

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				2	*****
				3	* FAC5861.ASM
				4	*****
				5	*
				6	* This program performs a quick test of the instructions defined by
				7	* the new Miscellaneous-Instruction-Extensions Facilities 2 and 3.
				8	* It is NOT a comprehensive test. It does not, for example, check
				9	* for proper detection of overflow and/or boundary conditions, etc.
				10	* It simply verifies a simple execution of each instruction produces
				11	* the expected results. Nothing more.
				12	*
				13	*****
00000000		00000000	000010F8	15	FAC5861 START 0
		00000000		16	USING FAC5861,R0
00000000		00000000	000001A0	18	ORG FAC5861+X'1A0' z Restart New PSW
000001A0	00000001 80000000			19	DC X'0000000180000000',AD(BEGIN)
000001B0		000001B0	000001D0	21	ORG FAC5861+X'1D0' z Program New PSW
000001D0	00000001 80000000			22	ZPGMNEW DC X'0000000180000000',AD(PGMCHK)
				24	*****
				25	* Start of actual program...
				26	*****
000001E0		000001E0	00000200	28	ORG FAC5861+X'200' So no base registers needed
00000200	4100 001F		0000001F	30	BEGIN LA R0,(L'FACLIST/8)-1
00000204	B2B0 0800		00000800	31	STFLE FACLIST
00000208	9120 0807		00000807	33	TM FACLIST+M2FACBYT,M2FACBIT
0000020C	A784 037A		00000900	34	JZ M2FAIL
00000210	9104 0807		00000807	36	TM FACLIST+M3FACBYT,M3FACBIT
00000214	A784 037A		00000908	37	JZ M3FAIL

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				39	*****
				40	* Miscellaneous-Instruction-Extensions Facility 2
				41	*****
				42	*
				43	** Add Halfword
				44	*
00000218	9201 093F		0000093F	45	MVI FAILPSW+16-1,X'01' Test number...
0000021C	E300 0950 0004		00000950	46	LG R0,=XL8'0000000000000001'
00000222	E300 0A5C 0038		00000A5C	47	AGH R0,=H'123'
00000228	A7D4 0194		00000550	48	BRC B'1101',FAILURE not cc2 > 0, no oflow
0000022C	E300 0958 0020		00000958	49	CG R0,=XL8'000000000000007C'
00000232	A774 018F		00000550	50	JNE FAILURE
				51	*
00000236	E300 0960 0004		00000960	52	LG R0,=XL8'FFFFFFFFFFFFFFF'
0000023C	E300 0A5E 0038		00000A5E	53	AGH R0,=H'-123'
00000242	A7B4 0187		00000550	54	BRC B'1011',FAILURE not cc1 < 0, no oflow
00000246	E300 0968 0020		00000968	55	CG R0,=XL8'FFFFFFFFFFFFFFF84'
0000024C	A774 0182		00000550	56	JNE FAILURE
				57	*
00000250	E300 0960 0004		00000960	58	LG R0,=XL8'FFFFFFFFFFFFFFF'
00000256	E300 0A60 0038		00000A60	59	AGH R0,=H'1'
0000025C	A774 017A		00000550	60	BRC B'0111',FAILURE not cc0 = 0, no oflow
00000260	E300 0970 0020		00000970	61	CG R0,=XL8'0000000000000000'
00000266	A774 0175		00000550	62	JNE FAILURE
				64	*
				65	** Subtract Halfword
				66	*
0000026A	9202 093F		0000093F	67	MVI FAILPSW+16-1,X'02' Test number...
0000026E	E300 0950 0004		00000950	68	LG R0,=XL8'0000000000000001'
00000274	E300 0A5C 0039		00000A5C	69	SGH R0,=H'123'
0000027A	A7B4 016B		00000550	70	BRC B'1011',FAILURE not cc1 < 0, no oflow
0000027E	E300 0978 0020		00000978	71	CG R0,=XL8'FFFFFFFFFFFFFFF86'
00000284	A774 0166		00000550	72	JNE FAILURE
				73	*
00000288	E300 0960 0004		00000960	74	LG R0,=XL8'FFFFFFFFFFFFFFF'
0000028E	E300 0A5E 0039		00000A5E	75	SGH R0,=H'-123'
00000294	A7D4 015E		00000550	76	BRC B'1101',FAILURE not cc2 > 0, no oflow
00000298	E300 0980 0020		00000980	77	CG R0,=XL8'000000000000007A'
0000029E	A774 0159		00000550	78	JNE FAILURE
				79	*
000002A2	E300 0960 0004		00000960	80	LG R0,=XL8'FFFFFFFFFFFFFFF'
000002A8	E300 0A62 0039		00000A62	81	SGH R0,=H'-1'
000002AE	A774 0151		00000550	82	BRC B'0111',FAILURE not cc0 = 0, no oflow
000002B2	E300 0970 0020		00000970	83	CG R0,=XL8'0000000000000000'
000002B8	A774 014C		00000550	84	JNE FAILURE

