

ZCxS	Opcode	ZC	I	Cond.	Destination	Source	Instr/00	01	10	11	Operand(s)	Flags
ZCWS	0000000	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	RDBYTE				D,S/PTRA/PTRB	[WZ],[WC]
ZCWS	0000001	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	RDBYTEC				D,S/PTRA/PTRB	[WZ],[WC]
ZCWS	0000010	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	RDWORD				D,S/PTRA/PTRB	[WZ],[WC]
ZCWS	0000011	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	RDWORDC				D,S/PTRA/PTRB	[WZ],[WC]
ZCWS	0000100	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	RDLONG				D,S/PTRA/PTRB	[WZ],[WC]
ZCWS	0000101	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	RDLONGC				D,S/PTRA/PTRB	[WZ],[WC]
ZCWS	0000110	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	RDAUX				D,S/#0..\$FF/PTRX/PTRY	[WZ],[WC]
ZCWS	0000111	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	RDAUXR				D,S/#0..\$FF/PTRX/PTRY	[WZ],[WC]
							-					
ZCMS	0001000	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	ISOB				D,S/#	[WZ],[WC]
ZCMS	0001001	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	NOTB				D,S/#	[WZ],[WC]
ZCMS	0001010	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	CLRB				D,S/#	[WZ],[WC]
ZCMS	0001011	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	SETB				D,S/#	[WZ],[WC]
ZCMS	0001100	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	SETBC				D,S/#	[WZ],[WC]
ZCMS	0001101	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	SETBNC				D,S/#	[WZ],[WC]
ZCMS	0001110	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	SETBZ				D,S/#	[WZ],[WC]
ZCMS	0001111	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	SETBNZ				D,S/#	[WZ],[WC]
							-					
ZCMS	0010000	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	ANDN				D,S/#	[WZ],[WC]
ZCMS	0010001	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	AND				D,S/#	[WZ],[WC]
ZCMS	0010010	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	OR				D,S/#	[WZ],[WC]
ZCMS	0010011	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	XOR				D,S/#	[WZ],[WC]
ZCMS	0010100	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	MUXC				D,S/#	[WZ],[WC]
ZCMS	0010101	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	MUXNC				D,S/#	[WZ],[WC]
ZCMS	0010110	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	MUXZ				D,S/#	[WZ],[WC]
ZCMS	0010111	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	MUXNZ				D,S/#	[WZ],[WC]
							-					
ZCMS	0011000	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	ROR				D,S/#	[WZ],[WC]
ZCMS	0011001	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	ROL				D,S/#	[WZ],[WC]
ZCMS	0011010	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	SHR				D,S/#	[WZ],[WC]
ZCMS	0011011	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	SHL				D,S/#	[WZ],[WC]
ZCMS	0011100	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	RCR				D,S/#	[WZ],[WC]
ZCMS	0011101	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	RCL				D,S/#	[WZ],[WC]
ZCMS	0011110	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	SAR				D,S/#	[WZ],[WC]
ZCMS	0011111	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	REV				D,S/#	[WZ],[WC]
							-					
ZCWS	0100000	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSSS	MOV				D,S/#	[WZ],[WC]

