

- Group -	- Encoding -	#S = immediate (I=1). S = register. #D = immediate (L=1). D = register.	- Assembly Syntax -	0	- Alias -
Branch A - Call	EEEE 1101101 RAA AAAAAAAAAA AAAAAAAAAA		CALL #(\)A	403	.
Branch A - Call	EEEE 1101110 RAA AAAAAAAAAA AAAAAAAAAA		CALLA #(\)A	404	.
Branch A - Call	EEEE 1101111 RAA AAAAAAAAAA AAAAAAAAAA		CALLB #(\)A	405	.
Branch A - Call	EEEE 11100WW RAA AAAAAAAAAA AAAAAAAAAA		CALLD PA/PB/PTRA/PTRB, #(\)A	406	.
Branch A - Jump	EEEE 1101100 RAA AAAAAAAAAA AAAAAAAAAA		JMP #(\)A	402	.
Branch D - Call	EEEE 1101011 CZ0 DDDDDDDDD 000101101		CALL D {WC/WZ/WCZ}	318	.
Branch D - Call	EEEE 1101011 CZ0 DDDDDDDDD 000101110		CALLA D {WC/WZ/WCZ}	320	.
Branch D - Call	EEEE 1101011 CZ0 DDDDDDDDD 000101111		CALLB D {WC/WZ/WCZ}	322	.
Branch D - Call+Skip	EEEE 1101011 00L DDDDDDDDD 000110011		EXECF {#}D	327	.
Branch D - Jump	EEEE 1101011 CZ0 DDDDDDDDD 000101100		JMP D {WC/WZ/WCZ}	317	.
Branch D - Jump	EEEE 1101011 00L DDDDDDDDD 000110000		JMPREL {#}D	324	.
Branch D - Jump+Skip	EEEE 1101011 00L DDDDDDDDD 000110010		SKIPF {#}D	326	.
Branch D - Skip	EEEE 1101011 00L DDDDDDDDD 000110001		SKIP {#}D	325	.
Branch Repeat	EEEE 1100110 1LI DDDDDDDDD SSSSSSSSS		REP {#}D, {#}S	233	.
Branch Return	EEEE 1101011 CZ1 000000000 000101101		RET {WC/WZ/WCZ}	319	.
Branch Return	EEEE 1101011 CZ1 000000000 000101110		RETA {WC/WZ/WCZ}	321	.
Branch Return	EEEE 1101011 CZ1 000000000 000101111		RETB {WC/WZ/WCZ}	323	.
Branch S - Call	EEEE 1011001 CZI DDDDDDDDD SSSSSSSSS		CALLD D, {#}S {WC/WZ/WCZ}	157	.
Branch S - Call	EEEE 1011010 0LI DDDDDDDDD SSSSSSSSS		CALLPA {#}D, {#}S	166	.
Branch S - Call	EEEE 1011010 1LI DDDDDDDDD SSSSSSSSS		CALLPB {#}D, {#}S	167	.
Branch S - Mod & Test	EEEE 1011011 00I DDDDDDDDD SSSSSSSSS		DJZ D, {#}S	168	.
Branch S - Mod & Test	EEEE 1011011 01I DDDDDDDDD SSSSSSSSS		DJNZ D, {#}S	169	.
Branch S - Mod & Test	EEEE 1011011 10I DDDDDDDDD SSSSSSSSS		DJF D, {#}S	170	.
Branch S - Mod & Test	EEEE 1011011 11I DDDDDDDDD SSSSSSSSS		DJNF D, {#}S	171	.
Branch S - Mod & Test	EEEE 1011100 00I DDDDDDDDD SSSSSSSSS		IJZ D, {#}S	172	.
Branch S - Mod & Test	EEEE 1011100 01I DDDDDDDDD SSSSSSSSS		IJNZ D, {#}S	173	.
Branch S - Resume	EEEE 1011001 110 111110000 111110001		RESI3	158	alias
Branch S - Resume	EEEE 1011001 110 111110010 111110011		RESI2	159	alias
Branch S - Resume	EEEE 1011001 110 111110100 111110101		RESI1	160	alias
Branch S - Resume	EEEE 1011001 110 111111110 111111111		RESI0	161	alias
Branch S - Return	EEEE 1011001 110 111111111 111110001		RETI3	162	alias
Branch S - Return	EEEE 1011001 110 111111111 111110011		RETI2	163	alias
Branch S - Return	EEEE 1011001 110 111111111 111110101		RETI1	164	alias
Branch S - Return	EEEE 1011001 110 111111111 111111111		RETI0	165	alias
Branch S - Test	EEEE 1011100 10I DDDDDDDDD SSSSSSSSS		TJZ D, {#}S	174	.
Branch S - Test	EEEE 1011100 11I DDDDDDDDD SSSSSSSSS		TJNZ D, {#}S	175	.
Branch S - Test	EEEE 1011101 00I DDDDDDDDD SSSSSSSSS		TJF D, {#}S	176	.
Branch S - Test	EEEE 1011101 01I DDDDDDDDD SSSSSSSSS		TJNF D, {#}S	177	.

Branch S - Test	EEEE	1011101	10I	DDDDDDDD	SSSSSSSS	TJS D, {#}S	178	.
Branch S - Test	EEEE	1011101	11I	DDDDDDDD	SSSSSSSS	TJNS D, {#}S	179	.
Branch S - Test	EEEE	1011110	00I	DDDDDDDD	SSSSSSSS	TJV D, {#}S	180	.
Color Space Converter	EEEE	1101011	00L	DDDDDDDD	000111000	SETCY {#}D	333	.
Color Space Converter	EEEE	1101011	00L	DDDDDDDD	000111001	SETCI {#}D	334	.
Color Space Converter	EEEE	1101011	00L	DDDDDDDD	000111010	SETCQ {#}D	335	.
Color Space Converter	EEEE	1101011	00L	DDDDDDDD	000111011	SETCFRQ {#}D	336	.
Color Space Converter	EEEE	1101011	00L	DDDDDDDD	000111100	SETCMOD {#}D	337	.
CORDIC Solver	EEEE	1101000	0LI	DDDDDDDD	SSSSSSSS	QMUL {#}D, {#}S	235	.
CORDIC Solver	EEEE	1101000	1LI	DDDDDDDD	SSSSSSSS	QDIV {#}D, {#}S	236	.
CORDIC Solver	EEEE	1101001	0LI	DDDDDDDD	SSSSSSSS	QFRAC {#}D, {#}S	237	.
CORDIC Solver	EEEE	1101001	1LI	DDDDDDDD	SSSSSSSS	QSQRT {#}D, {#}S	238	.
CORDIC Solver	EEEE	1101010	0LI	DDDDDDDD	SSSSSSSS	QROTATE {#}D, {#}S	239	.
CORDIC Solver	EEEE	1101010	1LI	DDDDDDDD	SSSSSSSS	QVECTOR {#}D, {#}S	240	.
CORDIC Solver	EEEE	1101011	00L	DDDDDDDD	000001110	QLOG {#}D	248	.