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				86 *	
				87 **	Multiply Halfword
				88 *	
000002BC	9203 093F		0000093F	89	MVI FAILPSW+16-1,X'03' Test number...
000002C0	E300 0960 0004		00000960	90	LG R0,=XL8'FFFFFFFFFFFFFFFF'
000002C6	E300 0A5C 003C		00000A5C	91	MGH R0,=H'123'
000002CC	E300 0988 0020		00000988	92	CG R0,=XL8'FFFFFFFFFFFFFFFF85'
000002D2	A774 013F		00000550	93	JNE FAILURE
				95 *	
				96 **	Multiply
				97 *	
000002D6	9204 093F		0000093F	98	MVI FAILPSW+16-1,X'04' Test number...
000002DA	E320 0990 0004		00000990	99	LG R2,=XL8'000000000000007B'
000002E0	B9EC 2002			100	MGRK R0,R2,R2
000002E4	B902 0000			101	LTGR R0,R0
000002E8	A774 0134		00000550	102	JNZ FAILURE
000002EC	E310 0998 0020		00000998	103	CG R1,=XL8'00000000000003B19'
000002F2	A774 012F		00000550	104	JNE FAILURE
				105 *	
000002F6	9205 093F		0000093F	106	MVI FAILPSW+16-1,X'05' Test number...
000002FA	E310 0990 0004		00000990	107	LG R1,=XL8'000000000000007B'
00000300	E300 0990 0084		00000990	108	MG R0,=XL8'000000000000007B'
00000306	B902 0000			109	LTGR R0,R0
0000030A	A774 0123		00000550	110	JNZ FAILURE
0000030E	E310 0998 0020		00000998	111	CG R1,=XL8'00000000000003B19'
00000314	A774 011E		00000550	112	JNE FAILURE

