000014	4115	LM R10,R13,OPSWHERE			
00000A32	A9AC 0000		00000000	4116	CLCLE R10,R12,0			
00000A36			00000A32		BC B'0001',*-4			
	98AD 5014		00000014	4118	LM R10,R13,OPSWHERE			
	A9AC 0000		0000000	4119	CLCLE R10, R12,0			
	4710 283E		00000A3E	4120	BC B'0001',*-4			
	98AD 5014		00000014	4121	LM R10,R13,OPSWHERE			
	A9AC 0000		00000000	4122	CLCLE R10, R12,0			
	4710 284A		00000A4A	4123	BC B'0001',*-4			
	98AD 5014		00000014	4124	LM R10,R13,OPSWHERE			
	A9AC 0000		0000000	4125	CLCLE R10,R12,0			
	4710 2856		00000A56	4126	BC B'0001',*-4			
	98AD 5014		00000014	4127	LM R10,R13,OPSWHERE			
	A9AC 0000		0000000	4128	CLCLE R10,R12,0			
			00000A62	4129	BC B'0001',*-4			
	98AD 5014		00000014	4130	LM R10,R13,OPSWHERE			
	A9AC 0000		0000000	4131	CLCLE R10, R12,0			
			00000A6E		BC B'0001',*-4			
					·			

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT			

				4166 *	RPTSP	EED	Report instruction speed
				4167 ******	*****	*******	**********
000ABA	50F0 2990		00000B90	4169 RPTSPEE	ST	R15,RPTSAVE	Save return address
0000ABE	45F0 2994		00000B94	4170	BAL	R15,CALCDUR	Calculate duration
0000AC2	4150 2B88		00000D88	4171 * 4172	LA	R5,OVERHEAD	Subtract overhead
0000AC2	4160 2B80		00000D80	4173	LA	R6, DURATION	From raw timing
0000AC0	4170 2B80		00000D80	4174	LA	R7, DURATION	Yielding true instruction timing
0000ACA	45F0 29E8		00000BE8	4175	BAL	R15, SUBDWORD	Do it
OOOOACE	4370 2960		000000E0	4176 *	DAL	KI3,30BDWOKD	DO IC
0000AD2	98CD 2B80		00000D80	4177	I M	D12 D12 DUDATION	Convert to
					LM SRDL	R12,R13,DURATION	
000AD6	8CC0 000C		0000000C	4178 *	SKNL	R12,12	microseconds
0000101	4EC0 2B90		aaaaanaa		CVD	D12 TTCVCAAA	convent UTGU nant to decimal
0000ADA			00000D90	4180	CVD	R12, TICKSAAA	convert HIGH part to decimal
0000ADE	4ED0 2B98		00000D98	4181	CVD	R13,TICKSBBB	convert LOW part to decimal
0000453	E077 2040 2000	00000040	00000000	4182 *	745	TICKSTOT TICKS A A A	Calaulata
0000AE2	F877 2BA0 2B90	00000DA0	00000D90	4183	ZAP	TICKSTOT, TICKSAAA	Calculate
0000AE8	FC75 2BA0 2B5A	00000DA0	00000D5A	4184	MP	TICKSTOT, =P'429496	
0000AEE	FA77 2BA0 2B98	00000DA0	00000D98	4185	AP	TICKSTOT, TICKSBBB	microseconds
0000154	D20D 2DDD 2D54	0000000	00000554	4186 *	M) /C	DDT1 TNE . 42 /1 155 TT	FDIT
0000AF4	D20B 2BDB 2BF4	00000DDB	00000DF4	4187	MVC	PRTLINE+43(L'EDIT)	
000AFA	DE0B 2BDB 2BA3	00000DDB	00000DA3	4188	ED	PRTLINE+43(L'EDIT)	,TICKSTOT+3print line)
				4190		4,FAIL=FAILIO	Print elapsed time on console
0000B00	9200 300E		0000000E	4191+	MVI	IOCBSC,X'00'	Clear SC information
0000В04	D201 300A 3006	000000A	00000006	4191+ 4192+		IOCBSC,X'00' IOCBST,IOCBZERO	Clear SC information Clear accumulated status
	D201 300A 3006	000000A		4191+ 4192+ 4193+	MVI MVC L	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID	Clear SC information Clear accumulated status Remember the device ID with which I am work
0000B04 0000B0A	D201 300A 3006 5810 3000	000000A	00000006 00000000	4191+ 4192+ 4193+ 4194+* Initia	MVI MVC L ate Sub	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input	Clear SC information Clear accumulated status Remember the device ID with which I am work (output operation
0000B04 0000B0A 0000B0E	D201 300A 3006 5810 3000 5840 3018	000000A	00000006 00000000 00000018	4191+ 4192+ 4193+ 4194+* Initia 4195+	MVI MVC L ate Sub	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB	Clear SC information Clear accumulated status Remember the device ID with which I am work (output operation Locate the ORB for the channel subsystem
0000B04 0000B0A 0000B0E 0000B12	D201 300A 3006 5810 3000 5840 3018 B233 4000	0000000A	00000006 00000000 00000018 00000000	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+	MVI MVC L ate Sub \$L SSCH	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4)	Clear SC information Clear accumulated status Remember the device ID with which I am work (output operation Locate the ORB for the channel subsystem Initiate the I/O operation
0000B04 0000B0A 0000B0E 0000B12 0000B16	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D	000000A	00000006 00000000 00000018 00000000 00000C50	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+ 4197+	MVI MVC L ate Sub \$L SSCH \$BC	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO	Clear SC information Clear accumulated status Remember the device ID with which I am work (output operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the
0000B04 0000B0A 0000B0E 0000B12 0000B16 0000B1A	D201 300A 3006 5810 3000 5840 3018 B233 4000		00000006 00000000 00000018 00000000	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+ 4197+ 4198+	MVI MVC L ate Sub \$L SSCH \$BC \$L	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO 4,IOCBIRB	Clear SC information Clear accumulated status Remember the device ID with which I am work /output operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the Locate the IRB storage area
0000B04 0000B0A 0000B0E 0000B12 0000B16 0000B1A	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D	0000000A	00000006 00000000 00000018 00000000 00000C50	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+ 4197+	MVI MVC L ate Sub \$L SSCH \$BC \$L	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO	Clear SC information Clear accumulated status Remember the device ID with which I am work (output operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the
0000B04 0000B0A 0000B0E 0000B12 0000B16 0000B1A	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D		00000006 00000000 00000018 00000000 00000C50	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+ 4197+ 4198+ 4199+	MVI MVC L ste Sub \$L SSCH \$BC \$L USING	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO 4,IOCBIRB IRB,4	Clear SC information Clear accumulated status Remember the device ID with which I am work (output operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the Locate the IRB storage area Make it addressable
0000B04 0000B0A 0000B0E 0000B12 0000B16 0000B1A 0000B1E	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D		00000006 00000000 00000018 00000000 00000C50	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+ 4197+ 4198+ 4199+	MVI MVC L ste Sub \$L SSCH \$BC \$L USING	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO 4,IOCBIRB IRB,4	Clear SC information Clear accumulated status Remember the device ID with which I am work (output operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the Locate the IRB storage area Make it addressable
0000B04 0000B0A 0000B0E 0000B12 0000B16 0000B1A 0000B1E	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D		00000006 00000000 00000018 00000000 00000C50	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+ 4197+ 4198+ 4199+	MVI MVC L ste Sub \$L SSCH \$BC \$L USING	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO 4,IOCBIRB IRB,4 operation to prese 0H Wait for I/O t	Clear SC information Clear accumulated status Remember the device ID with which I am work (output operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the Locate the IRB storage area Make it addressable ent status via an interruption co complete
0000B04 0000B0A 0000B0E 0000B12 0000B16 0000B1A 0000B1E	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D 5840 3020	0000000	00000006 00000000 00000000 00000050 00000020	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+ 4197+ 4198+ 4199+ 4201+* Wait 1 4202+IOWT0007	MVI MVC L ste Sub \$L SSCH \$BC \$L USING	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO 4,IOCBIRB IRB,4 operation to prese 0H Wait for I/O t IOS0008(8),120(0)	Clear SC information Clear accumulated status Remember the device ID with which I am work Joutput operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the Locate the IRB storage area Make it addressable ent status via an interruption co complete Save Input/Output new PSW
0000B04 0000B0A 0000B12 0000B16 0000B1A 0000B1E 0000B1E	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D 5840 3020 D207 2940 0078	00000000 00000B40	00000006 00000000 00000000 00000050 00000020	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+ 4197+ 4198+ 4199+ 4201+* Wait 1 4202+IOWT0007 4204+ 4205+	MVI MVC L ste Sub \$L SSCH \$BC \$L USING For I/O 7 DS MVC MVC	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO 4,IOCBIRB IRB,4 operation to prese 0H Wait for I/O t IOS0008(8),120(0) 120(8,0),ION0008	Clear SC information Clear accumulated status Remember the device ID with which I am work (output operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the Locate the IRB storage area Make it addressable ent status via an interruption co complete
0000B04 0000B0A 0000B12 0000B12 0000B1A 0000B1E 0000B1E 0000B1E 0000B2A	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D 5840 3020 D207 2940 0078 D207 0078 2938 8200 2930	00000000 00000B40	00000006 00000000 00000018 00000000 00000050 00000020	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+ 4197+ 4198+ 4199+ 4201+* Wait 4 4202+IOWT0007 4204+ 4205+ 4206+	MVI MVC L ste Sub \$L SSCH \$BC \$L USING For I/O 7 DS MVC MVC \$LPSW	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO 4,IOCBIRB IRB,4 operation to prese 0H Wait for I/O t IOS0008(8),120(0) 120(8,0),ION0008 WPSW0008	Clear SC information Clear accumulated status Remember the device ID with which I am work Coutput operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the Locate the IRB storage area Make it addressable ent status via an interruption co complete Save Input/Output new PSW Establish Input/Oupput new PSW Wait for event
0000B04 0000B0A 0000B12 0000B16 0000B1A 0000B1E 0000B1E 0000B1E 0000B24 0000B2A 0000B30	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D 5840 3020 D207 2940 0078 D207 0078 2938 8200 2930 020A0000 00000000	00000000 00000B40	00000006 00000000 00000018 00000000 00000050 00000020	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+ 4197+ 4198+ 4199+ 4201+* Wait 1 4202+IOWT0007 4204+ 4205+ 4206+ 4207+WPSW0008	MVI MVC L ste Sub \$L SSCH \$BC \$L USING For I/O 7 DS MVC MVC \$LPSW B PSW	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO 4,IOCBIRB IRB,4 operation to prese 0H Wait for I/O t IOS0008(8),120(0) 120(8,0),ION0008 WPSW0008 2,0,2,0,0	Clear SC information Clear accumulated status Remember the device ID with which I am work (output operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the Locate the IRB storage area Make it addressable ent status via an interruption co complete Save Input/Output new PSW Establish Input/Oupput new PSW Wait for event Wait for event
0000B04 0000B0A 0000B12 0000B1A 0000B1A 0000B1E 0000B1E 0000B1E 0000B2A 0000B30 0000B38	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D 5840 3020 D207 2940 0078 D207 0078 2938 B200 2930 020A0000 00000000 00082000 00000B48	00000000 00000B40	00000006 00000000 00000018 00000000 00000050 00000020	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+ 4197+ 4198+ 4199+ 4201+* Wait 1 4202+IOWT0007 4204+ 4205+ 4206+ 4207+WPSW0008	MVI MVC L ste Sub \$L SSCH \$BC \$L USING For I/O 7 DS MVC MVC \$LPSW PSW	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO 4,IOCBIRB IRB,4 operation to prese 0H Wait for I/O t IOS0008(8),120(0) 120(8,0),ION0008 WPSW0008 2,0,2,0,0 0,0,32,IRST0008,	Clear SC information Clear accumulated status Remember the device ID with which I am work (output operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the Locate the IRB storage area Make it addressable ent status via an interruption co complete Save Input/Output new PSW Establish Input/Oupput new PSW Wait for event Wait for event
0000B04 0000B0A 0000B12 0000B16 0000B1A 0000B1E 0000B1E 0000B1E 0000B24 0000B2A 0000B30	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D 5840 3020 D207 2940 0078 D207 0078 2938 8200 2930 020A0000 00000000	00000000 00000B40	00000006 00000000 00000018 00000000 00000050 00000020	4191+ 4192+ 4193+ 4194+* Initial 4195+ 4196+ 4197+ 4198+ 4199+ 4201+* Wait 1 4202+IOWT0007 4204+ 4205+ 4206+ 4207+WPSW0008 4208+ION0008 4209+IOS0008	MVI MVC L ste Sub \$L SSCH \$BC \$L USING For I/O 7 DS MVC MVC \$LPSW PSW PSW DC	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO 4,IOCBIRB IRB,4 operation to prese 0H Wait for I/O t IOS0008(8),120(0) 120(8,0),ION0008 WPSW0008 2,0,2,0,0 0,0,0,32,IRST0008, XL8'00'	Clear SC information Clear accumulated status Remember the device ID with which I am work //output operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the Locate the IRB storage area Make it addressable ent status via an interruption co complete Save Input/Output new PSW Establish Input/Ouput new PSW Wait for event Wait for event 1/O New PSW: cc==2
0000B04 0000B0A 0000B12 0000B12 0000B1A 0000B1E 0000B1E 0000B1E 0000B2A 0000B30 0000B30 0000B40	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D 5840 3020 D207 2940 0078 D207 0078 2938 B200 2930 020A0000 00000000 00082000 00000B48	00000000 00000B40	00000006 00000000 00000018 00000000 00000050 00000020	4191+ 4192+ 4193+ 4194+* Initial 4195+ 4196+ 4197+ 4198+ 4199+ 4201+* Wait 1 4202+IOWT0007 4204+ 4205+ 4206+ 4207+WPSW0008 4208+ION0008 4209+IOS0008 4210+* Handle	MVI MVC L ste Sub \$L SSCH \$BC \$L USING FOR I/O 7 DS MVC MVC \$LPSW PSW PSW DC e input	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO 4,IOCBIRB IRB,4 operation to prese 0H Wait for I/O t IOS0008(8),120(0) 120(8,0),ION0008 WPSW0008 2,0,2,0,0 0,0,32,IRST0008, XL8'00' /output interruptio	Clear SC information Clear accumulated status Remember the device ID with which I am work //output operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the Locate the IRB storage area Make it addressable ent status via an interruption co complete Save Input/Output new PSW Establish Input/Ouput new PSW Wait for event Wait for event 1/O New PSW: cc==2
0000B04 0000B0A 0000B12 0000B1A 0000B1A 0000B1E 0000B1E 0000B1E 0000B2A 0000B30 0000B38	D201 300A 3006 5810 3000 5840 3018 B233 4000 A774 009D 5840 3020 D207 2940 0078 D207 0078 2938 B200 2930 020A0000 00000000 00082000 00000B48	00000000 00000B40	00000006 00000000 00000018 00000000 00000050 00000020	4191+ 4192+ 4193+ 4194+* Initia 4195+ 4196+ 4197+ 4198+ 4199+ 4201+* Wait 1 4202+IOWT0007 4204+ 4205+ 4206+ 4207+WPSW0008 4208+ION0008 4209+IOS0008 4210+* Handle 4211+IRST0008	MVI MVC L ste Sub \$L SSCH \$BC \$L USING FOR I/O 7 DS MVC MVC \$LPSW PSW PSW DC e input	IOCBSC,X'00' IOCBST,IOCBZERO 1,IOCBDID channel-based input 4,IOCBORB 0(4) B'0111',FAILIO 4,IOCBIRB IRB,4 operation to prese 0H Wait for I/O t IOS0008(8),120(0) 120(8,0),ION0008 WPSW0008 2,0,2,0,0 0,0,0,32,IRST0008, XL8'00'	Clear SC information Clear accumulated status Remember the device ID with which I am work //output operation Locate the ORB for the channel subsystem Initiate the I/O operationStart function failed, report/handle the Locate the IRB storage area Make it addressable ent status via an interruption co complete Save Input/Output new PSW Establish Input/Ouput new PSW Wait for event Wait for event 1/O New PSW: cc==2