CORDIC Solver	EEEE	1101011	00L	DDDDDDDD	000001111	QEXP {#}D	249	.
CORDIC Solver	EEEE	1101011	CZ0	DDDDDDDD	000011000	GETQX D {WC/WZ/WCZ}	258	.
CORDIC Solver	EEEE	1101011	CZ0	DDDDDDDD	000011001	GETQY D {WC/WZ/WCZ}	259	.
Events - Attention	EEEE	1101011	00L	DDDDDDDD	000111111	COGATN {#}D	340	.
Events - Branch	EEEE	1011110	01I	00000000	SSSSSSSS	JINT {#}S	181	.
Events - Branch	EEEE	1011110	01I	00000001	SSSSSSSS	JCT1 {#}S	182	.
Events - Branch	EEEE	1011110	01I	00000010	SSSSSSSS	JCT2 {#}S	183	.
Events - Branch	EEEE	1011110	01I	00000011	SSSSSSSS	JCT3 {#}S	184	.
Events - Branch	EEEE	1011110	01I	00000100	SSSSSSSS	JSE1 {#}S	185	.
Events - Branch	EEEE	1011110	01I	00000101	SSSSSSSS	JSE2 {#}S	186	.
Events - Branch	EEEE	1011110	01I	00000110	SSSSSSSS	JSE3 {#}S	187	.
Events - Branch	EEEE	1011110	01I	00000111	SSSSSSSS	JSE4 {#}S	188	.
Events - Branch	EEEE	1011110	01I	00001000	SSSSSSSS	JPAT {#}S	189	.
Events - Branch	EEEE	1011110	01I	00001001	SSSSSSSS	JFBW {#}S	190	.
Events - Branch	EEEE	1011110	01I	00001010	SSSSSSSS	JXMT {#}S	191	.
Events - Branch	EEEE	1011110	01I	00001011	SSSSSSSS	JXFI {#}S	192	.
Events - Branch	EEEE	1011110	01I	00001100	SSSSSSSS	JXRO {#}S	193	.
Events - Branch	EEEE	1011110	01I	00001101	SSSSSSSS	JXRL {#}S	194	.
Events - Branch	EEEE	1011110	01I	00001110	SSSSSSSS	JATN {#}S	195	.
Events - Branch	EEEE	1011110	01I	00001111	SSSSSSSS	JQMT {#}S	196	.
Events - Branch	EEEE	1011110	01I	00001000	SSSSSSSS	JNINT {#}S	197	.
Events - Branch	EEEE	1011110	01I	00001001	SSSSSSSS	JNCT1 {#}S	198	.
Events - Branch	EEEE	1011110	01I	00001010	SSSSSSSS	JNCT2 {#}S	199	.
Events - Branch	EEEE	1011110	01I	00001011	SSSSSSSS	JNCT3 {#}S	200	.
Events - Branch	EEEE	1011110	01I	00001010	SSSSSSSS	JNSE1 {#}S	201	.

Events - Branch	EEEE 1011110 01I 000010101 SSSSSSSSS	JNSE2 {#}S	202	.
Events - Branch	EEEE 1011110 01I 000010110 SSSSSSSSS	JNSE3 {#}S	203	.
Events - Branch	EEEE 1011110 01I 000010111 SSSSSSSSS	JNSE4 {#}S	204	.
Events - Branch	EEEE 1011110 01I 000011000 SSSSSSSSS	JNPAT {#}S	205	.
Events - Branch	EEEE 1011110 01I 000011001 SSSSSSSSS	JNFBW {#}S	206	.
Events - Branch	EEEE 1011110 01I 000011010 SSSSSSSSS	JNXMT {#}S	207	.
Events - Branch	EEEE 1011110 01I 000011011 SSSSSSSSS	JNXFI {#}S	208	.
Events - Branch	EEEE 1011110 01I 000011100 SSSSSSSSS	JNXRO {#}S	209	.
Events - Branch	EEEE 1011110 01I 000011101 SSSSSSSSS	JNXRL {#}S	210	.
Events - Branch	EEEE 1011110 01I 000011110 SSSSSSSSS	JNATN {#}S	211	.
Events - Branch	EEEE 1011110 01I 000011111 SSSSSSSSS	JNQMT {#}S	212	.
Events - Configuration	EEEE 1010011 00I DDDDDDDDD SSSSSSSSS	ADDCT1 D, {#}S	145	.
Events - Configuration	EEEE 1010011 01I DDDDDDDDD SSSSSSSSS	ADDCT2 D, {#}S	146	.
Events - Configuration	EEEE 1010011 10I DDDDDDDDD SSSSSSSSS	ADDCT3 D, {#}S	147	.
Events - Configuration	EEEE 1011111 1LI DDDDDDDDD SSSSSSSSS	SETPAT {#}D, {#}S	215	.
Events - Configuration	EEEE 1101011 00L DDDDDDDDD 000100000	SETSE1 {#}D	267	.
Events - Configuration	EEEE 1101011 00L DDDDDDDDD 000100001	SETSE2 {#}D	268	.
Events - Configuration	EEEE 1101011 00L DDDDDDDDD 000100010	SETSE3 {#}D	269	.
Events - Configuration	EEEE 1101011 00L DDDDDDDDD 000100011	SETSE4 {#}D	270	.
Events - Poll	EEEE 1101011 CZ0 000000000 000100100	POLLINT {WC/WZ/WCZ}	271	.
Events - Poll	EEEE 1101011 CZ0 000000001 000100100	POLLCT1 {WC/WZ/WCZ}	272	.
Events - Poll	EEEE 1101011 CZ0 000000010 000100100	POLLCT2 {WC/WZ/WCZ}	273	.
Events - Poll	EEEE 1101011 CZ0 000000011 000100100	POLLCT3 {WC/WZ/WCZ}	274	.
Events - Poll	EEEE 1101011 CZ0 000000100 000100100	POLLSE1 {WC/WZ/WCZ}	275	.
Events - Poll	EEEE 1101011 CZ0 000000101 000100100	POLLSE2 {WC/WZ/WCZ}	276	.
Events - Poll	EEEE 1101011 CZ0 000000110 000100100	POLLSE3 {WC/WZ/WCZ}	277	.
Events - Poll	EEEE 1101011 CZ0 000000111 000100100	POLLSE4 {WC/WZ/WCZ}	278	.
Events - Poll	EEEE 1101011 CZ0 000001000 000100100	POLLPAT {WC/WZ/WCZ}	279	.
Events - Poll	EEEE 1101011 CZ0 000001001 000100100	POLLFBW {WC/WZ/WCZ}	280	.
Events - Poll	EEEE 1101011 CZ0 000001010 000100100	POLLXMT {WC/WZ/WCZ}	281	.
Events - Poll	EEEE 1101011 CZ0 000001011 000100100	POLLXFI {WC/WZ/WCZ}	282	.