ZCWS	0100001	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	NOT				D,S/#	[WZ],[WC]
ZCWS	0100010	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	ABS				D,S/#	[WZ],[WC]
ZCWS	0100011	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	NEG				D,S/#	[WZ],[WC]
ZCWS	0100100	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	NEGC				D,S/#	[WZ],[WC]
ZCWS	0100101	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	NEGNC				D,S/#	[WZ],[WC]
ZCWS	0100110	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	NEGZ				D,S/#	[WZ],[WC]
ZCWS	0100111	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	NEGNZ				D,S/#	[WZ],[WC]
							-					
ZCMS	0101000	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	ADD				D,S/#	[WZ],[WC]
ZCMS	0101001	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SUB				D,S/#	[WZ],[WC]
ZCMS	0101010	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	ADDX				D,S/#	[WZ],[WC]
ZCMS	0101011	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SUBX				D,S/#	[WZ],[WC]
ZCMS	0101100	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	ADDS				D,S/#	[WZ],[WC]
ZCMS	0101101	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SUBS				D,S/#	[WZ],[WC]
ZCMS	0101110	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	ADDSX				D,S/#	[WZ],[WC]
ZCMS	0101111	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SUBSX				D,S/#	[WZ],[WC]
							-					
ZCMS	0110000	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SUMC				D,S/#	[WZ],[WC]
ZCMS	0110001	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SUMNC				D,S/#	[WZ],[WC]
ZCMS	0110010	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SUMZ				D,S/#	[WZ],[WC]
ZCMS	0110011	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SUMNZ				D,S/#	[WZ],[WC]
ZCMS	0110100	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	MIN				D,S/#	[WZ],[WC]
ZCMS	0110101	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	MAX				D,S/#	[WZ],[WC]
ZCMS	0110110	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	MINS				D,S/#	[WZ],[WC]
ZCMS	0110111	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	MAXS				D,S/#	[WZ],[WC]
							-					
ZCMS	0111000	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	ADDABS				D,S/#	[WZ],[WC]
ZCMS	0111001	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SUBABS				D,S/#	[WZ],[WC]
ZCMS	0111010	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	INCMOD				D,S/#	[WZ],[WC]
ZCMS	0111011	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	DECMOD				D,S/#	[WZ],[WC]
ZCMS	0111100	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	CMPSUB				D,S/#	[WZ],[WC]
ZCMS	0111101	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SUBR				D,S/#	[WZ],[WC]
ZCMS	0111110	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	MUL				D,S/#	[WZ],[WC]
ZCMS	0111111	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SCL				D,S/#	[WZ],[WC]
ZCxS	Opcode	ZC	I	Cond.	Destination	Source	Instr/00	01	10	11	Operand(s)	Flags
ZCWS	1000000	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	DECOD2				D,S/#	[WZ],[WC]
ZCWS	1000001	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	DECOD3				D,S/#	[WZ],[WC]
ZCWS	1000010	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	DECOD4				D,S/#	[WZ],[WC]

ZCWS	1000011	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	DECOD5					D,S/#	[WZ],[WC]
Z-WS	1000100	Zf	I	CCCC	DDDDDDDDDD	SSSSSSSSS	ENCOD	BLMASK				D,S/#	[WZ]
Z-WS	1000101	Zf	I	CCCC	DDDDDDDDDD	SSSSSSSSS	ONECNT	ZERCNT				D,S/#	[WZ]
-CWS	1000110	fC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	INCPAT		DECPAT			D,S/#	[WC]
--WS	1000111	ff	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SPLITB	MERGERB	SPLITW	MERGEW		D,S/#	
--MS	10010nn	nf	I	CCCC	DDDDDDDDDD	SSSSSSSSS	GETNIB	SETNIB				D,S/#,#0..7	
--MS	1001100	nf	I	CCCC	DDDDDDDDDD	SSSSSSSSS	GETWORD	SETWORD				D,S/#,#0..1	
--MS	1001101	ff	I	CCCC	DDDDDDDDDD	SSSSSSSSS	STWORDS	ROLNIB	ROLBYTE	ROLWORD		D,S/#	
--MS	1001110	ff	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SETS	SETD	SETX	SETI		D,S/#	
-CMS	1001111	fC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	COGNEW		WAITCNT			D,S/#	[WC]
--MS	101000n	nf	I	CCCC	DDDDDDDDDD	SSSSSSSSS	GETBYTE	SETBYTE				D,S/#,#0..3	
--WS	1010010	ff	I	CCCC	DDDDDDDDDD	SSSSSSSSS	STBYTES	SWBYTES	PACKRGB	UNPKRGB		D,S/#	
--MS	1010011	ff	I	CCCC	DDDDDDDDDD	SSSSSSSSS	ADDPIX	MULPIX	BLNPIX	MIXPIX		D,S/#	
ZCMS	1010100	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	JMP5W					D,S/#	[WZ],[WC]
ZCMS	1010101	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	JMP5WD					D,S/#	[WZ],[WC]
--MS	1010110	ff	I	CCCC	DDDDDDDDDD	SSSSSSSSS	IJZ	IJZD	IJNZ	IJNZD		D,S/#	
--MS	1010111	ff	I	CCCC	DDDDDDDDDD	SSSSSSSSS	DJZ	DJZD	DJNZ	DJNZD		D,S/#	
ZCRS	1011000	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	TESTB					D,S/#	[WZ],[WC]
ZCRS	1011001	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	TESTN					D,S/#	[WZ],[WC]
ZCRS	1011010	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	TEST					D,S/#	[WZ],[WC]
ZCRS	1011011	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	CMP					D,S/#	[WZ],[WC]
ZCRS	1011100	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	CMPX					D,S/#	[WZ],[WC]
ZCRS	1011101	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	CMPS					D,S/#	[WZ],[WC]
ZCRS	1011110	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	CMPSX					D,S/#	[WZ],[WC]
ZCRS	1011111	ZC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	CMPR					D,S/#	[WZ],[WC]
--RS	11000nn	nf	I	CCCC	DDDDDDDDDD	SSSSSSSSS	COGINIT	WAITVID		WAITPNE		D,S/#,#0..7 #0..\$DFF,S/# D,S/#	
-CRS	110010n	nC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	WAITPEQ					D,S/#,#0..3	[WC]
-CRS	110011n	nC	I	CCCC	DDDDDDDDDD	SSSSSSSSS	WAITPNE					D,S/#,#0..3	[WC]
--LS	1101000	fL	I	CCCC	DDDDDDDDDD	SSSSSSSSS	WRBYTE		WRWORD			D/#,S/PTRA/PTRB	
--LS	1101001	fL	I	CCCC	DDDDDDDDDD	SSSSSSSSS	WRLONG		FRAC			D/#,S/PTRA/PTRB	
--LS	1101010	fL	I	CCCC	DDDDDDDDDD	SSSSSSSSS	WRAUX		WRAUXR			D/#,S/#0..\$FF/PTRX/PTRY	
--LS	1101011	fL	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SETACCA		SETACCB			D/#,S/#	
--LS	1101100	fL	I	CCCC	DDDDDDDDDD	SSSSSSSSS	MACA		MACB			D/#,S/#	
--LS	1101101	fL	I	CCCC	DDDDDDDDDD	SSSSSSSSS	MUL32		MUL32U			D/#,S/#	
--LS	1101110	fL	I	CCCC	DDDDDDDDDD	SSSSSSSSS	DIV32		DIV32U			D/#,S/#	
--LS	1101111	fL	I	CCCC	DDDDDDDDDD	SSSSSSSSS	DIV64		DIV64U			D/#,S/#	
--LS	1110000	fL	I	CCCC	DDDDDDDDDD	SSSSSSSSS	SQRT64		QSINCOS			D/#,S/#	
--LS	1110001	fL	I	CCCC	DDDDDDDDDD	SSSSSSSSS	QARCTAN		QROTATE			D/#,S/#	