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				114 *	
				115 **	Multiply Single
				116 *	
00000318	9206 093F		0000093F	117	MVI FAILPSW+16-1,X'06' Test number...
0000031C	5810 0A30		00000A30	118	L R1,=XL4'7FFFFFFF'
00000320	5820 0A34		00000A34	119	L R2,=F'34800'
00000324	B9FD 2001			120	MSRKC R0,R1,R2
00000328	A7E4 0114		00000550	121	JNO FAILURE
0000032C	5900 0A38		00000A38	122	C R0,=XL4'FFFF7810'
00000330	A774 0110		00000550	123	JNE FAILURE
				124 *	
00000334	9207 093F		0000093F	125	MVI FAILPSW+16-1,X'07' Test number...
00000338	5800 0A30		00000A30	126	L R0,=XL4'7FFFFFFF'
0000033C	E300 0A34 0053		00000A34	127	MSC R0,=F'34800'
00000342	A7E4 0107		00000550	128	JNO FAILURE
00000346	5900 0A38		00000A38	129	C R0,=XL4'FFFF7810'
0000034A	A774 0103		00000550	130	JNE FAILURE
				131 *	
0000034E	9208 093F		0000093F	132	MVI FAILPSW+16-1,X'08' Test number...
00000352	E310 09A0 0004		000009A0	133	LG R1,=XL8'00000007FFFFFFF'
00000358	E320 09A8 0004		000009A8	134	LG R2,=D'34800'
0000035E	B9ED 2001			135	MSGRKC R0,R1,R2
00000362	A7D4 00F7		00000550	136	JNP FAILURE
00000366	E300 09B0 0020		000009B0	137	CG R0,=XL8'000043F7FFFF7810'
0000036C	A774 00F2		00000550	138	JNE FAILURE
				139 *	
00000370	9209 093F		0000093F	140	MVI FAILPSW+16-1,X'09' Test number...
00000374	E300 09A0 0004		000009A0	141	LG R0,=XL8'00000007FFFFFFF'
0000037A	E300 09A8 0083		000009A8	142	MSGC R0,=D'34800'
00000380	A7D4 00E8		00000550	143	JNP FAILURE
00000384	E300 09B0 0020		000009B0	144	CG R0,=XL8'000043F7FFFF7810'
0000038A	A774 00E3		00000550	145	JNE FAILURE
				147 *	
				148 **	Branch Indirect On Condition
				149 *	
0000038E	9210 093F		0000093F	150	MVI FAILPSW+16-1,X'10' Test number...
00000392	E380 0910 0047		00000910	151	BIC B'1000',ADDRAAAA
00000398	A7F4 00DC		00000550	152 BBBB	J FAILURE
0000039C	E370 0918 0047		00000918	153 AAAA	BIC B'0111',ADDRBBBB

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				155	*****
				156	* Miscellaneous-Instruction-Extensions Facility 3
				157	*****
				158	*
				159	** And With Complement
				160	*
000003A2	9211 093F		0000093F	161	MVI FAILPSW+16-1,X'11' Test number...
000003A6	5810 0A3C		00000A3C	162	L R1,=XL4'81818181'
000003AA	5820 0A40		00000A40	163	L R2,=XL4'01010101'
000003AE	B9F5 2001			164	NCRK R0,R1,R2
000003B2	5900 0A44		00000A44	165	C R0,=XL4'80808080'
000003B6	A774 00CD		00000550	166	JNE FAILURE
				167	*
000003BA	9212 093F		0000093F	168	MVI FAILPSW+16-1,X'12' Test number...
000003BE	E310 09B8 0004		000009B8	169	LG R1,=XL8'81818181818181'
000003C4	E320 09C0 0004		000009C0	170	LG R2,=XL8'01010101010101'
000003CA	B9E5 2001			171	NCGRK R0,R1,R2
000003CE	E300 09C8 0020		000009C8	172	CG R0,=XL8'80808080808080'
000003D4	A774 00BE		00000550	173	JNE FAILURE
				175	*
				176	** Move Right To Left
				177	*
000003D8	9213 093F		0000093F	178	MVI FAILPSW+16-1,X'13' Test number...
000003DC	4100 00FF		000000FF	179	LA R0,256-1
000003E0	E50A 0CC1 0FF9	00000CC1	00000FF9	180	MVCRL DST,SRC
000003E6	D5FF 0CC1 0FF9	00000CC1	00000FF9	181	CLC DST,SRC
000003EC	4770 0550		00000550	182	BNE FAILURE
				184	*
				185	** Nand
				186	*
000003F0	9214 093F		0000093F	187	MVI FAILPSW+16-1,X'14' Test number...
000003F4	5810 0A3C		00000A3C	188	L R1,=XL4'81818181'
000003F8	5820 0A48		00000A48	189	L R2,=XL4'F0F0F0F0'
000003FC	B974 2001			190	NNRK R0,R1,R2
00000400	5900 0A4C		00000A4C	191	C R0,=XL4'7F7F7F7F'
00000404	A774 00A6		00000550	192	JNE FAILURE
				193	*
00000408	9215 093F		0000093F	194	MVI FAILPSW+16-1,X'15' Test number...
0000040C	E310 09B8 0004		000009B8	195	LG R1,=XL8'81818181818181'
00000412	E320 09D0 0004		000009D0	196	LG R2,=XL8'F0F0F0F0F0F0'
00000418	B964 2001			197	NNGRK R0,R1,R2
0000041C	E300 09D8 0020		000009D8	198	CG R0,=XL8'7F7F7F7F7F7F'
00000422	A774 0097		00000550	199	JNE FAILURE