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
				4213+* Proce	ss the	interruption	
							expected subchannel
00000B4E	5510 00B8		000000B8	4215+	CL		Is this the device for which I am waiting?
00000B52	A774 FFE6		00000B1E	4216+	\$BNE	IOWT0007	No, continue waiting for it
				4217+* Accum		nterruption informat	
	B235 4000		00000000	4218+		0(4)	Retrive interrupt information
	A744 FFE2		00000B1E	4219+	\$BC	B'0100',IOWT0007	
00000B5E	A714 0079		00000C50		\$BC	B'0001',FAILIO	CC3 (not operational), an error then
				4221+*			CCO (status was pending), accumulate the stat
	D600 300E 4003	0000000E	00000003	4222+	OC		2 Accumulate status control
	D601 300A 4008	000000A	00000008	4223+	OC.		US Accumulate device and channel status
	9104 300E		0000000E	4224+	TM	IOCBSC, SCSWSPRI	Primary subchannel status?
	A7E4 FFD6		00000B1E	4225+	\$BNO		No, wait for primary status
	D203 3010 4004	00000010	00000004	4226+	MVC	IOCBSCCW, IRBSCSW+SC	
00000B7C	D201 3016 400A	00000016	000000A	4227+	MVC		SWCNT Residual count
0000000	0106 3004		0000000			ors as specified in	
	910C 300A		000000A	4229+	TM	IOCBUS, CSWCE+CSWDE	
00000B86	A7E4 0065		00000C50	4230+		FAILIO	
				4231+* Input	/Output	operation successfu	1
00000B8A	58F0 2990		00000B90	4233	ı	R15,RPTSAVE	Restore return address
	07FF		000000000	4234	BR		Return to caller
00000B90	00000000			4236 RPTSAVE	DC	F'0'	R15 save area

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LOC	OBJECT CODE	ADDR1 ADDR2	STMT					
LUC	OBJECT CODE	ADDRI ADDRZ						
					*****	*******	***********	
			4239	*	CALCD	UR	Calculate DURATION	
			4240	*****	*****	******	***********	
00000B94	50F0 29D8	00000BD8	4242	CALCDUR	ST	R15,CALCRET	Save return address	
00000B98	9057 29DC	0000BDC		C/CD C	STM	R5,R7,CALCWORK	Save work registers	
			4244	*		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-6	
00000B9C	9867 2B70	00000D70	4245		LM	R6,R7,BEGCLOCK	Remove CPU number from clock value	
00000BA0	8C60 0006	00000006	4246		SRDL	R6,6	II	
00000BA4	8D60 0006	0000006	4247		SLDL	R6,6	II	
00000BA8	9067 2B70	00000D70	4248		STM	R6,R7,BEGCLOCK	II	
			4249	*				
00000BAC	9867 2B78	00000D78	4250		LM	R6,R7,ENDCLOCK	Remove CPU number from clock value	
00000BB0	8C60 0006	0000006	4251		SRDL	R6,6	"	
00000BB4	8D60 0006	00000006	4252		SLDL	R6,6	"	
00000BB8	9067 2B78	00000D78	4253 4254	*	STM	R6,R7,ENDCLOCK	"	
00000BBC	4150 2B70	00000D70	4255		LA	R5,BEGCLOCK	Starting time	
00000BC0	4160 2B78	00000D78	4256		LA	R6, ENDCLOCK	Ending time	
00000BC4		00000D80	4257		LA	R7, DURATION	Difference	
00000BC8	45F0 29E8	00000BE8	4258		BAL	R15, SUBDWORD	Calculate duration	
			4259	*				
00000BCC	9857 29DC	00000BDC			LM	R5,R7,CALCWORK	Restore work registers	
00000BD0	58F0 29D8	00000BD8	4261		L	R15, CALCRET	Restore return address	
00000BD4	07FF		4262		BR	R15	Return to caller	
00000BD8	0000000		4264	CALCRET	DC	F'0'	R15 save area	
00000BDC	00000000 00000000		4265	CALCWORK	DC	3F'0'	R5-R7 save area	
			4267	******	k****	*****	***********	
			4267		SUBDW		Subtract two doublewords	
			4269				·> minuend, R7> result	
			4270	******	*****	******	*************	
00000BE8	90AD 2A10	00000C10		SUBDWORD	STM	R10,R13,SUBDWSAV	Save registers	
			4273	*				
00000BEC		0000000	4274		LM	R10,R11,0(R5)	Subtrahend (value to subtract)	
00000BF0		00000000			LM	R12,R13,0(R6)	Minuend (what to subtract FROM)	
00000BF4			4276		SLR	R13,R11	Subtract LOW part	
	47B0 29FE	00000BFE	4277		BNM	*+4+4	(branch if no borrow)	
00000BFA	5FC0 2B50	00000D50			SL	R12,=F'1'	(otherwise do borrow)	
00000BFE		0000000	4279		SLR	R12,R10	Subtract HIGH part	
00000C00	90CD 7000	00000000	4280 4281	*	STM	R12,R13,0(R7)	Store results	
00000C04	98AD 2A10	00000C10	4282		LM	R10,R13,SUBDWSAV	Restore registers	
00000C08	07FF	33333620	4283		BR	R15	Return to caller	
00000C10	00000000 00000000		4285	SUBDWSAV	DC	2D'0'	R10-R13 save area	

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
				4287 4288 4289	*		nm Initialization	**************************************
00000C20				4291	INIT	DS	0H	Program Initialization
00000C20 00000C24	4130 2AD0 5880 3018		00000CD0 00000018	4293 4294		LA L	R3,IOCB_009 R8,IOCBORB	Point to IOCB Point to ORB
00000C28 00000C2C 00000C30	45F0 2A70 45F0 2A7E 07FE		00000C70 00000C7E	4296 4297 4298		BAL BAL BR	R15,IOINIT R15,ENADEV R14	Initialize the CPU for I/O operations Enable our device making ready for use Return to caller

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LOC	OBJECT CODE	ADDR1 ADDR2	STMT			

	8200 2A38 000A0000 00000000	00000C38		DWAITEND LOAD=YES DS 0H LPSW DWAT0010 PSW 0,0,2,0,X'000000'	Normal completion	
	8200 2A48 000A0000 00010001	00000C48			ENADEV failed	
	8200 2A58 000A0000 00010002	00000C58		DWAIT LOAD=YES,CODE=02 DS 0H LPSW DWAT0012 PSW 0,0,2,0,X'010002'	RAWIO failed	
	8200 2A68	00000C68	4322+FAILTEST 4323+	DS 0H LPSW DWAT0013	Abnormal termination	
00000C68	000A0000 00010BAD		4324+DWAT0013	PSW 0,0,2,0,X'010BAD'		