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--LS 1110010 fL I CCCC DDDDDDDDD SSSSSSSS SETSERA SETSERB D/#,S/#
--LS 1110011 fL I CCCC DDDDDDDDD SSSSSSSS SETCTRS SETWAVS D/#,S/#
--LS 1110100 fL I CCCC DDDDDDDDD SSSSSSSS SETFRQS SETPHSS D/#,S/#
--LS 1110101 fL I CCCC DDDDDDDDD SSSSSSSS ADDPHSS SUBPHSS D/#,S/#
--LS 1110110 fL I CCCC DDDDDDDDD SSSSSSSS JP JPD D/#,S/#
--LS 1110111 fL I CCCC DDDDDDDDD SSSSSSSS JNP JNPD D/#,S/#
--LS 111100n nL I CCCC DDDDDDDDD SSSSSSSS CFGPINS SETXFR D/#,S/#,#0..2 | D/#,S/#
--LS 1111010 fL I CCCC DDDDDDDDD SSSSSSSS SETXFR SETMIX D/#,S/#
--LS 1111011 fL I CCCC DDDDDDDDD SSSSSSSS <empty> <empty> D/#,S/#
--RS 1111100 ff I CCCC DDDDDDDDD SSSSSSSS JZ JZD JNZ JNZD D,S/#

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---- 1111101 00 n nnnn nnnnnnnnn nnnnnnnnn AUGI #23bits
---- 1111101 01 0 nnnn nnnnnnnnn nnniiii REPS #1..$10000,#1..64
---- 1111101 01 1 BBAA dddddddd ssssssss xxxINDx FIXINDx #d,#s | SETINDx #s #d #d,#s
---- 1111101 10 0 CCCC ffnnnnnnn nnnnnnnnn JMP JMP_ JMP JMP_ #abs | #abs | @rel | @rel
---- 1111101 10 1 CCCC ffnnnnnnn nnnnnnnnn JMPD JMPD_ JMPD JMPD_ #abs | #abs | @rel | @rel
---- 1111101 11 0 CCCC ffnnnnnnn nnnnnnnnn CALL CALL_ CALL CALL_ #abs | #abs | @rel | @rel
---- 1111101 11 1 CCCC ffnnnnnnn nnnnnnnnn CALLD CALLD_ CALLD CALLD_ #abs | #abs | @rel | @rel