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				201 *	
				202 **	Nor
				203 *	
00000426	9216 093F		0000093F	204	MVI FAILPSW+16-1,X'16' Test number...
0000042A	5810 0A44		00000A44	205	L R1,=XL4'80808080'
0000042E	5820 0A50		00000A50	206	L R2,=XL4'08080808'
00000432	B976 2001			207	NORK R0,R1,R2
00000436	5900 0A54		00000A54	208	C R0,=XL4'77777777'
0000043A	A774 008B		00000550	209	JNE FAILURE
				210 *	
0000043E	9217 093F		0000093F	211	MVI FAILPSW+16-1,X'17' Test number...
00000442	E310 09C8 0004		000009C8	212	LG R1,=XL8'8080808080808080'
00000448	E320 09E0 0004		000009E0	213	LG R2,=XL8'0808080808080808'
0000044E	B966 2001			214	NOGRK R0,R1,R2
00000452	E300 09E8 0020		000009E8	215	CG R0,=XL8'7777777777777777'
00000458	A774 007C		00000550	216	JNE FAILURE
				218 *	
				219 **	Not Exclusive Or
				220 *	
0000045C	9218 093F		0000093F	221	MVI FAILPSW+16-1,X'18' Test number...
00000460	5810 0A3C		00000A3C	222	L R1,=XL4'81818181'
00000464	5820 0A40		00000A40	223	L R2,=XL4'01010101'
00000468	B977 2001			224	NXRK R0,R1,R2
0000046C	5900 0A4C		00000A4C	225	C R0,=XL4'7F7F7F7F'
00000470	A774 0070		00000550	226	JNE FAILURE
				227 *	
00000474	9219 093F		0000093F	228	MVI FAILPSW+16-1,X'19' Test number...
00000478	E310 09B8 0004		000009B8	229	LG R1,=XL8'8181818181818181'
0000047E	E320 09C0 0004		000009C0	230	LG R2,=XL8'0101010101010101'
00000484	B967 2001			231	NXGRK R0,R1,R2
00000488	E300 09D8 0020		000009D8	232	CG R0,=XL8'7F7F7F7F7F7F7F7F'
0000048E	A774 0061		00000550	233	JNE FAILURE
				235 *	
				236 **	Or With Complement
				237 *	
00000492	9220 093F		0000093F	238	MVI FAILPSW+16-1,X'20' Test number...
00000496	5810 0A44		00000A44	239	L R1,=XL4'80808080'
0000049A	5820 0A58		00000A58	240	L R2,=XL4'FEFEFEFE'
0000049E	B975 2001			241	OCRK R0,R1,R2
000004A2	5900 0A3C		00000A3C	242	C R0,=XL4'81818181'
000004A6	A774 0055		00000550	243	JNE FAILURE
				244 *	
000004AA	9221 093F		0000093F	245	MVI FAILPSW+16-1,X'21' Test number...
000004AE	E310 09C8 0004		000009C8	246	LG R1,=XL8'8080808080808080'
000004B4	E320 09F0 0004		000009F0	247	LG R2,=XL8'FEFEFEFEFEFEFEFE'
000004BA	B965 2001			248	OCGRK R0,R1,R2
000004BE	E300 09B8 0020		000009B8	249	CG R0,=XL8'8181818181818181'
000004C4	A774 0046		00000550	250	JNE FAILURE