Events - Poll	EEEE 1101011 CZ0 000001100 000100100	POLLXRO {WC/WZ/WCZ}	283	.
Events - Poll	EEEE 1101011 CZ0 000001101 000100100	POLLXRL {WC/WZ/WCZ}	284	.
Events - Poll	EEEE 1101011 CZ0 000001110 000100100	POLLATN {WC/WZ/WCZ}	285	.
Events - Poll	EEEE 1101011 CZ0 000001111 000100100	POLLQMT {WC/WZ/WCZ}	286	.
Events - Wait	EEEE 1101011 CZ0 000010000 000100100	WAITINT {WC/WZ/WCZ}	287	.
Events - Wait	EEEE 1101011 CZ0 000010001 000100100	WAITCT1 {WC/WZ/WCZ}	288	.
Events - Wait	EEEE 1101011 CZ0 000010010 000100100	WAITCT2 {WC/WZ/WCZ}	289	.
Events - Wait	EEEE 1101011 CZ0 000010011 000100100	WAITCT3 {WC/WZ/WCZ}	290	.
Events - Wait	EEEE 1101011 CZ0 000010100 000100100	WAITSE1 {WC/WZ/WCZ}	291	.

Events - Wait	EEEE	1101011	CZO	000010101	000100100	WAITSE2 {WC/WZ/WCZ}	292	.
Events - Wait	EEEE	1101011	CZO	000010110	000100100	WAITSE3 {WC/WZ/WCZ}	293	.
Events - Wait	EEEE	1101011	CZO	000010111	000100100	WAITSE4 {WC/WZ/WCZ}	294	.
Events - Wait	EEEE	1101011	CZO	000011000	000100100	WAITPAT {WC/WZ/WCZ}	295	.
Events - Wait	EEEE	1101011	CZO	000011001	000100100	WAITFBW {WC/WZ/WCZ}	296	.
Events - Wait	EEEE	1101011	CZO	000011010	000100100	WAITXMT {WC/WZ/WCZ}	297	.
Events - Wait	EEEE	1101011	CZO	000011011	000100100	WAITXFI {WC/WZ/WCZ}	298	.
Events - Wait	EEEE	1101011	CZO	000011100	000100100	WAITXRO {WC/WZ/WCZ}	299	.
Events - Wait	EEEE	1101011	CZO	000011101	000100100	WAITXRL {WC/WZ/WCZ}	300	.
Events - Wait	EEEE	1101011	CZO	000011110	000100100	WAITATN {WC/WZ/WCZ}	301	.
Hub Control - Cogs	EEEE	1100111	CLI	DDDDDDDD	SSSSSSSS	COGINIT {#}D,{#}S {WC}	234	.
Hub Control - Cogs	EEEE	1101011	COL	DDDDDDDD	00000001	COGID {#}D {WC}	242	.
Hub Control - Cogs	EEEE	1101011	00L	DDDDDDDD	00000011	COGSTOP {#}D	243	.
Hub Control - Locks	EEEE	1101011	C00	DDDDDDDD	000000100	LOCKNEW D {WC}	244	.
Hub Control - Locks	EEEE	1101011	00L	DDDDDDDD	000000101	LOCKRET {#}D	245	.
Hub Control - Locks	EEEE	1101011	C0L	DDDDDDDD	000000110	LOCKTRY {#}D {WC}	246	.
Hub Control - Locks	EEEE	1101011	C0L	DDDDDDDD	000000111	LOCKREL {#}D {WC}	247	.
Hub Control - Multi	EEEE	1101011	00L	DDDDDDDD	000000000	HUBSET {#}D	241	.
Hub FIFO	EEEE	1101011	000	DDDDDDDD	000110100	GETPTR D	328	.
Hub FIFO - New Block	EEEE	1100100	1LI	DDDDDDDD	SSSSSSSS	FBLOCK {#}D,{#}S	228	.
Hub FIFO - New Read	EEEE	1100011	1LI	DDDDDDDD	SSSSSSSS	RDFAST {#}D,{#}S	226	.
Hub FIFO - New Write	EEEE	1100100	0LI	DDDDDDDD	SSSSSSSS	WRFAST {#}D,{#}S	227	.
Hub FIFO - Read	EEEE	1101011	CZO	DDDDDDDD	000010000	RFBYTE D {WC/WZ/WCZ}	250	.
Hub FIFO - Read	EEEE	1101011	CZO	DDDDDDDD	000010001	RFWORD D {WC/WZ/WCZ}	251	.
Hub FIFO - Read	EEEE	1101011	CZO	DDDDDDDD	000010010	RFLONG D {WC/WZ/WCZ}	252	.
Hub FIFO - Read	EEEE	1101011	CZO	DDDDDDDD	000010011	RFVAR D {WC/WZ/WCZ}	253	.
Hub FIFO - Read	EEEE	1101011	CZO	DDDDDDDD	000010100	RFVARS D {WC/WZ/WCZ}	254	.
Hub FIFO - Write	EEEE	1101011	00L	DDDDDDDD	000010101	WFBYTE {#}D	255	.
Hub FIFO - Write	EEEE	1101011	00L	DDDDDDDD	000010110	WFWORD {#}D	256	.
Hub FIFO - Write	EEEE	1101011	00L	DDDDDDDD	000010111	WFLONG {#}D	257	.
Hub RAM - Read	EEEE	1010110	CZI	DDDDDDDD	SSSSSSSS	RDBYTE D,{#}S/P {WC/WZ/WCZ}	152	.
Hub RAM - Read	EEEE	1010111	CZI	DDDDDDDD	SSSSSSSS	RDWORD D,{#}S/P {WC/WZ/WCZ}	153	.
Hub RAM - Read	EEEE	1011000	CZI	DDDDDDDD	SSSSSSSS	RDLONG D,{#}S/P {WC/WZ/WCZ}	154	.
Hub RAM - Read	EEEE	1011000	CZ1	DDDDDDDD	101011111	POPA D {WC/WZ/WCZ}	155	alias
Hub RAM - Read	EEEE	1011000	CZ1	DDDDDDDD	110111111	POPB D {WC/WZ/WCZ}	156	alias
Hub RAM - Write	EEEE	1010011	11I	DDDDDDDD	SSSSSSSS	WMLONG D,{#}S/P	148	.
Hub RAM - Write	EEEE	1100010	0LI	DDDDDDDD	SSSSSSSS	WRBYTE {#}D,{#}S/P	221	.
Hub RAM - Write	EEEE	1100010	1LI	DDDDDDDD	SSSSSSSS	WRWORD {#}D,{#}S/P	222	.
Hub RAM - Write	EEEE	1100011	0LI	DDDDDDDD	SSSSSSSS	WRLONG {#}D,{#}S/P	223	.
Hub RAM - Write	EEEE	1100011	0L1	DDDDDDDD	101100001	PUSHA {#}D	224	alias

Hub RAM - Write	EEEE 1100011 0L1 DDDDDDDDD 111100001	PUSHB {#}D	225	alias
Instruction Prefix	0000 -----	_RET_ <inst> <ops>	411	.