12:06:32 Page 20 ******* ****** **** lasses for interruptions
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is to be stored
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k for desired device numl rst subchannel
ist and device number no
ce number valid?
ubchannel
ber being sought? ubchannel
benamer
l so I/O can be done to :
d so I/O requests accepto
to the channel sub-system
evice is ready. ate failed), quit
ice railed), quit
nnel
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stem ID
stem ID
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ASMA Ver.	0.2.1	CLCE-04-pe	rformance ((Test C	CLCLE ins	structi	ions)	22 Sep 2022 12:06:32 Page 21
LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
				1270 *	******	k*****	* * * * * * * * * * * * * * * * * * *	*********
				4370 *				AWIO identifying
				4372 *		the o	device and onera	ation being performed
				4373 *	******	*****	******	**************************************
				4275 7	.000 000	TOCE	VIOLATICAL CONT	n GW
0000000	0000000				OCB_009		X'009',CCW=CONF	PGM
	00000000				OCB_009		A(0)	+0 Device Identifier (supplied by ENADEV macro)
00000CD4 00000CD6	0009 0000			4377+ 4378+		DC DC	AL2(X'009') H'0'	+4 Device address or device number +6 Must be zeros
	D3			4370+		DC	AL1(X'D3')	+8 Default detected unit errors
00000CD8	3F			4379+		DC	AL1(X'3F')	+9 Default detected unit errors
00000CD3	0000			4381+		DC	HL2'0'	+10 Accumulated unit and channel errors
	0000			4382+		DC	HL2'0'	+12 Tested unit and channel status
	00			4383+		DC	XL1'00'	+14 Accumulated subchannel status control from SC
	80			4384+		DC	XL1'80'	+15 Default unsoliticed wait condition
	00000000			4385+		DC	F'0'	+16 I/O status CCW address
	00000000			4386+		DC	F'0'	+20 residual count
0000CE8	00000D40			4387+		DC	A(IORB0016)	+24 Address where ORB is located
0000CEC	00000000			4388+		DC	A(0)	+28 reserved
0000CF0	00000D00			4389+		DC	A(IIRB0016)	+32 Address where IRB stored
	00000000			4390+		DC	A(0)	+36 reserved
	00000D00			4391+		DC	A(IIRB0016)	+40 Address where SCHIB stored
	00000000			4392+		DC	A(0)	+44 reserved
	00000000 00000	1000			IRB0016		16F'0'	Embedded shared IRB and SCHIB area
0000D40					ORB0016		0XL12	
	00000000			4396+		DC	A(0)	Word 0 - Interruption Parameter
	00			4397+		DC	AL1((0)*16+B'06	
	80			4398+		DC	BL1'10000000'	Word 1, bits 8-15
	FF			4399+		DC	AL1(255)	Word 1, bits 16-23
00000D47	00			4400+		DC DC	BL1'00000000'	Word 1, bits 24-31
0000D48	00000DA8			4401+		שכ	AL4(CONPGM)	Word 2 - CCW address

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
				4403	*****	*****	*******	**********
				4404	*	Workin	ng Storage	
				4405	****	*****	*******	***********
0000D4C				4407		LTORG	,	Literals pool
0000D4C	0000000			4408			=F'0'	
0000D50	00000001			4409			=F'1'	
10000D54 10000D5A				4410 4411			=CL6'CLCLE' =P'4294967296'	
		00000400	00000001	4413		EQU	1024	One KB
		00001000	00000001			EQU	(4*K)	Size of one page
		00010000	00000001			EQU	(64*K)	64 KB
		00100000	00000001	4416	MB	EQU	(K*K)	1 MB
		000021FE	00000001		TESTADDR	EQU	(2*PAGE+X'200'-2	
		000021FD	00000001	4419	TIMEADDR	EQU	(TESTADDR-1)	Address of timing tests option flag
		00200000	00000001		MAINSIZE		(2*MB)	Minimum required storage size
		00000020	00000001				((MAINSIZE+K64-1	
		00000002	00000001				((NUMPGTBS*4)/(1	
		00003000	00000001				(3*PAGE)	Segment Tables Origin
0000D60	00B00060	00003080	00000001		CRLREG0		(SEGTABLS+(NUMPG 0A(0),XL4'00B000	
0000D00 0000D64	00003002				CTLREG1		A(SEGTABLS+NUMSE	
							•	,
0000D68	00002710			4429	NUMLOOPS	DC	F'10000'	10,000 * 100 = 1,000,000
0000D70	BBBBBBBB BBBBBBBB			4431	BEGCLOCK	DC	0D'0',8X'BB'	Begin
0000D78	EEEEEEEE EEEEEEEE				ENDCLOCK		0D'0',8X'EE'	End
0800000	DDDDDDDD DDDDDDD				DURATION		0D'0',8X'DD'	Diff
0000D88	FFFFFFFF FFFFFFF			4434	OVERHEAD	DC	0D'0',8X'FF'	Overhead
0000D90					TICKSAAA		PL8'0'	Clock ticks high part
	00000000 0000000C				TICKSBBB		PL8'0'	Clock ticks low part
0000DA0	00000000 0000000C			4438	TICKSTOT	DC	PL8'0'	Total clock ticks
0000DA8	09000044 00000DB0			4440	CONPGM	CCW1	X'09',PRTLINE,0,	PRTLNG
	40404040 40404040				PRTLINE	DC		,000 iterations of XXXXX'
	40A39696 9240F9F9			4442		DC	C' took 999,999,	999 microseconds'
		00000044	00000001			EQU	*-PRTLINE	
0000DF4	40202020 6B202020			4444	EDIT	DC	X'402020206B2020	206B202120'

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT			·		
				4447 4448	*	CLETES	ST DSECT	**************************************	
				4451	CLETEST	DSECT	,		
00000000 00000001 00000002 00000003	00 00 00				TNUM TSUBNUM	DC DC DC DC	X'00' X'00' X'00' X'00'	CLCLE table Number sub table number	
0000000				4430		БС	Λ 00		
				4459 4460 4461	OP1DATA OP1LEN OP2DATA OP2LEN	DC DC DC DC	A(0) A(0) A(0) A(0)	Pointer to Operand-1 data Operand-1 data length Pointer to Operand-2 data Operand-2 data length	
	00000000 00000000 00000000	00000014	00000001	4464 4465 4466	OPSWHERE OP1WHERE OP1WLEN OP2WHERE	DC DC DC	* A(0) F'0' A(0)	Where CLCLE Operands are located Where Operand-1 data should be placed How much data is there - 1 Where Operand-2 data should be placed	
00000020	00000000			4467	OP2WLEN	DC	F'0'	How much data is there - 2	
00000024	00000000			4469	FAILMASK	DC	A(0)	not used in performance test	
00000028 0000002C	00000000 00000000				ENDREG ENDSTOR	DC DC	A(0) A(0)	not used in performance test not used in performance test	
		00000030	00000001	4474	CLENEXT	EQU	*	Start of next table entry	
		00000000	00003000	4476	CLCLE04	CSECT	,		
				4478 4479 4480	*		************** Performace Tes	**************************************	
				4481 4482	*	Note:	The test CLCLE	pad byte is always X'00'.	

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LOC	ОВЈЕСТ	CODE	ADDR1	ADDR2	STMT									
					4483 4484 4485 4486	* *		operands are The test loc tests introd	less than to does test luced to this	3,840 byte for CC=3 s table.	e a CC=3 as the es in length. for any future	***	***	
00000E00						CLEPER			tart of tab		•	****	***	
00000E04 00000E0C 00000E14	91000000 00000EF8 00000EF8 00010000 00110000 00000007 00010200	00000200 00000200 00000200			4490 4491 4492 4493 4494 4495	CLEPOF	DC DC DC DC DC DC DC	X'91',X'00', A(CLEOP10),A A(CLEOP10),A A(00+(01*K64 A(MB+(01*K64 A(7) CC0 A(00+(01*K64	A(512) A(512) A)),A(512) A)),A(512)	G2PATT)	no crosses			
00000E30	9200000	00000000				CLEPOF		X'92',X'00',						
00000E3C 00000E44	00000EF8 00000EF8 0001FFF4 00120000 00000007 000201F4	00000200 00000200 00000200			4499 4500 4501 4502 4503 4504		DC DC DC DC DC	A(CLEOP10),A A(CLEOP10),A A(00+(02*K64 A(MB+(02*K64 A(7) CC0 A(00+(02*K64	A(512) -12),A(512),A(512)	•	op1 crosses			
22225					45.05			· ·		`				
00000E74	00000EF8 00000EF8 00030000	00000800 00000800			4507 4508 4509	CLEPOF	DC DC DC	X'93',X'00', A(CLEOP10),A A(CLEOP10),A A(00+(03*K64	A(2048) A(2048) A)),A(2048)					
00000E84	00130000 00000007 00030200				4510 4511 4512		DC DC DC	A(MB+(03*K64 A(7) CC0 A(00+(03*K64		G2PATT)	no crosses			
00000E90	94000000				4514	CLEPOF	P4 DC	X'94',X'00',	X'00',X'00'					
00000E94 00000E9C 00000EA4	00000EF8 00000EF8 00040000	00000800 00000800			4515 4516 4517		DC DC DC	A(CLEÓP10),A A(CLEOP10),A A(00+(04*K64	(2048) (2048) ()),A(2048)	o \	on2 cnossos			
00000EB4	0013FFF4 00000007 00040200				4518 4519 4520		DC DC DC	A(MB+(04*K64 A(7) CC0 A(00+(04*K64		·	op2 crosses			

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT						
00000EC0 00000EC4 00000ECC 00000ED4 00000EDC 00000EE4 00000EE8	95000000 00000EF8 00000800 00000EF8 00000800 0004FFF4 00000800 0014FFF4 00000800 00000007 000501F4 AABBCCDD			4522 CLEPOP5 4523 4524 4525 4526 4527 4528	DC DC DC DC DC DC	A(MB+(05*K64 A(7) CC0	A(2048)	op1 crosses op2 crosses EG2PATT)		
00000EF0 00000EF4	00000000 00000000	AABBCCDD 00000DD	00000001 00000001	4530 4531 4532 * 4533 REG2PATT 4534 REG2LOW	DC DC EQU EQU	A(0) A(0) X'AABBCCDD' X'DD'	end of table end of table Register 2 (last byte	starting/ending CC0 va above)	lue	
				4536 ******* 4537 *		**************************************		********	*****	
00000EF8 00000EF8	78125634 78125634			4538 ******* 4539 4540 CLEOP10	***** DS DC	**************************************	******	**********	*****	

					.						_	
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LOC	OBJECT CODE	ADDR1	ADDR2	STMT								
				4542 4543 4544	****** * ****	***** Fixed *****	********* storage l ******	*********** ocations ******	***************************	******* ****	****	
000016F8		000016F8	000021FD	4546		ORG	CLCLE04+T	IMEADDR	(s/b @ X'21FD')			
000021FD	99				TIMEOPT		X'00'		-zero to run timing t	ests		
0000211.5				4549	11112011		х оо	366 60 11011	zero co ram ciming c	23 03		
									/ // 0 ylat=1 ylat			
000021FE		000021FE	000021FE			ORG	CLCLE04+T		(s/b @ X'21FE', X'21	FF.)		
000021FE 000021FF	00 00				TESTNUM SUBTEST		X'00' X'00'		r of active test t sub-test number			
00002200		00002200	00003000	4556		ORG	CLCLE04+S	EGTABLS	(s/b @ X'3000')			
00003000	00			4558	DATTABS	DC	X'00'	Segment an	d Page Tables will go	here		