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				252 *	
				253 **	Select
				254 *	
000004C8	9222 093F		0000093F	255	MVI FAILPSW+16-1,X'22' Test number...
000004CC	E300 09F8 0004		000009F8	256	LG R0,=XL8'1122334455667788'
000004D2	E310 0A00 0004		00000A00	257	LG R1,=XL8'AAAAAAAA11111111'
000004D8	E320 0A08 0004		00000A08	258	LG R2,=XL8'BBBBBBBB22222222'
000004DE	B9F0 2801			259	SELR R0,R1,R2,B'1000'
000004E2	E300 0A10 0020		00000A10	260	CG R0,=XL8'1122334411111111'
000004E8	4770 0550		00000550	261	BNE FAILURE
				262 *	
000004EC	9223 093F		0000093F	263	MVI FAILPSW+16-1,X'23' Test number...
000004F0	E300 09F8 0004		000009F8	264	LG R0,=XL8'1122334455667788'
000004F6	E310 0A00 0004		00000A00	265	LG R1,=XL8'AAAAAAAA11111111'
000004FC	E320 0A08 0004		00000A08	266	LG R2,=XL8'BBBBBBBB22222222'
00000502	B9E3 2801			267	SELGR R0,R1,R2,B'1000'
00000506	E300 0A00 0020		00000A00	268	CG R0,=XL8'AAAAAAAA11111111'
0000050C	4770 0550		00000550	269	BNE FAILURE
				271 *	
				272 **	Select High
				273 *	
00000510	9224 093F		0000093F	274	MVI FAILPSW+16-1,X'24' Test number...
00000514	E300 09F8 0004		000009F8	275	LG R0,=XL8'1122334455667788'
0000051A	E310 0A00 0004		00000A00	276	LG R1,=XL8'AAAAAAAA11111111'
00000520	E320 0A08 0004		00000A08	277	LG R2,=XL8'BBBBBBBB22222222'
00000526	B9C0 2801			278	SELFHR R0,R1,R2,B'1000'
0000052A	E300 0A18 0020		00000A18	279	CG R0,=XL8'AAAAAAA55667788'
00000530	4770 0550		00000550	280	BNE FAILURE
				282 *	
				283 **	Population Count
				284 *	
00000534	9225 093F		0000093F	285	MVI FAILPSW+16-1,X'25' Test number...
00000538	E310 0A20 0004		00000A20	286	LG R1,=XL8'0102040810204080'
0000053E	B9E1 8001			287	POPCNT R0,R1,B'1000'
00000542	E300 0A28 0020		00000A28	288	CG R0,=D'8'
00000548	4770 0550		00000550	289	BNE FAILURE

LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
				291	*****			
				292	*	SUCCESS!		
				293	*****			
000054C	B2B2 0920		0000920	295	SUCCESS	LPSWE	GOODPSW	Load test completed successfully PSW
				297	*****			
				298	*	FAILURE!		
				299	*****			
0000550	B2B2 0930		0000930	301	FAILURE	LPSWE	FAILPSW	Load the test FAILED somewhere!! PSW
				303	*****			
				304	*	PROGRAM CHECK!		
				305	*****			
0000554	D200 094F 093F	000094F	000093F	307	PGMCHK	MVC	PROGPSW+16-1(1),FAILPSW+16-1	Copy test number to PSW
000055A	B2B2 0940		0000940	308	LPSWE	PROGPSW		UNEXPECTED PROGRAM CHECK

LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
				310	*****			
				311	*	WORKING STORAGE		
				312	*****			
0000055E		0000055E	00000FF9	314	ORG	FAC5861+X'FF9'	(odd alignment + page cross)	
00000FF9				316	SRC	DS	0CL256	MVCRL instruction source operand
00000FF9	C1C1C1C1	C1C1C1C1		317		DC	256C'A'	
000010F9		000010F9	00000CC1	319	ORG	FAC5861+X'CC1'	(odd alignment)	
00000CC1				321	DST	DS	0CL256	MVCRL instruction destination operand
00000CC1	C2C2C2C2	C2C2C2C2		322		DC	256C'B'	
00000DC1		00000DC1	00000800	324	ORG	FAC5861+X'800'	(primary working storage)	
00000800	00000000	00000000		326	FACLIST	DC	XL256'00'	Facility List
		0000003A	00000001	328	M2FACNUM	EQU	58	Miscellaneous-Instruction-Extensions Facility 2
		00000007	00000001	329	M2FACBYT	EQU	X'07'	
		00000020	00000001	330	M2FACBIT	EQU	X'20'	
00000900	9258 093F		0000093F	331	M2FAIL	MVI	FAILPSW+16-1,X'58'	
00000904	A7F4 FE26		00000550	332		J	FAILURE	
		0000003D	00000001	334	M3FACNUM	EQU	61	Miscellaneous-Instruction-Extensions Facility 3
		00000007	00000001	335	M3FACBYT	EQU	X'07'	
		00000004	00000001	336	M3FACBIT	EQU	X'04'	
00000908	9261 093F		0000093F	337	M3FAIL	MVI	FAILPSW+16-1,X'61'	
0000090C	A7F4 FE22		00000550	338		J	FAILURE	
00000910	00000000	0000039C		340	ADDRAAAA	DC	AD(AAAA)	BIC instruction branch address
00000918	00000000	00000398		341	ADDRBBBB	DC	AD(BBBB)	BIC instruction branch address
00000920				343		DC	0D'0'	(alignment)
00000920	00020001	80000000		345	GOODPSW	DC	XL8'0002000180000000'	
00000928	00000000	00000000		346		DC	XL4'00000000',A(X'00000000')	
00000930	00020001	80000000		348	FAILPSW	DC	XL8'0002000180000000'	
00000938	00000BAD	000000FF		349		DC	XL4'00000BAD',A(X'000000FF')	FF = code where we failed
00000940	00020001	80000000		351	PROGPSW	DC	XL8'0002000180000000'	
00000948	0000DEAD	000000FF		352		DC	XL4'0000DEAD',A(X'000000FF')	FF = code where we failed

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				354 *****
				355 * Literals Pool
				356 *****
00000950				358 LTORG ,
00000950	00000000	00000001		359 =XL8 '0000000000000001'
00000958	00000000	0000007C		360 =XL8 '000000000000007C'
00000960	FFFFFFFF	FFFFFFFF		361 =XL8 'FFFFFFFFFFFFFFFF'
00000968	FFFFFFFF	FFFFFFF84		362 =XL8 'FFFFFFFFFFFFFFFF84'
00000970	00000000	00000000		363 =XL8 '0000000000000000'
00000978	FFFFFFFF	FFFFFFF86		364 =XL8 'FFFFFFFFFFFFFFFF86'
00000980	00000000	0000007A		365 =XL8 '000000000000007A'
00000988	FFFFFFFF	FFFFFFF85		366 =XL8 'FFFFFFFFFFFFFFFF85'
00000990	00000000	0000007B		367 =XL8 '000000000000007B'
00000998	00000000	00003B19		368 =XL8 '0000000000003B19'
000009A0	00000000	7FFFFFFF		369 =XL8 '000000007FFFFFFF'
000009A8	00000000	000087F0		370 =D '34800'
000009B0	000043F7	FFFF7810		371 =XL8 '000043F7FFFF7810'
000009B8	81818181	81818181		372 =XL8 '8181818181818181'
000009C0	01010101	01010101		373 =XL8 '0101010101010101'
000009C8	80808080	80808080		374 =XL8 '8080808080808080'
000009D0	F0F0F0F0	F0F0F0F0		375 =XL8 'F0F0F0F0F0F0F0F0'
000009D8	7F7F7F7F	7F7F7F7F		376 =XL8 '7F7F7F7F7F7F7F7F'
000009E0	08080808	08080808		377 =XL8 '0808080808080808'
000009E8	77777777	77777777		378 =XL8 '7777777777777777'
000009F0	FEFEFEFE	FEFEFEFE		379 =XL8 'FEFEFEFEFEFEFEFE'
000009F8	11223344	55667788		380 =XL8 '1122334455667788'
00000A00	AAAAAAAA	11111111		381 =XL8 'AAAAAAAA11111111'
00000A08	BBBBBBBB	22222222		382 =XL8 'BBBBBBBB22222222'
00000A10	11223344	11111111		383 =XL8 '1122334411111111'
00000A18	AAAAAAAA	55667788		384 =XL8 'AAAAAAAA55667788'
00000A20	01020408	10204080		385 =XL8 '0102040810204080'
00000A28	00000000	00000008		386 =D '8'
00000A30	7FFFFFFF			387 =XL4 '7FFFFFFF'
00000A34	000087F0			388 =F '34800'
00000A38	FFFF7810			389 =XL4 'FFFF7810'
00000A3C	81818181			390 =XL4 '81818181'
00000A40	01010101			391 =XL4 '01010101'
00000A44	80808080			392 =XL4 '80808080'
00000A48	F0F0F0F0			393 =XL4 'F0F0F0F0'
00000A4C	7F7F7F7F			394 =XL4 '7F7F7F7F'
00000A50	08080808			395 =XL4 '08080808'
00000A54	77777777			396 =XL4 '77777777'
00000A58	FEFEFEFE			397 =XL4 'FEFEFEFE'
00000A5C	007B			398 =H '123'
00000A5E	FF85			399 =H ' -123'
00000A60	0001			400 =H '1'
00000A62	FFFF			401 =H ' -1'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				403 *****
				404 * Register equates
				405 *****
		00000000	00000001	407 R0 EQU 0
		00000001	00000001	408 R1 EQU 1
		00000002	00000001	409 R2 EQU 2
		00000003	00000001	410 R3 EQU 3
		00000004	00000001	411 R4 EQU 4
		00000005	00000001	412 R5 EQU 5
		00000006	00000001	413 R6 EQU 6
		00000007	00000001	414 R7 EQU 7
		00000008	00000001	415 R8 EQU 8
		00000009	00000001	416 R9 EQU 9
		0000000A	00000001	417 R10 EQU 10
		0000000B	00000001	418 R11 EQU 11
		0000000C	00000001	419 R12 EQU 12
		0000000D	00000001	420 R13 EQU 13
		0000000E	00000001	421 R14 EQU 14
		0000000F	00000001	422 R15 EQU 15
				424 END