Instruction Prefix	0001 -----	IF_NC_AND_NZ <inst> <ops>	412	.
Instruction Prefix	0001 -----	IF_NZ_AND_NC <inst> <ops>	413	alias
Instruction Prefix	0001 -----	IF_A <inst> <ops>	414	alias
Instruction Prefix	0001 -----	IF_00 <inst> <ops>	415	alias
Instruction Prefix	0010 -----	IF_NC_AND_Z <inst> <ops>	416	.
Instruction Prefix	0010 -----	IF_Z_AND_NC <inst> <ops>	417	alias
Instruction Prefix	0010 -----	IF_01 <inst> <ops>	418	alias
Instruction Prefix	0011 -----	IF_NC <inst> <ops>	419	.
Instruction Prefix	0011 -----	IF_AE <inst> <ops>	420	alias
Instruction Prefix	0011 -----	IF_0X <inst> <ops>	421	alias
Instruction Prefix	0100 -----	IF_C_AND_NZ <inst> <ops>	422	.
Instruction Prefix	0100 -----	IF_NZ_AND_C <inst> <ops>	423	alias
Instruction Prefix	0100 -----	IF_10 <inst> <ops>	424	alias
Instruction Prefix	0101 -----	IF_NZ <inst> <ops>	425	.
Instruction Prefix	0101 -----	IF_NE <inst> <ops>	426	alias
Instruction Prefix	0101 -----	IF_X0 <inst> <ops>	427	alias
Instruction Prefix	0110 -----	IF_C_NE_Z <inst> <ops>	428	.
Instruction Prefix	0110 -----	IF_Z_NE_C <inst> <ops>	429	alias
Instruction Prefix	0110 -----	IF_DIFF <inst> <ops>	430	alias
Instruction Prefix	0111 -----	IF_NC_OR_NZ <inst> <ops>	431	.
Instruction Prefix	0111 -----	IF_NZ_OR_NC <inst> <ops>	432	alias
Instruction Prefix	0111 -----	IF_NOT_11 <inst> <ops>	433	alias
Instruction Prefix	1000 -----	IF_C_AND_Z <inst> <ops>	434	.
Instruction Prefix	1000 -----	IF_Z_AND_C <inst> <ops>	435	alias
Instruction Prefix	1000 -----	IF_11 <inst> <ops>	436	alias
Instruction Prefix	1001 -----	IF_C_EQ_Z <inst> <ops>	437	.
Instruction Prefix	1001 -----	IF_Z_EQ_C <inst> <ops>	438	alias
Instruction Prefix	1001 -----	IF_SAME <inst> <ops>	439	alias
Instruction Prefix	1010 -----	IF_Z <inst> <ops>	440	.
Instruction Prefix	1010 -----	IF_E <inst> <ops>	441	alias
Instruction Prefix	1010 -----	IF_X1 <inst> <ops>	442	alias
Instruction Prefix	1011 -----	IF_NC_OR_Z <inst> <ops>	443	.
Instruction Prefix	1011 -----	IF_Z_OR_NC <inst> <ops>	444	alias
Instruction Prefix	1011 -----	IF_NOT_10 <inst> <ops>	445	alias
Instruction Prefix	1100 -----	IF_C <inst> <ops>	446	.
Instruction Prefix	1100 -----	IF_B <inst> <ops>	447	alias
Instruction Prefix	1100 -----	IF_1X <inst> <ops>	448	alias
Instruction Prefix	1101 -----	IF_C_OR_NZ <inst> <ops>	449	.

Instruction Prefix	1101	-----	---	-----	-----	IF_NZ_OR_C	<inst>	<ops>	450	alias
Instruction Prefix	1101	-----	---	-----	-----	IF_NOT_01	<inst>	<ops>	451	alias
Instruction Prefix	1110	-----	---	-----	-----	IF_C_OR_Z	<inst>	<ops>	452	.
Instruction Prefix	1110	-----	---	-----	-----	IF_Z_OR_C	<inst>	<ops>	453	alias
Instruction Prefix	1110	-----	---	-----	-----	IF_BE	<inst>	<ops>	454	alias
Instruction Prefix	1110	-----	---	-----	-----	IF_NOT_00	<inst>	<ops>	455	alias
Instruction Prefix	1111	-----	---	-----	-----		<inst>	<ops>	456	.
Interrupts	EEEE	1101011	000	000100000	000100100	ALLOWI			302	.
Interrupts	EEEE	1101011	000	000100001	000100100	STALLI			303	.
Interrupts	EEEE	1101011	000	000100010	000100100	TRGINT1			304	.
Interrupts	EEEE	1101011	000	000100011	000100100	TRGINT2			305	.
Interrupts	EEEE	1101011	000	000100100	000100100	TRGINT3			306	.
Interrupts	EEEE	1101011	000	000100101	000100100	NIXINT1			307	.
Interrupts	EEEE	1101011	000	000100110	000100100	NIXINT2			308	.
Interrupts	EEEE	1101011	000	000100111	000100100	NIXINT3			309	.
Interrupts	EEEE	1101011	00L	DDDDDDDDD	000100101	SETINT1	{#}D		310	.
Interrupts	EEEE	1101011	00L	DDDDDDDDD	000100110	SETINT2	{#}D		311	.
Interrupts	EEEE	1101011	00L	DDDDDDDDD	000100111	SETINT3	{#}D		312	.
Interrupts	EEEE	1101011	CZ0	DDDDDDDDD	000110101	GETBRK	D WC/WZ/WCZ		329	.
Interrupts	EEEE	1101011	00L	DDDDDDDDD	000110101	COGBRK	{#}D		330	.
Interrupts	EEEE	1101011	00L	DDDDDDDDD	000110110	BRK	{#}D		331	.
Lookup Table	EEEE	1010101	CZI	DDDDDDDDD	SSSSSSSSS	RDLUT	D, {#}S/P {WC/WZ/WCZ}		151	.
Lookup Table	EEEE	1100001	1LI	DDDDDDDDD	SSSSSSSSS	WRLUT	{#}D, {#}S/P		220	.
Lookup Table	EEEE	1101011	00L	DDDDDDDDD	000110111	SETLUTS	{#}D		332	.
Math and Logic	EEEE	0000000	CZI	DDDDDDDDD	SSSSSSSSS	ROR	D, {#}S {WC/WZ/WCZ}		2	.
Math and Logic	EEEE	0000001	CZI	DDDDDDDDD	SSSSSSSSS	ROL	D, {#}S {WC/WZ/WCZ}		3	.
Math and Logic	EEEE	0000010	CZI	DDDDDDDDD	SSSSSSSSS	SHR	D, {#}S {WC/WZ/WCZ}		4	.
Math and Logic	EEEE	0000011	CZI	DDDDDDDDD	SSSSSSSSS	SHL	D, {#}S {WC/WZ/WCZ}		5	.
Math and Logic	EEEE	0000100	CZI	DDDDDDDDD	SSSSSSSSS	RCR	D, {#}S {WC/WZ/WCZ}		6	.