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LOC	OBJECT COD	E ADDR1	ADDR2	STMT						
				4560 ******	*****	****	****	***	**	*********
				4561 *	IOCB	DSECT	-			
				4562 ******	*****	****	****	***	**	**********
				4564	DSECT	S NAM	1E=I0	СВ		
				4566+IOCB	DSECT					
										Description (R->program read-only, X->program read/wr
00000000	0000			4568+IOCBDID	DS		+0		R	Device Identifier - Subsystem ID for channel subsyst
00000000	0000			4569+	DS		+0			reserved - must be zeros
00000002 00000004	0000 0000			4570+IOCBDV 4571+IOCBDEV			+2		v	Channel Unit Device address of I/O operation Device address or device number (R after ENADEV)
00000004	0000			4571+10CBDEV 4572+10CBZER(+6	^ R	A P	Must be zeros
00000000	00			4573+IOCBUM	DS			X		Unit status test mask
00000000	00			4574+IOCBCM	DS			X		Channel status test mask
000000A				4575+IOCBST	DS		+10			
A000000A	00			4576+IOCBUS	DS		+10			
0000000В	00			4577+IOCBCS	DS	Χ	+11	R	R	Accumulated channel status
3000000C	00			4578+IOCBUT	DS					Used to test unit status
000000D	00			4579+IOCBCT	DS		+13			Used to test channel status
300000E	00			4580+IOCBSC	DS		+14			Accumulted subchanel status control
000000F	00			4581+IOCBWAI			+15			Recognized unsolicited interruption unit status even
00000010	00000000			4582+IOCBSCCI			+16			
00000014	0000			4583+IOCBSCN					K	I/O status residual count as a positive full word
00000014 00000016	0000			4584+ 4585+IOCBRCN	DS		+20 +22			reserved must be zeros
00000018	0000			4585+10CBCAW	DS		+24			I/O status residual count as an unsigned halfword Channel Address word
00000018	00000000 0000	9999		4587+IOCBORB	DS		+24		X	Address of the ORB for channel subsystem I/O
00000010	00000000 0000			4588+IOCBIRB	DS	AD			X	Channel subsystem IRB address
00000028	00000000 0000			4589+IOCBSIB	DS	AD				Channel subsystem SCHIB address
		00000030	00000001	4590+IOCBL	EQU	*-IC				h of IOCB control block (48) without embedded structu

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
				4592 ******* 4593 * 4594 ******	ORB D	SECT		
				4596 4598+ORB	DSECT	S NAME=OR	В	
000000	00000000			4599+ORBPARM	DC	F'0'	Word 0, bits 0-31	
0000004	00	000000F0 00000008 00000004 00000002 00000001	00000001 00000001 00000001 00000001	4604+ORBC 4605+ORBM	DC EQU EQU EQU EQU EQU	X'00' X'F0' X'08' X'04' X'02' X'01'	Word 1, bits 0-7 Word 1, bits 0-3 Word 1, bit 4 Word 1, bit 5 Word 1, bit 6 Word 1, bit 7	 Storage Key Mask Suspend Control Streaming Mode Control Modification Control Synchronization Control
0000005	00			4608+ORB1_8	DC	X'00'	Word 1, bits 8-15	
		00000080 00000040 00000020 00000010	00000001	4611+ORBI 4612+ORBA	EQU EQU EQU	X'80' X'40' X'20' X'10'	Word 1, bit 8 Word 1, bit 9 Word 1, bit 10 Word 1, bit 11	 CCW Format-Control Pre-fetch control Initial-status Interruption Control Address Limit Checking Control
		00000008 00000004 00000002	00000001 00000001 00000001	4614+ORBB	EQU EQU EQU	X'08' X'04' X'02'	Word 1, bit 12 Word 1, bit 13 Word 1, bit 14	 Suppress-suspended-interruption conf Channel-Program-Type Control Format 2-IDAW Control
0000006 0000007	00 00	00000001	00000001	4616+ORBT 4617+ORBLPM 4618+ORRB1 24	EQU DC DC	X'01' X'00' X'00'	Word 1, bit 15 Word 1, bits 16-23 Word 1, bits 24-31	- 2K-IDAW control - Logical Path Mask
		00000080 0000007F 00000040	00000001 00000001 00000001	4619+0RBL 4620+0RBRSV3	EQU EQU EQU	X'80' X'7F' X'40'	Word 1, bit 24	- Incorrect Length Suppression Mode - reserved must be zeros
		0000003E 0000007E 00000001	00000001	4622+0RBRSV26 4623+0RBRSV25	EQU	X'3E' X'7E' X'01'	Word 1, bits 26-30 Word 1, bits 25-30	MIDAW Addressing Controlreserved must be zerosoRB-extension control
000008	00000000	00000080	00000001	4626+ORBCCW 4627+ORBRSV4	DC EQU	A(0) X'80'		- Channel Program Address - reserved must be zero
		000000C	00000001	4628+ORBLEN 4629+* Extend	EQU ed ORB		ngth of standard ORE	
90000C	00			4630+0RBCSS	DC	X'00'	Word 3, bits 0-7	- Channel Subsystem Priority
000000D 000000E 000000E	00			4631+ORBRSV5 4632+ORBPGM 4633+ORBCU		X'00' 0X'00' X'00'	Word 3, bits 8-15 Word 3, bits 16-23	reserved must be zerosTransport mode reserves for programControl Unit Priority
000000F				4634+ORBRSV6 4635+ORBRSV7	DC	X'00' XL16'00'	Word 3, bits 24-31	- reserved must be zeros - reserved must be zeros

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LOC	ОВЈЕСТ	CODE	ADDR1	ADDR2	STMT								
					4639 ******* 4640 * 4641 ******	IRB DS	SECT						
00000C	00000000 6 00000000 6 00000000 6	0000000	00000040	00000001	4643 4645+IRB 4646+IRBSCSW 4647+IRBESW 4648+IRBECW 4649+IRBL	DSECT DC DC DC	XL12'00' XL20'00'	tion Words 0-2 - Words 3-7 - Words 8-15	Subchanne Extended	l Status Word	d .	ed by DSI	ECT S
0000040	00000000	9000000			4650+IRBEMW 4651+IRBXL	DC	XL32'00' *-IRB	Words 16-23		d Measureme	ent Word		
			0000000	0000001	403111NDXL	240	IND	Execuaca II	Lengen				

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
LUC	OBJECT CODE	ADDKI	ADDRZ	31111				

				4655 *	SCSM I	DSECT	·*************************************	
				4656 ******	* * * * * * *	* * * * * * * * * *	· ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^	
				4658	DSECT	S NAME=S	SCSW	
				4660+SCSW		Subchar		
00000000	00			4661+SCSWFLAG		X'00'	Flags	
			00000001	4662+SCSWKEYM		X'F0'	Storage Key Mask of subchannel storage key	
				4663+SCSWSUSC		X'08'	Suspend Control	
				4664+SCSWESWF 4665+SCSWDCCM		X'04' X'03'	Extended Status Word Format Deferred condiont code mask	
				4666+SCSWDCC0		X'00'	Normal I/O interruption	
				4667+SCSWDCC1		X'01'	Deferred condition code is 1	
		00000003	00000001	4668+SCSWDCC3	EQU	X'03'	Deferred condition code is 3	
0000000				1670 505::5=: =	5.6	V.I. 0.0.1		
00000001	00	0000000	0000001	4670+SCSWCTLS		X'00'	General Controls	
				4671+SCSWCCWF 4672+SCSWCCWP		X'80' X'40'	CCW Format control when CCW Prefetch Control	
				4673+SCSWISIC		X'20'	Initial-Status-Interruption Control	
				4674+SCSWALKC		X'10'	Address-Limit-Checking Control	
				4675+SCSWSSIC		X'08'	Suppress suspended interruption	
				4676+SCSW0CC		X'04'	Zero-Condition Code	
				4677+SCSWECWC		X'02'	Extended Control Word control	
		00000001	00000001	4678+SCSWPNOP	EQU	X'01'	Path Not Operational	
00000002	00			4680+SCSW1	DC	X'00'	Control Byte 1	
		00000070	00000001	4681+SCSWFM	EQU	X'70'	Functional Control Mask	
				4682+SCSWFS	EQU	X'40'	Function Control - Start Function	
				4683+SCSWFH	EQU	X'20'	Function Control - Halt Function	
				4684+SCSWFC 4685+SCSWARP	EQU EQU	X'10' X'08'	Function Control - Clear Function Activity Control - Resume pending	
				4686+SCSWASP	EQU	X'04'	Activity Control - Resume pending Activity Control - Start pending	
				4687+SCSWAHP	EQU	X'02'	Activity Control - Halt pending	
				4688+SCSWACP	EQU	X'01'	Activity Control - Clear pending	
00000003	00			4689+SCSW2	DC	X'00'	Control Byte 2	
		00000080	00000001	4690+SCSWASA	EQU	X'80'	Activity Control - Subchannel Active	
		00000040 00000020		4691+SCSWADA 4692+SCSWASUS	EQU	X'40' X'20'	Activity Control - Device Active Activity Control - Suspended	
					EQU	X'10'	Status Control - Alert Status	
				4694+SCSWSINT		X'08'	Status Control - Intermediate Status	
		00000004	00000001	4695+SCSWSPRI	EQU	X'04'	Status Control - Primary Status	
				4696+SCSWSSEC		X'02'	Status Control - Secondary Status	
		0000001	00000001	4697+SCSWSPEN	EQU	X'01'	Status Control - Status Pending	
00000004	00000000			4699+SCSWCCW	DC	A(0)	CCW Address	
3000004				. J.J J.J. W.C.N		(0)		
00000008	00			4701+SCSWUS	DC	X'00'	Unit Status	
		00000080	00000001	4702+SCSWATTN		X'80'	Attention	
				4703+SCSWSM	EQU	X'40'	Status modifier	
				4704+SCSWCUE 4705+SCSWBUSY	EQU	X'20' X'10'	Control-unit end Busy	
				4706+SCSWCE	EQU	X'08'	Channel end	
					- 40			

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LOC	OBJECT CODE	ADDR1	ADDR2	STMT						
		00000004 00000002 00000001	00000001 00000001 00000001	4707+SCSWDE 4708+SCSWUC 4709+SCSWUX	EQU EQU EQU	X'04' X'02' X'01'	Device end Unit check Unit exception			
00000009	00	0000080 00000040 00000020 00000010 00000008 00000004 00000002	00000001 00000001 00000001 00000001	4711+SCSWCS 4712+SCSWPCI 4713+SCSWIL 4714+SCSWPRGM 4715+SCSWPROT 4716+SCSWCDAT 4717+SCSWCCTL	EQU EQU EQU EQU	X'00' X'80' X'40' X'20' X'10' X'08' X'04' X'02'	Channel Status Program-controlled interruption Incorrect length Program check Protection Check Channel-data check Channel-control check Interface-control check			
A0000000	0000	00000001 0000000C	00000001	4719+SCSWCHNG 4721+SCSWCNT 4722+SCSWL	DC EQU	X'01' H'0' *-SCSW	Chaining check Residual CCW count			