---- 1111110 00 0 CCCC ffnnnnnnn nnnnnnnnn CALLA CALLA_ CALLA CALLA_ #abs | #abs | @rel | @rel
---- 1111110 00 1 CCCC ffnnnnnnn nnnnnnnnn CALLAD CALLAD_ CALLAD CALLAD_ #abs | #abs | @rel | @rel
---- 1111110 01 0 CCCC ffnnnnnnn nnnnnnnnn CALLB CALLB_ CALLB CALLB_ #abs | #abs | @rel | @rel
---- 1111110 01 1 CCCC ffnnnnnnn nnnnnnnnn CALLBD CALLBD_ CALLBD CALLBD_ #abs | #abs | @rel | @rel
---- 1111110 10 0 CCCC ffnnnnnnn nnnnnnnnn CALLX CALLX_ CALLX CALLX_ #abs | #abs | @rel | @rel
---- 1111110 10 1 CCCC ffnnnnnnn nnnnnnnnn CALLXD CALLXD_ CALLXD CALLXD_ #abs | #abs | @rel | @rel
---- 1111110 11 0 CCCC ffnnnnnnn nnnnnnnnn CALLY CALLY_ CALLY CALLY_ #abs | #abs | @rel | @rel
---- 1111110 11 1 CCCC ffnnnnnnn nnnnnnnnn CALLYD CALLYD_ CALLYD CALLYD_ #abs | #abs | @rel | @rel

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ZCxS	Opcode	ZC	I	Cond.	Destination	Source	Instr/00	01	10	11	Operand(s)	Flags
ZCW-	1111111	ZC	0	CCCC	DDDDDDDD	00000000	COGID				D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDD	00000001	LOCKNEW				D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDD	00000010	GETPC				D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDD	00000011	GETLFSR				D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDD	00000100	GETCNT				D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDD	00000101	GETCNTX				D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDD	00000110	GETACAL				D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDD	00000111	GETACAH				D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDD	00001000	GETACBL				D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDD	00001001	GETACBH				D	[WZ],[WC]

ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000001010	GETPTRA	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000001011	GETPTRB	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000001100	GETPTRX	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000001101	GETPTRY	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000001110	SERINA	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000001111	SERINB	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000010000	GETMULL	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000010001	GETMULH	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000010010	GETDIVQ	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000010011	GETDIVR	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000010100	GETSQRT	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000010101	GETQX	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000010110	GETQY	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000010111	GETQZ	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000011000	GETPHSA	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000011001	GETPHZA	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000011010	GETCOSA	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000011011	GETSINA	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000011100	GETPHSB	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000011101	GETPHZB	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000011110	GETCOSB	D	[WZ],[WC]
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000011111	GETSINB	D	[WZ],[WC]
							-		
ZCM-	1111111	ZC	0	CCCC	DDDDDDDDDD	000100000	PUSHZC	D	[WZ],[WC]
ZCM-	1111111	ZC	0	CCCC	DDDDDDDDDD	000100001	POPZC	D	[WZ],[WC]
ZCM-	1111111	ZC	0	CCCC	DDDDDDDDDD	000100010	SUBCNT	D	[WZ],[WC]
ZCM-	1111111	ZC	0	CCCC	DDDDDDDDDD	000100011	GETPIX	D	[WZ],[WC]
ZCM-	1111111	ZC	0	CCCC	DDDDDDDDDD	000100100	BINBCD	D	[WZ],[WC]
ZCM-	1111111	ZC	0	CCCC	DDDDDDDDDD	000100101	BCDBIN	D	[WZ],[WC]
ZCM-	1111111	ZC	0	CCCC	DDDDDDDDDD	000100110	BINGRY	D	[WZ],[WC]
ZCM-	1111111	ZC	0	CCCC	DDDDDDDDDD	000100111	GRYBIN	D	[WZ],[WC]
ZCM-	1111111	ZC	0	CCCC	DDDDDDDDDD	000101000	ESWAP4	D	[WZ],[WC]
ZCM-	1111111	ZC	0	CCCC	DDDDDDDDDD	000101001	ESWAP8	D	[WZ],[WC]
ZCM-	1111111	ZC	0	CCCC	DDDDDDDDDD	000101010	SEUSSF	D	[WZ],[WC]
ZCM-	1111111	ZC	0	CCCC	DDDDDDDDDD	000101011	SEUSSR	D	[WZ],[WC]
Z-M-	1111111	ZC	0	CCCC	DDDDDDDDDD	000101100	INCD	D	[WZ],[WC]
Z-M-	1111111	ZC	0	CCCC	DDDDDDDDDD	000101101	DECD	D	[WZ],[WC]
Z-M-	1111111	ZC	0	CCCC	DDDDDDDDDD	000101110	INCDS	D	[WZ],[WC]