Math and Logic	EEEE	0000101	CZI	DDDDDDDDD	SSSSSSSSS	RCL	D, {#}S {WC/WZ/WCZ}		7	.
Math and Logic	EEEE	0000110	CZI	DDDDDDDDD	SSSSSSSSS	SAR	D, {#}S {WC/WZ/WCZ}		8	.
Math and Logic	EEEE	0000111	CZI	DDDDDDDDD	SSSSSSSSS	SAL	D, {#}S {WC/WZ/WCZ}		9	.
Math and Logic	EEEE	0001000	CZI	DDDDDDDDD	SSSSSSSSS	ADD	D, {#}S {WC/WZ/WCZ}		10	.
Math and Logic	EEEE	0001001	CZI	DDDDDDDDD	SSSSSSSSS	ADDX	D, {#}S {WC/WZ/WCZ}		11	.
Math and Logic	EEEE	0001010	CZI	DDDDDDDDD	SSSSSSSSS	ADDS	D, {#}S {WC/WZ/WCZ}		12	.
Math and Logic	EEEE	0001011	CZI	DDDDDDDDD	SSSSSSSSS	ADDSX	D, {#}S {WC/WZ/WCZ}		13	.
Math and Logic	EEEE	0001100	CZI	DDDDDDDDD	SSSSSSSSS	SUB	D, {#}S {WC/WZ/WCZ}		14	.
Math and Logic	EEEE	0001101	CZI	DDDDDDDDD	SSSSSSSSS	SUBX	D, {#}S {WC/WZ/WCZ}		15	.
Math and Logic	EEEE	0001110	CZI	DDDDDDDDD	SSSSSSSSS	SUBS	D, {#}S {WC/WZ/WCZ}		16	.
Math and Logic	EEEE	0001111	CZI	DDDDDDDDD	SSSSSSSSS	SUBSX	D, {#}S {WC/WZ/WCZ}		17	.

Math and Logic	EEEE	0010000	CZI	DDDDDDDD	SSSSSSSS	CMP D, {#}S {WC/WZ/WCZ}	18	.
Math and Logic	EEEE	0010001	CZI	DDDDDDDD	SSSSSSSS	CMPX D, {#}S {WC/WZ/WCZ}	19	.
Math and Logic	EEEE	0010010	CZI	DDDDDDDD	SSSSSSSS	CMPS D, {#}S {WC/WZ/WCZ}	20	.
Math and Logic	EEEE	0010011	CZI	DDDDDDDD	SSSSSSSS	CMPSX D, {#}S {WC/WZ/WCZ}	21	.
Math and Logic	EEEE	0010100	CZI	DDDDDDDD	SSSSSSSS	CMPR D, {#}S {WC/WZ/WCZ}	22	.
Math and Logic	EEEE	0010101	CZI	DDDDDDDD	SSSSSSSS	CMPP D, {#}S {WC/WZ/WCZ}	23	.
Math and Logic	EEEE	0010110	CZI	DDDDDDDD	SSSSSSSS	SUBR D, {#}S {WC/WZ/WCZ}	24	.
Math and Logic	EEEE	0010111	CZI	DDDDDDDD	SSSSSSSS	CMPSUB D, {#}S {WC/WZ/WCZ}	25	.
Math and Logic	EEEE	0011000	CZI	DDDDDDDD	SSSSSSSS	FGE D, {#}S {WC/WZ/WCZ}	26	.
Math and Logic	EEEE	0011001	CZI	DDDDDDDD	SSSSSSSS	FLE D, {#}S {WC/WZ/WCZ}	27	.
Math and Logic	EEEE	0011010	CZI	DDDDDDDD	SSSSSSSS	FGES D, {#}S {WC/WZ/WCZ}	28	.
Math and Logic	EEEE	0011011	CZI	DDDDDDDD	SSSSSSSS	FLES D, {#}S {WC/WZ/WCZ}	29	.
Math and Logic	EEEE	0011100	CZI	DDDDDDDD	SSSSSSSS	SUMC D, {#}S {WC/WZ/WCZ}	30	.
Math and Logic	EEEE	0011101	CZI	DDDDDDDD	SSSSSSSS	SUMNC D, {#}S {WC/WZ/WCZ}	31	.
Math and Logic	EEEE	0011110	CZI	DDDDDDDD	SSSSSSSS	SUMZ D, {#}S {WC/WZ/WCZ}	32	.
Math and Logic	EEEE	0011111	CZI	DDDDDDDD	SSSSSSSS	SUMNZ D, {#}S {WC/WZ/WCZ}	33	.
Math and Logic	EEEE	0100000	CZI	DDDDDDDD	SSSSSSSS	TESTB D, {#}S WC/WZ	34	.
Math and Logic	EEEE	0100001	CZI	DDDDDDDD	SSSSSSSS	TESTBN D, {#}S WC/WZ	35	.
Math and Logic	EEEE	0100010	CZI	DDDDDDDD	SSSSSSSS	TESTB D, {#}S ANDC/ANDZ	36	.
Math and Logic	EEEE	0100011	CZI	DDDDDDDD	SSSSSSSS	TESTBN D, {#}S ANDC/ANDZ	37	.
Math and Logic	EEEE	0100100	CZI	DDDDDDDD	SSSSSSSS	TESTB D, {#}S ORC/ORZ	38	.
Math and Logic	EEEE	0100101	CZI	DDDDDDDD	SSSSSSSS	TESTBN D, {#}S ORC/ORZ	39	.
Math and Logic	EEEE	0100110	CZI	DDDDDDDD	SSSSSSSS	TESTB D, {#}S XORC/XORZ	40	.
Math and Logic	EEEE	0100111	CZI	DDDDDDDD	SSSSSSSS	TESTBN D, {#}S XORC/XORZ	41	.
Math and Logic	EEEE	0100000	CZI	DDDDDDDD	SSSSSSSS	BITL D, {#}S {WCZ}	42	.
Math and Logic	EEEE	0100001	CZI	DDDDDDDD	SSSSSSSS	BITH D, {#}S {WCZ}	43	.
Math and Logic	EEEE	0100010	CZI	DDDDDDDD	SSSSSSSS	BITC D, {#}S {WCZ}	44	.
Math and Logic	EEEE	0100011	CZI	DDDDDDDD	SSSSSSSS	BITNC D, {#}S {WCZ}	45	.
Math and Logic	EEEE	0100100	CZI	DDDDDDDD	SSSSSSSS	BITZ D, {#}S {WCZ}	46	.
Math and Logic	EEEE	0100101	CZI	DDDDDDDD	SSSSSSSS	BITNZ D, {#}S {WCZ}	47	.
Math and Logic	EEEE	0100110	CZI	DDDDDDDD	SSSSSSSS	BITRND D, {#}S {WCZ}	48	.
Math and Logic	EEEE	0100111	CZI	DDDDDDDD	SSSSSSSS	BITNOT D, {#}S {WCZ}	49	.