A C M A . Y	0 2 1	CL CE - 0.4	C =	/T- ·	CL CL E	·	\	22.6- 2222.42	06.33	- 30
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LOC	OBJECT CODE	ADDR1	ADDR2	STMT						
				4726	*	(othe	er DSECTS needed by	**************************************		
				4729		DSECT	S PRINT=OFF.NAME=(A	SA,SCHIB,CCW0,CCW1,CSW)		
				.,			· (,		
				5005		PRINT	· ON			
				5007 5008			**************************************	*********	******	*
				5009	****	*******	************	*********	*****	*
		00000000	00000001	5011		EQU	0			
		00000001 00000002	00000001 00000001	5012 5013		EQU EQU	1 2			
		0000003	00000001	5014	R3	EQU	3			
			00000001 00000001			EQU EQU	4 5			
		0000006	00000001	5017	R6	EQU	6			
		00000007 00000008	00000001 00000001	5018 5019		EQU EOU	7 8			
		00000009	00000001	5020	R9	EQU EQU	9			
		0000000A 0000000B	00000001 00000001	5021 5022		EQU EQU	10 11			
		000000C	00000001	5023	R12	EQU	12			
		0000000D 0000000E	00000001 00000001	5024 5025		EQU EQU	13 14			
		0000000F	00000001	5026	R15	EQU	15			
				5028		END				

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SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFER	ENCES							
CSW	F	00000040	8	4762									
CSWATTN	U	00000080	1	4932									
CSWBUSY	U	00000010	1	4935									
CSWCCTL	U	00000004	1	4947									
CSWCCW	R	00000001	3	4929									
CSWCDAT	U	8000000	1	4946									
CSWCE	U	00000008	1	4936	4229								
CSWCHNG	U	00000001	1	4949									
CSWCNT	Н	00000006	2	4951									
CSWCS	Χ	00000005	1	4941									
CSWCUE	U	00000020	1	4934									
CSWDCC0	Ü	00000000	1	4925									
CSWDCC1	Ŭ	00000001	1	4926									
CSWDCC3	Ü	00000003	1	4927									
CSWDCCM	II	00000003	1	4924									
CSWDE	Ü	00000003	1	4937	4229								
CSWFLAG	X	00000004	1	4919									
CSWFMT	4	00000000	8	4918	4952								
CSWFMTL	-7 	00000000	1	4952	7772								
CSWICTL	Ü	00000000	1	4948									
CSWIL	ii -	00000002	1	4943									
CSWKEYM	Ü	00000040 000000F0	1	4920									
CSWLOG	Ü	00000010	1	4923									
CSWPCI	U	00000004	1	4942									
CSWPRGM	U	00000020	1	4944									
	U	00000020	_										
CSWPROT	U		1	4945 4933									
CSWSM	U	00000040	1										
CSWSUSP	U	00000008	1	4922									
CSWUC	U	00000002	1	4938									
CSWUS	X	00000004	1	4931									
CSWUX	Ū	00000001	1	4939									
CTLREG1	A	00000D64	4	4427									
DATTABS	X	00003000	1	4558	2026	4470	4474	4477	4257				
DURATION	D	00000D80	8	4433		4173	41/4	4177	425/				
DWAT0010	3	00000C38	8	4309	4308								
DWAT0011	3	00000C48	8	4314	4313								
DWAT0012	3	00000C58	8	4319	4318								
DWAT0013	3	00000C68	8	4324	4323	4466							
EDIT	X	00000DF4	12	4444	4187	4188							
ENADEV	<u>+</u>	00000C7E	4	4343	4297								
ENAOKAY	Ţ	00000CCC	2	4368	4357	44.5	40-0	40-0	4054				
ENDCLOCK	D	00000D78	8	4432	3824	4143	4250	4253	4256				
ENDREG	A	00000028	4	4471									
ENDSTOR	A	0000002C	4	4472	2552	2565							
EOJ	H 	00000C32	2	4307	3559	3567							
EXTCPUAD	H	00000084	2	4783									
EXTICODE	H	00000086	2	4784									
EXTIPARM	F	00000080	4	4782									
EXTNPSW	F	00000058	8	4772	. — -								
EXTOPSW	F	00000018	8	4744	4750								
FAILDEV	H	00000C40	2	4312	4348	4358	4363						
FAILIO	Н	00000C50	2	4317	4197	4220	4230						

ASMA Ver. 0.2.1		CLCE-0	4-performan	•			uccions)	22 3ep 202	22 12:06:32	rage	35
SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCE	ES					
AILMASK	Α	00000024	4	4469							
AILTEST	Ĥ	00000C60	2	4322	3562 356	55					
IND0015	A	00000CC4	4	4365	4343						
INL0015	Ĥ	00000C84	2	4346	4362						
INM0015	A	00000CC8	4	4366	4361						
INN0015	Ĥ	00000CB4	2	4359	4350 435	52					
IRB0016	.; F	00000CB4	4	4393	4389 439						
IMAGE	1	00000000	12289	4393	4309 433) <u>T</u>					
INIT	H	00000000 00000C20	2	4291	3547						
IOCB	4	00000020	48	4566	4590 353	36					
OCBCAW	Ā	00000000	4	4586	4550 55.	, ,					
OCBCM	X	00000018	1	4574							
OCBCS	X	00000003	1	4577							
OCBCT	X	0000000D	1	4579							
		00000000			/DE1						
OCBDEV	H F		2	4571 4568	4351	= 1					
OCBDID		00000000 00000002	4	4568 4570	4193 435)4					
OCBIRD	Н		2		4100						
OCBIRB	A	00000020	8	4588	4198						
OCBL	U	00000030	1	4590	4105 420	. 4					
COCROCAL	A	00000018	8	4587	4195 429	14					
OCBRCNT	Н	00000016	2	4585	4227		224				
OCBSC	X	0000000E	1	4580	4191 422	22 4	224				
OCBSCCW	A	00000010	4	4582	4226						
OCBSCNT	F	00000014	4	4583	4244						
OCBSIB	A	00000028	8	4589	4344						
OCBST	Н	0000000A	2	4575	4192 422	23					
OCBUM	X	00000008	1	4573							
OCBUS	X	000000A	1	4576	4229						
OCBUT	X	0000000C	1	4578							
OCBWAIT	X	0000000F	1	4581							
OCBZERO	H	00000006	2	4572	4192						
IOCB_009	Α	00000CD0	4	4376	4293						
OELADDR	F	000000AC	4	4819							
OICODE	Н	000000BA	2	4824							
OIID	F	000000C0	4	4829							
OINIT	I	00000C70	4	4331	4296						
OIPARM	F	000000BC	4	4828							
OMK0014	F	00000C78	4	4333	4331 433	32					
:ON0008	3	00000B38	8	4208	4205						
ONPSW	F	00000078	8	4776							
IOOPSW	F	00000038	8	4748	4758						
ORB0016	Χ	00000D40	12	4395	4387						
050008	Χ	00000B40	8	4209	4204 423	12					
OSSID	F	000000B8	4	4827	4215						
OWT0007	Н	00000B1E	2	4202	4216 423	19 4	225				
PLCCW1	F	80000008	8	4736							
PLCCW2	F	00000010	8	4737							
IPLPSW	F	00000000	8	4735							
IRB	4	00000000	96	4645	4649 465	51 4	199				
RBECW	X	00000020	32	4648							
IRBEMW	X	00000040	32	4650							
IRBESW	X	00000040 0000000C	20	4647							
	, ·		-0	,							

ASMA Ver. 0.2.1		CLCE-0	4-performa	nce (Te	est CLC	CLE ins	tructi	ons)					22 Sep	2022	12:06:	32 Pá	age	36
SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFER	RENCES												
TDDI		00000010	1	4640														
IRBL	U	00000040	1		4222	4222	4226	4227										
IRBSCSW	Х	0000000	12		4222	4223	4226	4227										
IRBXL	U	00000060	1															
IRST0008	Н	00000B48	2	4211	4208													
K	U	00000400	1	4413	4414	4415	4416											
K64	U	00010000	1		4422 4525	4493 4526	4494 4528	4496	4501	4502	4504	4509	4510	4512	4517	4518	4520	
LCHANLOG	F	000000В0	4	4820	7323	7320	4520											
MAINSIZE	Ü	00200000	1		4422													
MB	Ü	00100000	1		4421	4494	1502	4510	4518	1526								
	5				4421	4434	4302	4310	4310	4320								
MCKLOG	F	00000100	4	4852														
MCKNPSW	F _	00000070	8															
MCKOPSW	F	00000030	8		4756													
MEASUREB	Х	000000B9	1															
MKARCHMD	Χ	000000A3	1	4811														
MKARS	F	00000120	4	4850														
MKCLKCMP	F	000000E0	8	4836														
MKCPUTIM	E	000000E0	8															
MKCRS	Ė	00000000000000000000000000000000000000	4															
			-															
MKDMGCOD	<u> </u>	000000F4	4															
MKFAILA	F	000000F8	4	4841														
MKFPRS	D	00000160	8	4853														
MKICODE	F	000000E8	4	4837														
MKLOGOUT	F	00000100	4	4843														
MKMODEL	F	000000FC	4															
MKXSAA	F	000000D4	4															
MONCLS	H	00000094	2	4799														
MONCODE	 E	0000009C	4	4806														
	r V		•															
MONNUMBR	Х	00000095	1															
MPGACCID	X	000000A2	1															
NKGRS	F	00000180	4															
NUMLOOPS	F	00000D68	4	4429	3610	3830												
NUMPGTBS	U	00000020	1	4422	4423	4425												
NUMSEGTB	U	00000002	1	4423	4427													
OP1DATA	Ä	00000004	4	4458	3597													
OP1LEN	Ä	00000004	4	4459	3596	3598												
OP1UHERE	_	00000008		4464	3595	5550												
	A		4		2222													
OP1WLEN	^	00000018	4	4465	2602													
OP2DATA	A	0000000C	4	4460	3603	2-5-												
OP2LEN	Α	00000010	4	4461	3602	3604												
OP2WHERE	Α	0000001C	4	4466	3601													
OP2WLEN	F	00000020	4	4467														
OPSWHERE	U	00000014	1	4463	3614	3616	3621	3623	3625	3627	3629	3631	3633	3635	3637	3639	3641	
					3643	3645	3647	3649	3651	3653	3655	3657	3659	3661	3663	3665		
					3669	3671	3673	3675	3677	3679	3681	3683	3685	3687	3689	3691		
					3695	3697	3699	3701	3703	3705	3707	3709	3711	3713	3715	3717	3719	
					3721	3723	3725	3727	3729	3731	3733	3735	3737	3739	3741	3743	3745	
					3747	3749	3751	3753	3755	3757	3759	3761	3763	3765	3767	3769	3771	
					3773	3775	3777	3779	3781	3783	3785	3787	3789	3791	3793	3795	3797	
					3799	3801	3803	3805	3807	3809	3811	3813	3818	3820	3833	3836		
					3845	3848	3851	3854	3857	3860	3863	3866	3869	3872	3875	3878	3881	
					3884	3887	3890	3893	3896	3899	3902	3905	3908	3911	3914	3917	3920	
					-	-	-	-	-								=	