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
AAAA	I	00039C	6	153	340
ADDRAAAA	A	000910	8	340	151
ADDRBBBB	A	000918	8	341	153
BBBB	I	000398	4	152	341
BEGIN	I	000200	4	30	19
DST	C	000CC1	256	321	180 181
FAC5861	J	000000	4345	15	18 21 28 314 319 324 16
FACLIST	X	000800	256	326	30 31 33 36
FAILPSW	X	000930	8	348	45 67 89 98 106 117 125 132 140 150 161 168 178 187 194 204 211
FAILURE	I	000550	4	301	48 50 54 56 60 62 70 72 76 78 82 84 93 102 104 110 112
					121 123 128 130 136 138 143 145 152 166 173 182 192 199 209 216 226
					233 243 250 261 269 280 289 332 338
GOODPSW	X	000920	8	345	295
IMAGE	I	000000	4345	0	
M2FACBIT	U	000020	1	330	33
M2FACBYT	U	000007	1	329	33
M2FACNUM	U	00003A	1	328	
M2FAIL	I	000900	4	331	34
M3FACBIT	U	000004	1	336	36
M3FACBYT	U	000007	1	335	36
M3FACNUM	U	00003D	1	334	
M3FAIL	I	000908	4	337	37
PGMCHK	I	000554	6	307	22
PROGPSW	X	000940	8	351	307 308
R0	U	000000	1	407	16 30 46 47 49 52 53 55 58 59 61 68 69 71 74 75 77
					80 81 83 90 91 92 100 101 108 109 120 122 126 127 129 135 137
					141 142 144 164 165 171 172 179 190 191 197 198 207 208 214 215 224
					225 231 232 241 242 248 249 256 259 260 264 267 268 275 278 279 287
					288
R1	U	000001	1	408	103 107 111 118 120 133 135 162 164 169 171 188 190 195 197 205 207
					212 214 222 224 229 231 239 241 246 248 257 259 265 267 276 278 286
					287
R10	U	00000A	1	417	
R11	U	00000B	1	418	
R12	U	00000C	1	419	
R13	U	00000D	1	420	
R14	U	00000E	1	421	
R15	U	00000F	1	422	
R2	U	000002	1	409	99 100 119 120 134 135 163 164 170 171 189 190 196 197 206 207 213
					214 223 224 230 231 240 241 247 248 258 259 266 267 277 278
R3	U	000003	1	410	
R4	U	000004	1	411	
R5	U	000005	1	412	
R6	U	000006	1	413	
R7	U	000007	1	414	
R8	U	000008	1	415	
R9	U	000009	1	416	
SRC	C	000FF9	256	316	180 181
SUCCESS	I	00054C	4	295	
ZPGMNEW	X	0001D0	8	22	
=D'34800'	D	0009A8	8	370	134 142