Math and Logic	EEEE	0101000	CZI	DDDDDDDD	SSSSSSSS	AND D, {#}S {WC/WZ/WCZ}	50	.
Math and Logic	EEEE	0101001	CZI	DDDDDDDD	SSSSSSSS	ANDN D, {#}S {WC/WZ/WCZ}	51	.
Math and Logic	EEEE	0101010	CZI	DDDDDDDD	SSSSSSSS	OR D, {#}S {WC/WZ/WCZ}	52	.
Math and Logic	EEEE	0101011	CZI	DDDDDDDD	SSSSSSSS	XOR D, {#}S {WC/WZ/WCZ}	53	.
Math and Logic	EEEE	0101100	CZI	DDDDDDDD	SSSSSSSS	MUXC D, {#}S {WC/WZ/WCZ}	54	.
Math and Logic	EEEE	0101101	CZI	DDDDDDDD	SSSSSSSS	MUXNC D, {#}S {WC/WZ/WCZ}	55	.
Math and Logic	EEEE	0101110	CZI	DDDDDDDD	SSSSSSSS	MUXZ D, {#}S {WC/WZ/WCZ}	56	.
Math and Logic	EEEE	0101111	CZI	DDDDDDDD	SSSSSSSS	MUXNZ D, {#}S {WC/WZ/WCZ}	57	.

Math and Logic	EEEE	0110000	CZI	DDDDDDDD	SSSSSSSS	MOV D, {#}S {WC/WZ/WCZ}	58	.
Math and Logic	EEEE	0110001	CZI	DDDDDDDD	SSSSSSSS	NOT D, {#}S {WC/WZ/WCZ}	59	.
Math and Logic	EEEE	0110001	CZ0	DDDDDDDD	DDDDDDDD	NOT D {WC/WZ/WCZ}	60	alias
Math and Logic	EEEE	0110010	CZI	DDDDDDDD	SSSSSSSS	ABS D, {#}S {WC/WZ/WCZ}	61	.
Math and Logic	EEEE	0110010	CZ0	DDDDDDDD	DDDDDDDD	ABS D {WC/WZ/WCZ}	62	alias
Math and Logic	EEEE	0110011	CZI	DDDDDDDD	SSSSSSSS	NEG D, {#}S {WC/WZ/WCZ}	63	.
Math and Logic	EEEE	0110011	CZ0	DDDDDDDD	DDDDDDDD	NEG D {WC/WZ/WCZ}	64	alias
Math and Logic	EEEE	0110100	CZI	DDDDDDDD	SSSSSSSS	NEGC D, {#}S {WC/WZ/WCZ}	65	.
Math and Logic	EEEE	0110100	CZ0	DDDDDDDD	DDDDDDDD	NEGC D {WC/WZ/WCZ}	66	alias
Math and Logic	EEEE	0110101	CZI	DDDDDDDD	SSSSSSSS	NEGNC D, {#}S {WC/WZ/WCZ}	67	.
Math and Logic	EEEE	0110101	CZ0	DDDDDDDD	DDDDDDDD	NEGNC D {WC/WZ/WCZ}	68	alias
Math and Logic	EEEE	0110110	CZI	DDDDDDDD	SSSSSSSS	NEGZ D, {#}S {WC/WZ/WCZ}	69	.
Math and Logic	EEEE	0110110	CZ0	DDDDDDDD	DDDDDDDD	NEGZ D {WC/WZ/WCZ}	70	alias
Math and Logic	EEEE	0110111	CZI	DDDDDDDD	SSSSSSSS	NEGNZ D, {#}S {WC/WZ/WCZ}	71	.
Math and Logic	EEEE	0110111	CZ0	DDDDDDDD	DDDDDDDD	NEGNZ D {WC/WZ/WCZ}	72	alias
Math and Logic	EEEE	0111000	CZI	DDDDDDDD	SSSSSSSS	INCMOD D, {#}S {WC/WZ/WCZ}	73	.
Math and Logic	EEEE	0111001	CZI	DDDDDDDD	SSSSSSSS	DECMOD D, {#}S {WC/WZ/WCZ}	74	.
Math and Logic	EEEE	0111010	CZI	DDDDDDDD	SSSSSSSS	ZEROX D, {#}S {WC/WZ/WCZ}	75	.
Math and Logic	EEEE	0111011	CZI	DDDDDDDD	SSSSSSSS	SIGNX D, {#}S {WC/WZ/WCZ}	76	.
Math and Logic	EEEE	0111100	CZI	DDDDDDDD	SSSSSSSS	ENCOD D, {#}S {WC/WZ/WCZ}	77	.
Math and Logic	EEEE	0111100	CZ0	DDDDDDDD	DDDDDDDD	ENCOD D {WC/WZ/WCZ}	78	alias
Math and Logic	EEEE	0111101	CZI	DDDDDDDD	SSSSSSSS	ONES D, {#}S {WC/WZ/WCZ}	79	.
Math and Logic	EEEE	0111101	CZ0	DDDDDDDD	DDDDDDDD	ONES D {WC/WZ/WCZ}	80	alias
Math and Logic	EEEE	0111110	CZI	DDDDDDDD	SSSSSSSS	TEST D, {#}S {WC/WZ/WCZ}	81	.
Math and Logic	EEEE	0111110	CZ0	DDDDDDDD	DDDDDDDD	TEST D {WC/WZ/WCZ}	82	alias
Math and Logic	EEEE	0111111	CZI	DDDDDDDD	SSSSSSSS	TESTN D, {#}S {WC/WZ/WCZ}	83	.
Math and Logic	EEEE	100000N	NNI	DDDDDDDD	SSSSSSSS	SETNIB D, {#}S, #N	84	.
Math and Logic	EEEE	1000000	00I	00000000	SSSSSSSS	SETNIB {#}S	85	alias
Math and Logic	EEEE	100001N	NNI	DDDDDDDD	SSSSSSSS	GETNIB D, {#}S, #N	86	.
Math and Logic	EEEE	1000010	000	DDDDDDDD	00000000	GETNIB D	87	alias
Math and Logic	EEEE	100010N	NNI	DDDDDDDD	SSSSSSSS	ROLNIB D, {#}S, #N	88	.
Math and Logic	EEEE	1000100	000	DDDDDDDD	00000000	ROLNIB D	89	alias
Math and Logic	EEEE	1000110	NNI	DDDDDDDD	SSSSSSSS	SETBYTE D, {#}S, #N	90	.
Math and Logic	EEEE	1000110	00I	00000000	SSSSSSSS	SETBYTE {#}S	91	alias
Math and Logic	EEEE	1000111	NNI	DDDDDDDD	SSSSSSSS	GETBYTE D, {#}S, #N	92	.
Math and Logic	EEEE	1000111	000	DDDDDDDD	00000000	GETBYTE D	93	alias
Math and Logic	EEEE	1001000	NNI	DDDDDDDD	SSSSSSSS	ROLBYTE D, {#}S, #N	94	.