ASMA Ver. 0.2.1		CLCE-0	4-performan	ce (Te	st CLC	LE ins	tructi	ons)					22 Sep	2022	12:06:	32 Pa	ge	37
SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFER	ENCES												
					3923	3926	3929	3932	3935	3938	3941	3944	3947	3950	3953	3956	3959	
					3962 4001	3965 4004	3968 4007	3971 4010	3974 4013	3977 4016	3980 4019	3983 4022	3986 4025	3989 4028	3992 4031	3995 4034	3998 4037	
					4040	4043	4046	4049	4052	4055	4058	4061	4064	4023	4070	4073	4076	
					4079	4082	4085	4088	4091	4094	4097	4100	4103	4106	4109	4112	4115	
N D D		0000000	2.2	4500	4118	4121	4124	4127	4130	4135	4138							
ORB ORB1 0	4	00000000 00000004	32	4598 4601	4628	4636	3537											
ORB1 8	X	00000004	1	4601														
ORBA	Û	00000003	1	4612														
ORBB	Ü	00000004	1	4614														
ORBC	Ü	00000004	1	4604														
ORBCCW	Α	00000008	4	4626														
ORBCSS	Χ	0000000C	1	4630														
ORBCU	X	0000000E	1	4633														
ORBD	U	00000040	1	4621														
ORBF	U	00000080	1	4609 4615														
ORBH ORBI	U	00000002 00000020	1	4615														
ORBKEYM	Ü	00000020 000000F0	1	4602														
ORBL	U	00000080	1	4619														
ORBLEN	Ü	0000000C	1	4628														
ORBLPM	Χ	00000006	1	4617														
ORBM	U	00000002	1	4605														
ORBP	U	00000040	1	4610														
ORBPARM	F	00000000	4	4599														
ORBPGM	X	0000000E	1	4632														
ORBRSV25 ORBRSV26	U U	0000007E 0000003E	1	4623 4622														
ORBRSV3	U	0000003E	1	4620														
ORBRSV4	Ü	00000071	1	4627														
ORBRSV5	X	000000D	1	4631														
ORBRSV6	Χ	0000000F	1	4634														
ORBRSV7	Χ	00000010	16	4635														
ORBS	U	00000008	1	4603														
ORBT	U	00000001	1	4616														
ORBU ORBX	U	00000008 00000001	1	4613 4624														
ORBXLEN	IJ	00000020	1	4624														
ORBY	Ü	00000020	1	4606														
ORRB1 24	X	00000007	1	4618														
OVERHĒAD	D	00000D88	8	4434	3826	4172												
PAGE	U	00001000	1	4414	4418	4424												
PAGETABS	U	00003080	1	4425														
PCFETO	A	000000C4	4	4830														
PERACCID	X	000000A1	1	4808 4805														
PERADDR PERCODE	X	00000098 00000096	4	4805														
PERCODE	N II	00000050 000000F0	1	4803														
PGMACCID	X	00000010	1	4807														
PGMDXC	F	00000090	4	4797														
PGMICODE	Н	0000008E	2	4796														