Z-M-	1111111	ZC	0	CCCC	DDDDDDDDDD	000101111	DECDS	D	[WZ],[WC]
							-		
ZCW-	1111111	ZC	0	CCCC	DDDDDDDDDD	000110000	POP	D	[WZ],[WC]
							-		
--L-	1111111	00	L	CCCC	DDDDDDDDDD	001iiiiii	REPD	D/#1..512,#1..64	
							-		
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010000000	CLKSET	D/#	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010000001	COGSTOP	D/#	
-CL-	1111111	0C	L	CCCC	DDDDDDDDDD	010000010	LOCKSET	D/#	[WC]
-CL-	1111111	0C	L	CCCC	DDDDDDDDDD	010000011	LOCKCLR	D/#	[WC]
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010000100	LOCKRET	D/#	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010000101	RDWIDEC	D/PTRA/PTRB	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010000110	RDWIDE	D/PTRA/PTRB	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010000111	WRWIDE	D/PTRA/PTRB	
							-		
ZCL-	1111111	ZC	L	CCCC	DDDDDDDDDD	010001000	GETP	D/#	[WZ],[WC]
ZCL-	1111111	ZC	L	CCCC	DDDDDDDDDD	010001001	GETNP	D/#	[WZ],[WC]
-CL-	1111111	0C	L	CCCC	DDDDDDDDDD	010001010	SEROUTA	D/#	[WC]
-CL-	1111111	0C	L	CCCC	DDDDDDDDDD	010001011	SEROUTB	D/#	[WC]
-CL-	1111111	0C	L	CCCC	DDDDDDDDDD	010001100	CMPCNT	D/#	[WC]
-CL-	1111111	0C	L	CCCC	DDDDDDDDDD	010001101	WAITPX	D/#	[WC]
-CL-	1111111	0C	L	CCCC	DDDDDDDDDD	010001110	WAITPR	D/#	[WC]
-CL-	1111111	0C	L	CCCC	DDDDDDDDDD	010001111	WAITPF	D/#	[WC]
							-		
ZCL-	1111111	ZC	L	CCCC	DDDDDDDDDD	010010000	SETZC	D/#	[WZ],[WC]
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010010001	SETMAP	D/#	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010010010	SETXCH	D/#	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010010011	SETTASK	D/#	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010010100	SETRACE	D/#	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010010101	SARACCA	D/#	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010010110	SARACCB	D/#	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010010111	SARACCS	D/#	
							-		
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010011000	SETPTRA	D/#	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010011001	SETPTRB	D/#	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010011010	ADDPTRA	D/#	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010011011	ADDPTRB	D/#	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010011100	SUBPTRA	D/#	

--L-	1111111	00	L	CCCC	DDDDDDDDDD	010011101	SUBPTRB	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010011110	SETWIDE	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010011111	SETWIDZ	D/#
						-		
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010100000	SETPTRX	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010100001	SETPTRY	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010100010	ADDPTRX	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010100011	ADDPTRY	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010100100	SUBPTRX	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010100101	SUBPTRY	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010100110	PASSCNT	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010100111	WAIT	D/#
						-		
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010101000	OFFP	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010101001	NOTP	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010101010	CLRP	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010101011	SETP	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010101100	SETPC	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010101101	SETPNC	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010101110	SETPZ	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010101111	SETPNZ	D/#
						-		
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010110000	DIV64D	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010110001	SQRT32	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010110010	QLOG	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010110011	QEXP	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010110100	SETQI	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010110101	SETQZ	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010110110	CFGDACS	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010110111	SETDACS	D/#
						-		
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010111000	CFGDAC0	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010111001	CFGDAC1	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010111010	CFGDAC2	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010111011	CFGDAC3	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010111100	SETDAC0	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010111101	SETDAC1	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	010111110	SETDAC2	D/#