Math and Logic	EEEE	1001000	000	DDDDDDDD	00000000	ROLBYTE D	95	alias
Math and Logic	EEEE	1001001	0NI	DDDDDDDD	SSSSSSSS	SETWORD D, {#}S, #N	96	.
Math and Logic	EEEE	1001001	00I	00000000	SSSSSSSS	SETWORD {#}S	97	alias

Math and Logic	EEEE	1001001	1NI	DDDDDDDD	SSSSSSSS	GETWORD D, {#}S, #N	98	.
Math and Logic	EEEE	1001001	100	DDDDDDDD	00000000	GETWORD D	99	alias
Math and Logic	EEEE	1001010	0NI	DDDDDDDD	SSSSSSSS	ROLWORD D, {#}S, #N	100	.
Math and Logic	EEEE	1001010	000	DDDDDDDD	00000000	ROLWORD D	101	alias
Math and Logic	EEEE	1001101	01I	DDDDDDDD	SSSSSSSS	SETR D, {#}S	124	.
Math and Logic	EEEE	1001101	10I	DDDDDDDD	SSSSSSSS	SETD D, {#}S	125	.
Math and Logic	EEEE	1001101	11I	DDDDDDDD	SSSSSSSS	SETS D, {#}S	126	.
Math and Logic	EEEE	1001110	00I	DDDDDDDD	SSSSSSSS	DECOD D, {#}S	127	.
Math and Logic	EEEE	1001110	000	DDDDDDDD	DDDDDDDD	DECOD D	128	alias
Math and Logic	EEEE	1001110	01I	DDDDDDDD	SSSSSSSS	EMASK D, {#}S	129	.
Math and Logic	EEEE	1001110	010	DDDDDDDD	DDDDDDDD	EMASK D	130	alias
Math and Logic	EEEE	1001110	10I	DDDDDDDD	SSSSSSSS	CRCBIT D, {#}S	131	.
Math and Logic	EEEE	1001110	11I	DDDDDDDD	SSSSSSSS	CRCNIB D, {#}S	132	.
Math and Logic	EEEE	1001111	00I	DDDDDDDD	SSSSSSSS	MUXNITS D, {#}S	133	.
Math and Logic	EEEE	1001111	01I	DDDDDDDD	SSSSSSSS	MUXNIBS D, {#}S	134	.
Math and Logic	EEEE	1001111	10I	DDDDDDDD	SSSSSSSS	MUXQ D, {#}S	135	.
Math and Logic	EEEE	1001111	11I	DDDDDDDD	SSSSSSSS	MOVBYTES D, {#}S	136	.
Math and Logic	EEEE	1010000	0ZI	DDDDDDDD	SSSSSSSS	MUL D, {#}S {WZ}	137	.
Math and Logic	EEEE	1010000	1ZI	DDDDDDDD	SSSSSSSS	MULS D, {#}S {WZ}	138	.
Math and Logic	EEEE	1010001	0ZI	DDDDDDDD	SSSSSSSS	SCA D, {#}S {WZ}	139	.
Math and Logic	EEEE	1010001	1ZI	DDDDDDDD	SSSSSSSS	SCAS D, {#}S {WZ}	140	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	00110000	SPLITB D	381	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	00110001	MERGEB D	382	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	00110010	SPLITW D	383	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	00110011	MERGEW D	384	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	001100100	SEUSSF D	385	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	001100101	SEUSSR D	386	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	001100110	RGBSQZ D	387	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	001100111	RGBEXP D	388	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	001101000	XORO32 D	389	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	001101001	REV D	390	.
Math and Logic	EEEE	1101011	CZ0	DDDDDDDD	001101010	RCZR D {WC/WZ/WCZ}	391	.
Math and Logic	EEEE	1101011	CZ0	DDDDDDDD	001101011	RCZL D {WC/WZ/WCZ}	392	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	001101100	WRC D	393	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	001101101	WRNC D	394	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	001101110	WRZ D	395	.
Math and Logic	EEEE	1101011	000	DDDDDDDD	001101111	WRNZ D	396	.
Math and Logic	EEEE	1101011	CZ1	0cccczzz	001101111	MODCZ c, z {WC/WZ/WCZ}	397	.
Math and Logic	EEEE	1101011	C01	0cccc000	001101111	MODC c {WC}	398	alias
Math and Logic	EEEE	1101011	OZ1	0000zzzz	001101111	MODZ z {WZ}	399	alias

Math and Logic	EEEE 11101WW RAA AAAAAAAAAA AAAAAAAAAA	LOC PA/PB/PTRA/PTRB,#(\}A	407	.
Miscellaneous	0000 0000000 000 000000000 000000000	NOP	1	.
Miscellaneous	EEEE 1011110 1LI DDDDDDDDD SSSSSSSSS	<empty> {#}D,{#}S	213	.
Miscellaneous	EEEE 1011111 0LI DDDDDDDDD SSSSSSSSS	<empty> {#}D,{#}S	214	.
Miscellaneous	EEEE 1101011 C00 DDDDDDDDD 000011010	GETCT D {WC}	260	.
Miscellaneous	EEEE 1101011 CZ0 DDDDDDDDD 000011011	GETRND D {WC/WZ/WCZ}	261	.
Miscellaneous	EEEE 1101011 CZ1 000000000 000011011	GETRND WC/WZ/WCZ	262	alias
Miscellaneous	EEEE 1101011 00L DDDDDDDDD 000011111	WAITX {#}D {WC/WZ/WCZ}	266	.
Miscellaneous	EEEE 1101011 00L DDDDDDDDD 000101000	SETQ {#}D	313	.
Miscellaneous	EEEE 1101011 00L DDDDDDDDD 000101001	SETQ2 {#}D	314	.
Miscellaneous	EEEE 1101011 00L DDDDDDDDD 000101010	PUSH {#}D	315	.
Miscellaneous	EEEE 1101011 CZ0 DDDDDDDDD 000101011	POP D {WC/WZ/WCZ}	316	.
Miscellaneous	EEEE 11110NN NNN NNNNNNNNN NNNNNNNNN	AUGS #N	408	.
Miscellaneous	EEEE 11111NN NNN NNNNNNNNN NNNNNNNNN	AUGD #N	409	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000000	TESTP {#}D WC/WZ	341	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000001	TESTPN {#}D WC/WZ	342	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000010	TESTP {#}D ANDC/ANDZ	343	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000011	TESTPN {#}D ANDC/ANDZ	344	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000100	TESTP {#}D ORC/ORZ	345	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000101	TESTPN {#}D ORC/ORZ	346	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000110	TESTP {#}D XORC/XORZ	347	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000111	TESTPN {#}D XORC/XORZ	348	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000000	DIRL {#}D {WCZ}	349	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000001	DIRH {#}D {WCZ}	350	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000010	DIRC {#}D {WCZ}	351	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000011	DIRNC {#}D {WCZ}	352	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000100	DIRZ {#}D {WCZ}	353	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000101	DIRNZ {#}D {WCZ}	354	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000110	DIRRND {#}D {WCZ}	355	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001000111	DIRNOT {#}D {WCZ}	356	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001001000	OUTL {#}D {WCZ}	357	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001001001	OUTH {#}D {WCZ}	358	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001001010	OUTC {#}D {WCZ}	359	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001001011	OUTNC {#}D {WCZ}	360	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001001100	OUTZ {#}D {WCZ}	361	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001001101	OUTNZ {#}D {WCZ}	362	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001001110	OUTRND {#}D {WCZ}	363	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001001111	OUTNOT {#}D {WCZ}	364	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001010000	FLTL {#}D {WCZ}	365	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001010001	FLTH {#}D {WCZ}	366	.