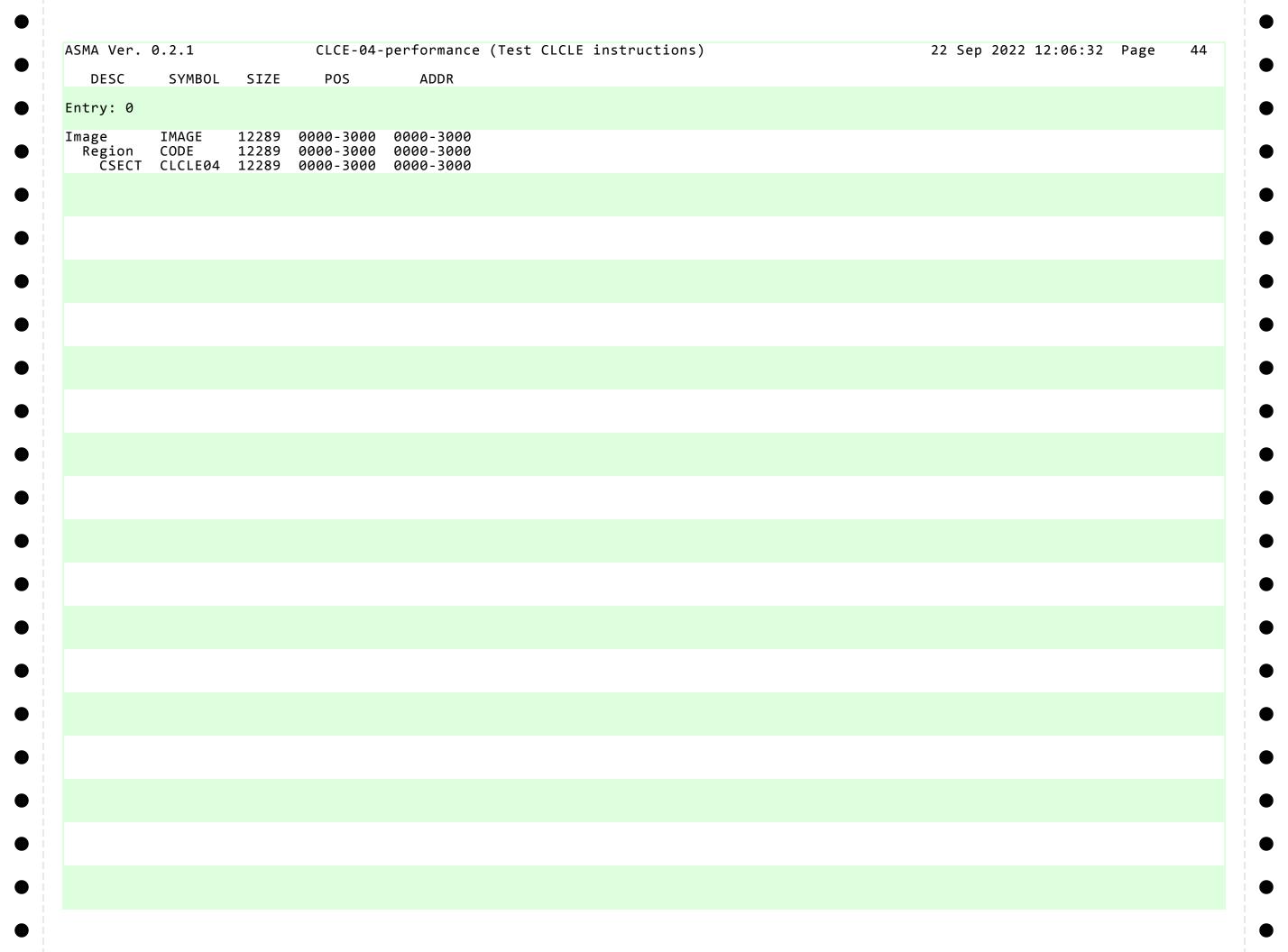
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Note	
Total C	
CASTILICM U	
F 00000028 8 4746 F 00000004 1 4758 F 00000004 1 4959 F 00000004 1 4984 F 00000001 1 4984 F 00000001 1 4985 F 00000001 1 4986 F 00000001 1 4986 F 00000001 1 4986 F 00000000 1 4989 F 00000000 1 4989 F 00000000 1 4989 F 00000000 1 4966 F 000000000 1 4966 F 000000000 1 4966 F 00000000 1 4966 F 000000000 1 4966 F 00000000 1 4966 F 000000000 1 4966 F 000000000 1 4966 F 000000000 1 4966 F 00000000000000000000000000000000000	
F 0000028 8 4796 4759 F 00000020 4 4798 MCWI	
POWINT F 00000009 4 4798 MCML1 0 X 00000004 1 4959 MCML 1 8 X 00000004 1 4959 MCML 1 8 X 00000004 1 4994 MCML 1 8 X 00000004 1 4994 MCML 1 9 00000004 1 4994 MCML 1 1 4984 MCML 1 9 00000011 1 4983 MCML 1 9 00000011 1 4983 MCML 1 9 00000011 1 4985 MCML 1 9 00000013 1 4985 MCML 1 9 00000015 1 4985 MCML 1 9 00000015 1 4985 MCML 1 9 00000015 1 4986 MCML 1 9 00000015 1 4989 MCML 1 9 00000000 1 4958 MCML 1 9 00000000 1 4958 MCML 1 9 00000000 1 4958 MCML 1 9 00000000 1 4956 MCML 1 9 0000000 1 4956 MCML 1 9 00000000 1 4956 MCML 1 9 0000000 1 4950 MCML 1 9 00000000 1 4950 MCML 1 9 00000000 1 495	
FORTIX F 00000090 4 4798 MCWL1 B X 00000004 1 4959 MCWL1 B X 00000004 1 4959 MCWL B X 00000004 1 4959 MCWL B X 00000004 1 4994 MCW.CHPO X 00000011 1 4983 MCW.CHPO X 00000013 1 4985 MCW.CHPO X 00000013 1 4988 MCW.CHPO X 00000013 1 4989 MCW.CHPO X 00000015 1 4990 MCW.CHPO X 00000001 1 4964 MCW.CW.CHPO X 00000000 1 4964 MCW.CW.CHPO X 00000000 1 4964 MCW.CW.CHPO X 00000000 1 4964 MCW.CW.CW.CHPO X 00000000 1 4964 MCW.CW.CW.CW.CW.CW.CW.CW.CW.CW.CW.CW.CW.C	
MCWILD N	
MCMCHPP MCMCHPP NCMCHPP NCMCHP	
MCMCHPP X 00900010 1 4983 MCMCHP1 X 00900011 1 4983 MCMCHP1 X 00900012 1 4985 MCMCHP3 X 00900012 1 4985 MCMCHP4 X 00900013 1 4985 MCMCHP5 X 00900013 1 4986 MCMCHP5 X 00900015 1 4988 MCMCHP6 X 00900015 1 4988 MCMCHP7 X 00900015 1 4988 MCMCHP7 X 00900016 1 4989 MCMCHP7 X 00900001 1 4990 MCMCHP7 X 00900001 1 4990 MCMCHP7 X 00900001 1 4963 MCMCHP7 X 00900001 1 4963 MCMCHP7 X 00900001 1 4964 MCMCH U 00900000 1 4965 MCMCH U 00900000 1 4965 MCMCH U 00900000 1 4966 MCMCH U 0 0090000 1 4967 MCMCH U 0 0090000 1 4968 MCMCH U 0 0090000 1 4967 MCMCH U 0 0090000 1 4968 MCMCH U 0 0090000 1 4977 MCMCH U 0 0090000 1 4987 MCMCH U 0 0090000 1 4968 MCMCH U 0 0090000 1 4977 MCMCH U 0	
MCWCHPP	
MCKICHP1	
MCMCHP2 X 00000013 1 4985 MCMCHP4 X 00000013 1 4986 MCMCHP5 X 00000015 1 4988 MCMCHP6 X 00000015 1 4988 MCMCHP6 X 00000016 1 4989 MCMCHP7 X 00000017 1 4990 MCMCHP7 X 00000017 1 4990 MCMCHP7 X 000000017 1 4990 MCMCHP7 X 00000001 1 4993 MCMCHP8 U 00000000 1 4953 MCMCHP F 00000000 1 4954 MCMCHP F 00000000 1 4964 MCMCHMM U 00000000 1 4966 MCMCHMM U 00000000 1 4978 MCMCMCHPM X 00000000 1 4978 MCMCMCHPM X 00000000 1 4978 MCMCMMM U 00000000 1 4989 MCMCMMM U 00000000 1 4989 MCMCMMM U 00000000 1 4989 MCMCMMM U 00000000 1 4999 MCMCMMM U 00000000 1 4999 MCMCMMM U 00000000 1 4989 MCMCMPTM X 00000000 1 4989 MCMCMPTM X 00000000 1 4997 MCMCMPTM X 000000000 1 4997 MCMCMPTM X 00000000 1 4997 MCMCMPTM X 00000000 1 4997	
MCNICHP3 X 00000013 1 4986 MCNICHP5 X 00000015 1 4988 MCNICHP5 X 00000015 1 4988 MCNICHP6 X 00000016 1 4989 MCNICHP7 X 00000017 1 4999 MCNICHP7 X 00000001 1 4999 MCNICHP7 X 00000000 1 4963 MCNICHP7 X 00000001 1 4968 MCNICHP F 0000000 4 4958 MCNICHP F 0000000 1 4966 MCNICHP F 0000000 1 4966 MCNICHW U 00000000 1 4966 MCNICHW U 00000000 1 4976 MCNICHW U 00000000 1 4976 MCNICHW U 00000000 1 4976 MCNICHP X 00000000 1 4976 MCNICHP X 00000000 1 4968 MCNICHP X 00000000 1 4979 MCNICHP X 00000000 1 4968 MCNICHP X 00000000 1 4968 MCNICHP X 00000000 1 4977 MCNICHP X 00000000 1 4977 MCNICHP X 00000000 1 4979 MCNICHP X 00000000 1 4968 MCNICHP X 00000000 1 4979 MCNICHP X 00000000 1 4977 MCNICHP X 00000000 1 4977 MCNICHP X 00000000 1 4979 MCNICHP X 00000000 1 4970 MCNICHP X 00000000 1 4970 MCNICHP X 00000000 1 4970 MCNICHP X 00000000 1 4977 MCNICHP X 00000000 1 4970 MCNICHP X 00000000 1 4971 MCNICHP X 00000000 1 5011 3533 MCNICHP X 00000000 1 5011 3501 3601 3601 3601 3605 3607 3607 3607 3607 3607 3607 3607 3607	
MCWCHP4 X 00000015 1 4988 MCWCHP6 X 00000015 1 4989 MCWCHP7 X 00000017 1 4990 MCWDNM H 0000006 2 4974 4351 MCWCHP U 0000008 1 4963 MCWCHP F 0000008 1 4968 MCWCHP F 0000000 1 4968 MCWCHP W 0 0000000 1 4979 MCWCHP W 0 0000000 1 4971 MCWCHP W 0 0000000 1 5011 3533 10 0 0000000 1 5011 3533 10 0 0000000 1 5011 3533 10 0 0000000 1 5011 3533 10 0 0000000 1 5011 3533 10 0 0000000 1 5011 3533 10 0 0000000 1 5011 3533 10 0 0000000 1 5011 3533 10 0 0000000 1 5011 3633 3655 3657 3659 3651 3693 3693 3693 3697 3609 3671 3673 3675 3681 3683 3683 3683 3683 3693 3693 3693 3693 3697 3697 3609 3601 3683 3683 3683 3683 3683 3693 3693 3693 3693 3697 3697 3609 3601 3603 3605 3657 3659 3651 3693 3693 3693 3693 3697 3609 3601 3603 3605 3657 3659 3651 3693 3693 3693 3693 3697 3609 3601 3603 3605 3657 3659 3651 3693 3693 3693 3693 3697 3609 3601 3603 3605 3657 3659 3651 3693 3693 3693 3693 3697 3609 3601 3603 3605 3657 3683 3683 3683 3683 3693 3691 3693 3693 3693 3697 3609 3601 3701 3701 3701 3701 3701 3701 3701 37	
MCMICHP5 X 00000015 1 4988 MCMICHP7 X 00000017 1 4990 MCMICHP7 X 00000017 1 4990 MCMICHP7 X 00000017 1 4990 MCMICHP7 X 00000000 1 4963 MCMICHE U 00000008 1 4963 MCMISCM U 00000008 1 4963 MCMIP F 00000000 4 4958 MCMISCM U 00000008 1 4964 MCMILM U 00000000 1 4964 MCMILM U 00000000 1 4966 MCMILM U 00000000 1 4966 MCMILM U 00000000 1 4976 MCMILM U 00000000 1 4976 MCMILM U 00000000 1 4978 MCMILM U 00000000 1 4978 MCMIMM U 0000000 1 4978 MCMMMM U 0000000 1 4969 MCMMMM U 0000000 1 4969 MCMMMM U 0000000 1 4968 MCMMM U 0000000 1 4979 MCMMM U 0000000 1 4979 MCMMM U 0000000 1 4968 MCMMM U 0000000 1 4979 MCMMM U 0000000 1 4979 MCMMM U 0000000 1 4996 MCMMM U 0000000 1 4997 MCMMM U 0000000 1 4991 MCMMM U 0 0000000 1 4991 MCMM U 0 0000000 1 4991 MCM U 0 0000000 1 4991	
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MCNCHP6	
MCKICHP7 X 00000017 1 4990 MCKIDNUM H 00000060 1 4963 4355 MCKIE U 00000080 1 4963 4355 MCKIE U 00000080 1 4963 MCKIE U 00000000 4 4958 MCKIE F 00000000 4 4958 MCKIE U 00000000 1 4966 MCKILM U 00000000 1 4966 MCKILM U 00000000 1 4966 MCKILM U 00000000 1 4976 MCKILM U 00000000 1 4978 MCKILM U 00000000 1 4967 MCKILM U 00000000 1 4968 MCKILM U 00000000 1 4968 MCKIMM U 0000000 1 4968 MCKIMS U 00000000 1 4968 MCKIMS U 00000000 1 4968 MCKIMS U 00000000 1 4968 MCKIMS U 000000000 1 4968 MCKIMS U 000000000 1 4968 MCKIMS U 00000000000000000000000000000000000	
MCKIE U 0000006	
MCMEX	
PMCKEXC X 000001B 1 4993 PMCKTP F 00000000 4 4958 PMCKTSCM U 00000038 1 4960 PMCKILMM U 00000000 1 4965 PMCKILMM U 00000000 1 4965 PMCKILMM U 00000000 1 4965 PMCKILMM U 00000000 1 4976 PMCKILMM U 00000000 1 4976 PMCKILMM X 00000000 1 4978 PMCKILPIM X 00000000 1 4978 PMCKILPIM X 00000000 1 4978 PMCKIMBI H 0000000 2 4980 PMCKIMBI H 0000000 1 4969 PMCKIMMC U 00000008 1 4969 PMCKIMMC U 00000008 1 4969 PMCKIMMC U 0000000 1 4979 PMCKIMMC U 0000000 1 4979 PMCKIMMC W 0000000 1 4979 PMCKIMMC W 0000000 1 4979 PMCKIMSSI X 0000000 1 4991 PMCKIMSSI X 0000000 1 4979 PMCKIMSSI X 0000000 1 4971 PMCKIMS U 0000000 1 4971 PMCKIM U 0000000 1 1 4972 PMCKIM U 00000000 1 1 4972 PMCKIM U	
MCWITP F 0000000 4 4958 MCWITSCM U 0000038 1 4964 MCWILMG U 0000020 1 4964 MCWILMG U 0000020 1 4965 MCWILMG U 0000020 1 4966 MCWILPM X 0000008 1 4976 MCWILPM X 0000008 1 4978 MCWILPM U 00000004 1 4978 MCWILMG U 0000004 1 4978 MCWILMG U 00000004 1 4978 MCWILMG U 00000004 1 4978 MCWILMG U 00000004 1 4967 MCWILMG U 00000008 1 4967 MCWILMG U 00000001 1 4968 MCWILMG U 00000001 1 4978 MCWILMG U 00000000 1 4977 MCWILMG U 00000000 1 4977 MCWILMG U 00000000 1 4977 MCWILMG X 00000000 1 4971 MCWILMG X 0 000000000 1 4971 MCWILMG X 0 00000000 1 4971 MCWILMG X 0 00000000 1 4971 MCWILMG X 0 000000000000000000000000000000000	
MCWILSCM U	
MCWLMMG U 00000600 1 4964 MCWLMMG U 0000020 1 4965 MCWLMMG U 00000080 1 4976 MCWLPM X 00000008 1 4978 MCWLPM U 00000004 1 4978 MCWMMU U 00000004 1 4978 MCWMMI U 00000004 1 4978 MCWMMI U 00000008 1 4967 MCWMMI U 00000008 1 4969 MCWMMMC U 00000008 1 4969 MCWMMMC U 00000008 1 4969 MCWPAM X 0000000F 1 4982 MCWPAM X 0000000F 1 4982 MCWPAM X 0000000F 1 4981 MCWPOM X 0000000F 1 4981 MCWPOM X 00000000 1 4977 MCWPOM X 00000000 1 4997 MCWRES2 X 0000001 1 4996 MCWS U 00000001 1 4996 MCWS U 00000001 1 4996 MCWX U 00000001 1 4996 MCWX U 00000001 1 4997 MCWX U 00000001 1 4996 MCWX U 00000001 1 5011 3533 M1 U 000000001 1 5011 3533 M1 U 000000000 1 5011 3533 M1 U 0000000000 1 5010 3533 3651 3653 3655 3657 3659 3650 3650 3650 3650 3650 3650 3650 3650	
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PRTLINE C 00000DB0 38 4441 4443 4147 4187 4188 4440 PRTLNG U 00000044 1 4443 4440 R0 U 00000000 1 5011 3533 R1 U 00000001 1 5012 4159 R10 U 0000000A 1 5021 3595 3599 3614 3616 3621 3623 3625 3627 3629 3631 3633 363 R1	
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ASMA	Ver. 0.2.1		CLCE-0	4-performa	nce (Te	st CLCLE in	structi	ons)					22 Sep	2022	12:06:	32 Pa	ge 39
	SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES											
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			3769 3771 3795 3797 3834 3836 3857 3858 3876 3878 3896 3897 3915 3917 3935 3936 3954 3956 3974 3975 3993 3995 4013 4014 4032 4034 4052 4053	3799 3837 3860 3879 3899 3918 3938 3957 3977 3996 4016 4035 4055	3775 3801 3842 3861 3881 3900 3920 3939 3959 3959 3978 3998 4017 4037 4056	3777 3803 3843 3863 3882 3902 3921 3941 3960 3980 3989 4019 4038 4058	3779 3805 3845 3864 3884 3903 3923 3942 3962 3962 3981 4001 4020 4040 4059	3781 3807 3846 3866 3885 3905 3924 3944 3963 3983 4002 4022 4041 4061	3783 3809 3848 3867 3887 3906 3926 3945 3965 3965 3984 4004 4023 4043 4062	3785 3811 3849 3869 3888 3908 3927 3947 3966 3986 4005 4025 4044 4064	3787 3813 3851 3870 3890 3909 3929 3948 3968 3968 3987 4007 4026 4046 4046	3789 3818 3852 3872 3891 39911 3930 3950 3969 3969 4008 4028 4047 4067	3791 3820 3854 3873 3893 3912 3932 3951 3971 3990 4010 4029 4049 4068	3793 3833 3855 3875 3894 3914 3933 3953 3972 3992 4011 4031 4050 4070
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R11 R12		U U	0000000B 0000000C	1 1		4130 4131 3596 4274 3601 3605 3870 3873 3909 3912 3948 3951	4135 4276 3834 3876 3915	3837 3879 3918 3957	4138 3843 3882 3921 3960	3846 3885 3924 3963	3849 3888 3927 3966	3852 3891 3930 3969	3855 3894 3933 3972	3858 3897 3936 3975	3861 3900 3939 3978	3864 3903 3942 3981	3867 3906 3945 3984
						3987 3990 4026 4029 4065 4068 4104 4107 4178 4180	3993 4032 4071 4110 4275	3996 4035 4074 4113 4278	3999 4038 4077 4116 4279	4002 4041 4080 4119 4280	4005 4044 4083 4122	4008 4047 4086 4125	4011 4050 4089 4128	4014 4053 4092 4131	4017 4056 4095 4136	4020 4059 4098 4139	4023 4062 4101 4177
R13		U	000000D	1	5024	3602 3614 3641 3643 3667 3669 3693 3695 3719 3721	3645 3671	3621 3647 3673 3699 3725	3623 3649 3675 3701 3727	3625 3651 3677 3703 3729	3627 3653 3679 3705 3731	3629 3655 3681 3707 3733	3631 3657 3683 3709 3735	3633 3659 3685 3711 3737	3635 3661 3687 3713 3739	3637 3663 3689 3715 3741	3639 3665 3691 3717 3743
						3745 3747 3771 3773 3797 3799 3842 3845 3881 3884 3920 3923	3749 3775 3801 3848 3887 3926	3751 3777 3803 3851 3890 3929	3753 3779 3805 3854 3893 3932	3755 3781 3807 3857 3896 3935	3757 3783 3809 3860 3899 3938	3759 3785 3811 3863 3902 3941	3761 3787 3813 3866 3905 3944	3763 3789 3818 3869 3908 3947	3765 3791 3820 3872 3911 3950	3767 3793 3833 3875 3914 3953	3769 3795 3836 3878 3917 3956
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R14 R15		U U	0000000E 0000000F	1 1		3547 3551 3825 4148 4297 4336	4169	4161 4170	4298 4175	4233	4234	4242	4258	4261	4262	4283	4296
R2 R3 R4		U U U	00000002 00000003 00000004	1 1 1	5013 5014 5015	3534 3539 3536 4293	3540		3542								
R5		U	00000005	1	5016	3580 3581	3584	4145	4152	4153	4155	4156	4163	4172	4243	4255	4260