--L-	1111111	00	L	CCCC	DDDDDDDDDD	010111111	SETDAC3	D/#
							-	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011000000	SETCTRA	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011000001	SETWAVA	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011000010	SETFRQA	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011000011	SETPHSA	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011000100	ADDPHSA	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011000101	SUBPHSA	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011000110	SETVID	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011000111	SETVIDY	D/#
							-	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011001000	SETCTRB	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011001001	SETWAVB	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011001010	SETFRQB	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011001011	SETPHSB	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011001100	ADDPHSB	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011001101	SUBPHSB	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011001110	SETVIDI	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011001111	SETVIDQ	D/#
							-	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011010000	SETPIX	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011010001	SETPIXZ	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011010010	SETPIXU	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011010011	SETPIXV	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011010100	SETPIXA	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011010101	SETPIXR	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011010110	SETPIXG	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011010111	SETPIXB	D/#
							-	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011011000	SETPORA	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011011001	SETPORB	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011011010	SETPORC	D/#
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011011011	SETPORD	D/#
							-	
--L-	1111111	00	L	CCCC	DDDDDDDDDD	011011100	PUSH	D/#
							-	
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011100110	JMPREL	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011100111	JMPRELD	D

-								
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011101000	JMP	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011101001	JMP_	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011101010	JMPD	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011101011	JMPD_	D
-								
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011101100	CALL	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011101101	CALL_	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011101110	CALLD	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011101111	CALLD_	D
-								
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011110000	CALLA	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011110001	CALLA_	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011110010	CALLAD	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011110011	CALLAD_	D
-								
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011110100	CALLB	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011110101	CALLB_	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011110110	CALLBD	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011110111	CALLBD_	D
-								
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011111000	CALLX	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011111001	CALLX_	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011111010	CALLXD	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011111011	CALLXD_	D
-								
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011111100	CALLY	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011111101	CALLY_	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011111110	CALLYD	D
--R-	1111111	00	0	CCCC	DDDDDDDDDD	011111111	CALLYD_	D
-								
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100000000	RETA	[WZ],[WC]
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100000001	RETAD	[WZ],[WC]
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100000010	RETB	[WZ],[WC]
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100000011	RETB	[WZ],[WC]
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100000100	RETX	[WZ],[WC]
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100000101	RETXD	[WZ],[WC]
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100000110	RETY	[WZ],[WC]

ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100000111	RETYD		[WZ],[WC]
							-		
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100001000	RET		[WZ],[WC]
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100001001	RETD		[WZ],[WC]
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100001010	POLCTRA		[WZ],[WC]
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100001011	POLCTRB		[WZ],[WC]
							-		
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100001100	POLVID		[WZ],[WC]
----	1111111	00	x	CCCC	xxxxxxxxxx	100001101	CAPCTRA		
----	1111111	00	x	CCCC	xxxxxxxxxx	100001110	CAPCTRB		
----	1111111	00	x	CCCC	xxxxxxxxxx	100001111	CAPCTRS		
							-		
----	1111111	00	x	CCCC	xxxxxxxxxx	100010000	CACHEX		
----	1111111	00	x	CCCC	xxxxxxxxxx	100010001	CLRACCA		
----	1111111	00	x	CCCC	xxxxxxxxxx	100010010	CLRACCB		
----	1111111	00	x	CCCC	xxxxxxxxxx	100010011	CLRACCS		
							-		
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100010100	CHKPTRX		[WZ],[WC]
ZC--	1111111	ZC	x	CCCC	xxxxxxxxxx	100010101	CHKPTRY		[WZ],[WC]
----	1111111	00	x	CCCC	xxxxxxxxxx	100010110	SYNCTRA		
----	1111111	00	x	CCCC	xxxxxxxxxx	100010111	SYNCTRB		
							-		
----	1111111	00	x	CCCC	xxxxxxxxxx	100011000	SETPIXW		