Pins	EEEE 1101011 CZL DDDDDDDDD 001010010	FLTC {#}D {WCZ}	367	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001010011	FLTNC {#}D {WCZ}	368	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001010100	FLTZ {#}D {WCZ}	369	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001010101	FLTNZ {#}D {WCZ}	370	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001010110	FLTRND {#}D {WCZ}	371	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001010111	FLTNOT {#}D {WCZ}	372	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001011000	DRVL {#}D {WCZ}	373	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001011001	DRVH {#}D {WCZ}	374	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001011010	DRVC {#}D {WCZ}	375	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001011011	DRVNC {#}D {WCZ}	376	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001011100	DRVZ {#}D {WCZ}	377	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001011101	DRVNZ {#}D {WCZ}	378	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001011110	DRVNRD {#}D {WCZ}	379	.
Pins	EEEE 1101011 CZL DDDDDDDDD 001011111	DRVNOT {#}D {WCZ}	380	.
Pixel Mixer	EEEE 1010010 00I DDDDDDDDD SSSSSSSSS	ADDPFX D, {#}S	141	.
Pixel Mixer	EEEE 1010010 01I DDDDDDDDD SSSSSSSSS	MULPIX D, {#}S	142	.
Pixel Mixer	EEEE 1010010 10I DDDDDDDDD SSSSSSSSS	BLNPIX D, {#}S	143	.
Pixel Mixer	EEEE 1010010 11I DDDDDDDDD SSSSSSSSS	MIXPIX D, {#}S	144	.
Pixel Mixer	EEEE 1101011 00L DDDDDDDDD 000111101	SETPIV {#}D	338	.
Pixel Mixer	EEEE 1101011 00L DDDDDDDDD 000111110	SETPIX {#}D	339	.
Register Indirection	EEEE 1001010 10I DDDDDDDDD SSSSSSSSS	ALTSN D, {#}S	102	.
Register Indirection	EEEE 1001010 10I DDDDDDDDD 000000000	ALTSN D	103	alias
Register Indirection	EEEE 1001010 11I DDDDDDDDD SSSSSSSSS	ALTGN D, {#}S	104	.
Register Indirection	EEEE 1001010 11I DDDDDDDDD 000000000	ALTGN D	105	alias
Register Indirection	EEEE 1001011 00I DDDDDDDDD SSSSSSSSS	ALTSB D, {#}S	106	.
Register Indirection	EEEE 1001011 00I DDDDDDDDD 000000000	ALTSB D	107	alias
Register Indirection	EEEE 1001011 01I DDDDDDDDD SSSSSSSSS	ALTGB D, {#}S	108	.
Register Indirection	EEEE 1001011 01I DDDDDDDDD 000000000	ALTGB D	109	alias
Register Indirection	EEEE 1001011 10I DDDDDDDDD SSSSSSSSS	ALTSW D, {#}S	110	.
Register Indirection	EEEE 1001011 10I DDDDDDDDD 000000000	ALTSW D	111	alias
Register Indirection	EEEE 1001011 11I DDDDDDDDD SSSSSSSSS	ALTGW D, {#}S	112	.
Register Indirection	EEEE 1001011 11I DDDDDDDDD 000000000	ALTGW D	113	alias
Register Indirection	EEEE 1001100 00I DDDDDDDDD SSSSSSSSS	ALTR D, {#}S	114	.
Register Indirection	EEEE 1001100 00I DDDDDDDDD 000000000	ALTR D	115	alias
Register Indirection	EEEE 1001100 01I DDDDDDDDD SSSSSSSSS	ALTD D, {#}S	116	.
Register Indirection	EEEE 1001100 01I DDDDDDDDD 000000000	ALTD D	117	alias
Register Indirection	EEEE 1001100 10I DDDDDDDDD SSSSSSSSS	ALTS D, {#}S	118	.
Register Indirection	EEEE 1001100 10I DDDDDDDDD 000000000	ALTS D	119	alias
Register Indirection	EEEE 1001100 11I DDDDDDDDD SSSSSSSSS	ALTB D, {#}S	120	.
Register Indirection	EEEE 1001100 11I DDDDDDDDD 000000000	ALTB D	121	alias

Register Indirection	EEEE 1001101 00I DDDDDDDDD SSSSSSSSS	ALTI D, {#}S	122	.
Register Indirection	EEEE 1001101 00I DDDDDDDDD 101100100	ALTI D	123	alias
Smart Pins	EEEE 1010100 00I DDDDDDDDD SSSSSSSSS	RQPIN D, {#}S {WC}	149	.
Smart Pins	EEEE 1010100 01I DDDDDDDDD SSSSSSSSS	RDPIN D, {#}S {WC}	150	.
Smart Pins	EEEE 1100000 01I 000000001 SSSSSSSSS	AKPIN {#}S	216	alias
Smart Pins	EEEE 1100000 01I DDDDDDDDD SSSSSSSSS	WRPIN {#}D, {#}S	217	.
Smart Pins	EEEE 1100000 1LI DDDDDDDDD SSSSSSSSS	WXPIN {#}D, {#}S	218	.
Smart Pins	EEEE 1100001 01I DDDDDDDDD SSSSSSSSS	WYPIN {#}D, {#}S	219	.
Smart Pins	EEEE 1101011 00L DDDDDDDDD 000011100	SETDACS {#}D	263	.
Smart Pins	EEEE 1101011 00L DDDDDDDDD 001110000	SETSCP {#}D	400	.
Smart Pins	EEEE 1101011 000 DDDDDDDDD 001110001	GETSCP D	401	.
Streamer	EEEE 1100101 01I DDDDDDDDD SSSSSSSSS	XINIT {#}D, {#}S	229	.
Streamer	EEEE 1100101 011 000000000 000000000	XSTOP	230	alias
Streamer	EEEE 1100101 1LI DDDDDDDDD SSSSSSSSS	XZERO {#}D, {#}S	231	.
Streamer	EEEE 1100110 01I DDDDDDDDD SSSSSSSSS	XCONT {#}D, {#}S	232	.
Streamer	EEEE 1101011 00L DDDDDDDDD 000011101	SETXFRQ {#}D	264	.
Streamer	EEEE 1101011 000 DDDDDDDDD 000011110	GETXACC D	265	.
			410	