SYMBOL													•				ige	40
	TYPE	VALUE	LENGTH	DEFN	REFER	ENCES												
					4274													
R6	U	00000006	1	5017	3586	3587	3588	3589	3597	3599	3603	3605	3612	3823	3832	4142	4173	
R7	U	00000007	1	5018	4245 3598 4260	4246 3604 4280	4247 3610	4248 3823	4250 3830	4251 4142	4252 4174	4253 4243	4256 4245	4275 4248	4250	4253	4257	
R8	U	00000008	1	5019	3537	4294												
R9	U	00000009	1	5020	3535	3544	3545											
REG2LOW	U	00000DD	1	4534														
REG2PATT	U	AABBCCDD	1	4533	4496	4504	4512	4520	4528									
RPTSAVE	F	00000B90	4	4236	4169	4233												
RPTSPEED	I	00000ABA	4	4169	4148													
RSTNPSW	F	0000000	8	4740														
RSTOPSW	F	0000008	8	4741														
SAVER1	F	00000238	4	3569	4159													
SAVER2	F	0000023C	4	3570	3542	4160												
SAVER5	F	00000240	4	3571	3584	4152												
SCANOUT	Χ	00000080	1	4778	4779													
SCANOUTL	Ü	00000000	1	4779														
SCHIB	4	00000000	52	4955	5002	4345												
SCHIBL	Ü	00000034	1	5002														
SCHMBA	Ā	00000028	8	5000														
SCHMDA1	X	00000030	4	5001														
SCHMDA3	X	00000028	12	4999														
SCHPMCW	X	00000000	28	4957														
SCHSCSW	X	0000001C	12	4998														
SCSW	4	00000000	12	4660	4722													
SCSW0CC	Ū	00000004	1	4676	7/22													
SCSW1	X	00000007	1	4680														
SCSW2	X	00000002	1	4689	4222													
SCSWACP	Û	00000000	1	4688	7222													
SCSWADA	Ü	00000001	1	4691														
SCSWAHP	Ü	00000000	1	4687														
SCSWALKC	U	00000002	1	4674														
SCSWARP	Ü	00000010	1	4685														
SCSWASA	U	00000080	1	4690														
SCSWASP	U		1	4686														
SCSWASP	U II	00000004 00000020	1	4686														
SCSWATTN	U II	00000020	1	4692														
	11		1	4702														
SCSWBUSY	U	00000010	1															
SCSWCCTL	υ Λ	00000004	1	4717	1226													
SCSWCCW	A	00000004	4	4699	4226													
SCSWCCWF	U	00000080	1	4671														
SCSWCCWP	U	00000040	1	4672														
SCSWCDAT	U	00000008	1	4716														
SCSWCE	U	00000008	1	4706														
SCSWCHNG	U	00000001	1	4719	4227													
SCSWCNT	H	0000000A	2	4721	4227													
SCSWCS	X	00000009	1	4711														
SCSWCTLS	X	00000001	1	4670														
SCSWCUE	U	00000020	1	4704														
SCSWDCC0	U	00000000	1	4666														
SCSWDCC1	U	00000001	1	4667														

SYMBOL TYPE VALUE LENGTH DEFN REFERENCES SCSNDCC3 SCSNDCC3 SCSNDCC4 U 000000033 1 4665 SCSNDC6 U 000000033 1 4665 SCSNDC6 U 000000003 1 4667 SCSNCSNCCN U 000000002 1 4667 SCSNCSNCCN U 0000000002 1 4667 SCSNCSNCCN U 000000002 1 4668 SCSNCSNCCN U 000000002 1 4661 SCSNCSNCCN U 000000002 1 4681 SCSNCSNCCN U 000000002 1 4681 SCSNCSNCS U 000000002 1 4718 SCSNCSNCCN U 000000002 1 4718 SCSNCCN U 000000002 1 4718 SCSNCCN U 000000002 1 4718 SCSNCCN U 000000002 1 4673 SCSNCCN U 000000002 1 4718 SCSNCCN U 000000002 1 4718 SCSNCSNCCN U 000000002 1 4718 SCSNCSNCCN U 000000002 1 4673 SCSNCCN U 000000002 1 4718 SCSNCSNCCN U 000000002 1 4714 SCSNCNCN U 000000002 1 4718 SCSNCNCN U 000000002 1 4718 SCSNCSNCN U 000000001 1 4715 SCSNCNCN U 000000001 1 4715 SCSNCNCN U 00000001 1 4715 SCSNCNSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS	22 Sep 2022 12:06:32 Page 41				
SCSMDCCM					
SCSNDCCM					
SCSNDE U 000000004 1 4707 SCSNESWF U 000000002 1 4664 SCSNFR U 000000004 1 4664 SCSNFR U 000000002 1 4683 SCSNFR U 00000002 1 4683 SCSNFR U 00000002 1 4661 SCSNFR U 00000002 1 4661 SCSNFR U 00000002 1 4661 SCSNFR U 00000002 1 4681 SCSNFR U 00000002 1 4682 SCSNFR U 00000002 1 4733 SCSNESS U 00000002 1 4733 SCSNESWFY U 00000002 1 4733 SCSNESWFY U 00000002 1 4732 SCSNESWFY U 000000002 1 4732 SCSNESWFY U 000000002 1 4732 SCSNESWFY U 00000000 1 4662 SCSNFR U 00000000 1 4678 SCSNFR U 00000000 1 4732 SCSNESWFY U 00000000 1 4734 SCSNESWFY U 00000000 1 4734 SCSNESWFY U 00000000 1 4735 SCSNESWFY U 00000000 1 4693 SCSNESWFY U 00000000 1 4694 SCSNESWFY U 00000000 1 4693 SCSNESWFY U 000000000 1 4693 SCSNESWFY U 000000000 1 4693 SCSNESWFY U 0000000000 1 440000000000 1 4693 SCSNESWFY U 00000000000000000000000000000000					
SCSMECNC U 00000002 1 4677 4664 4					
CSMFSWF					
SCSNFC U 0 0000010 1 4684 SCSNFLAG					
SCSMFH V 0 00000020 1 4683 SCSMFM U 00000070 1 4681 SCSMFM U 0000070 1 4681 SCSMFS U 00000040 1 4681 SCSMST U 00000040 1 4682 SCSMICTL U 00000040 1 4713 SCSMSISIC U 00000040 1 47713 SCSMSISIC U 000000070 1 4673 SCSMST U 000000070 1 47712 SCSMPNOP U 000000070 1 4673 SCSMST U 000000070 1 4673 SCSMST U 00000010 1 4673 SCSMST U 00000010 1 4673 SCSMST U 00000010 1 4693 SCSMST U 00000010 1 4693 SCSMST U 00000010 1 4697 SCSMST U 00000001 1 4697 SCSMST U 00000001 1 4697 SCSMSSEC U 00000000 1 4695 SCSMSSEC U 00000000 1 4695 SCSMSSEC U 00000000 1 4669 SCSMSSEC U 00000000 1 4669 SCSMSSEC U 00000000 1 4669 SCSMSSEC U 00000000 1 4701 SCSMSSEC U 00000000 1 4669 SCSMSSEC U 000000000 1 4669 SCSMSSEC U 0000000000 1 4669 SCSMSSEC U 0000000000 1 46690 SCSMSSEC U 0000000000 1 4669 SC					
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SCSMEYM U 000000F0 1 4662 SCSMPCI U 0000000C 1 4722 SCSMPCOP U 00000080 1 4712 SCSMPROM U 00000000 1 4714 SCSMPROM U 0000001 1 4715 SCSMPSAS U 0000001 1 4703 SCSMSSAS U 00000001 1 4703 SCSMSPRI U 00000001 1 4703 SCSMSPRI U 00000001 1 4695 SCSMSSEC U 00000000 1 4708 SCSMSSEC U 00000000 1 4708 SCSMSSEC U 00000000 1 4709 SCSMSSEC U 000000000 1 4709 SCSMSSEC U 000000000 1 4709 SCSMSSEC U 00000000000000000000000000000000000					
SCSILL U 0000000C 1 4722 CSSIPPOD U 00000080 1 4712 CSSIPPOD U 00000001 1 4678 CSSIPPOT U 00000010 1 4714 CSSIPPOT U 00000010 1 4715 CSSIPSOT U 00000010 1 4693 CSSISAS U 00000010 1 4694 CSSISSIT U 00000001 1 4694 CSSISSIT U 00000001 1 4695 CSSISSIT U 00000001 1 4695 CSSISSIT U 00000001 1 4696 CSSISSIT U 00000000					
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SCSMPROT U 00000010 1 4715					
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SSPREFIX F 00000108					
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ASMA Ver.	0.2.1		CI	LCE-04-p	performa	ance (Te	st CLCI	LE instru	uctions)		22 Sep 2	022 12:06:3	2 Pa	ge	43
MACRO	DEFN	REFEREN	ICES												
ANTR	103														
APROB ARCHIND	235 395	3425													
ARCHLVL	536	3423													
ASAIPL	662	3504													
ASALOAD	742	3487													
ASAREA	797	4732													
ASAZAREA CPUWAIT	982 1065	4203													
DSECTS	1391	4564	4596	4643	4658	4729									
DWAIT	1594	4306	4311	4316	4321	., _,									
DWAITEND	1651	4305													
ENADEV	1659	4342													
ESA390 IOCB	1759 1770	4375													
IOCBDS	1946	4565													
IOFMT	1980	4597	4644	4659	4891	4909	4917	4954							
IOINIT	2318	4330													
IOTRFR ORB	2359 2407	4394													
POINTER	2596	4334													
PSWFMT	2624														
RAWAIT	2758														
RAWIO SIGCPU	2854 3012	4190													
SMMGR	3070														
SMMGRB	3170														
TRAP128	3219														
TRAP64	3196	3489	3492												
TRAPS ZARCH	3232 3306														
ZEROH	3318														
ZEROL	3346														
ZEROLH	3374														
ZEROLL	3397														



ASMA Ver. 0.2.1	CLCE-04-performance (Test CLCLE instructions)	22 Sep 2022 12:06:32 Page	45
STMT	FILE NAME	~8c	-
	samples/tests/CLCLE-04-performance.asm :k/srcasm/satk.mac		
** NO ERRORS FOUND **			
no Emicis Foolis			