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
=D'8'	D	000A28	8	386	288
=F'34800'	F	000A34	4	388	119 127
=H'-1'	H	000A62	2	401	81
=H'-123'	H	000A5E	2	399	53 75
=H'1'	H	000A60	2	400	59
=H'123'	H	000A5C	2	398	47 69 91
=XL4'01010101'	X	000A40	4	391	163 223
=XL4'08080808'	X	000A50	4	395	206
=XL4'77777777'	X	000A54	4	396	208
=XL4'7F7F7F7F'	X	000A4C	4	394	191 225
=XL4'7FFFFFFF'	X	000A30	4	387	118 126
=XL4'80808080'	X	000A44	4	392	165 205 239
=XL4'81818181'	X	000A3C	4	390	162 188 222 242
=XL4'F0F0F0F0'	X	000A48	4	393	189
=XL4'FEFEFEFE'	X	000A58	4	397	240
=XL4'FFFF7810'	X	000A38	4	389	122 129
=XL8'0000000000000000'	X	000970	8	363	61 83
=XL8'0000000000000001'	X	000950	8	359	46 68
=XL8'000000000000007A'	X	000980	8	365	77
=XL8'000000000000007B'	X	000990	8	367	99 107 108
=XL8'000000000000007C'	X	000958	8	360	49
=XL8'0000000000003B19'	X	000998	8	368	103 111
=XL8'00000007FFFFFFF'	X	0009A0	8	369	133 141
=XL8'000043F7FFFFFF7810'	X	0009B0	8	371	137 144
=XL8'0101010101010101'	X	0009C0	8	373	170 230
=XL8'0102040810204080'	X	000A20	8	385	286
=XL8'0808080808080808'	X	0009E0	8	377	213
=XL8'1122334411111111'	X	000A10	8	383	260
=XL8'1122334455667788'	X	0009F8	8	380	256 264 275
=XL8'7777777777777777'	X	0009E8	8	378	215
=XL8'7F7F7F7F7F7F7F7F'	X	0009D8	8	376	198 232
=XL8'8080808080808080'	X	0009C8	8	374	172 212 246
=XL8'8181818181818181'	X	0009B8	8	372	169 195 229 249
=XL8'AAAAAAAA11111111'	X	000A00	8	381	257 265 268 276

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
=XL8'AAAAAAA55667788'	X	000A18	8	384	279
=XL8'BBBBBBB2222222'	X	000A08	8	382	258 266 277
=XL8'F0F0F0F0F0F0F0'	X	0009D0	8	375	196
=XL8'FEFEFEFEFEFEFE'	X	0009F0	8	379	247
=XL8'FFFFFFFFFFFFFF84'	X	000968	8	362	55
=XL8'FFFFFFFFFFFFFF85'	X	000988	8	366	92
=XL8'FFFFFFFFFFFFFF86'	X	000978	8	364	71
=XL8'FFFFFFFFFFFFFFF'	X	000960	8	361	52 58 74 80 90

MACRO DEFN REFERENCES

No defined macros

DESC	SYMBOL	SIZE	POS	ADDR
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Entry: 0

Image	IMAGE	4345	0000-10F8	0000-10F8
Region		4345	0000-10F8	0000-10F8
CSECT	FAC5861	4345	0000-10F8	0000-10F8

STMT

FILE NAME

1 c:\Users\Fish\Documents\Visual Studio 2008\Projects\MyProjects\ASMA-0\FAC5861\FAC5861.asm

\*\* NO ERRORS FOUND \*\*