

	c0	c1	c2	c3	c4	c5	c6	c7
00c	[ctrl]	[ctrl2]	[figs]	JMP [ads]	JSR [ads]	[bra]	[bra2]	MOVQ q#m, [ads]
01c	MOV [reg], [ads]	MOV \$m, [ads]	MOV \$m(PC), [ads]	MOV (reg), [ads]	MOV \$m(reg), [ads]	MOV (reg)+, [ads]	MOV -(reg), [ads]	MOV #m, [ads]
02c	ADD [reg], [ads]	ADD \$m, [ads]	ADD \$m(PC), [ads]	ADD (reg), [ads]	ADD \$m(reg), [ads]	ADD (reg)+, [ads]	ADD -(reg), [ads]	ADD #m, [ads]
03c	ADC [reg], [ads]	ADC \$m, [ads]	ADC \$m(PC), [ads]	ADC (reg), [ads]	ADC \$m(reg), [ads]	ADC (reg)+, [ads]	ADC -(reg), [ads]	ADC #m, [ads]
04c	SUB [reg], [ads]	SUB \$m, [ads]	SUB \$m(PC), [ads]	SUB (reg), [ads]	SUB \$m(reg), [ads]	SUB (reg)+, [ads]	SUB -(reg), [ads]	SUB #m, [ads]
05c	SBB [reg], [ads]	SBB \$m, [ads]	SBB \$m(PC), [ads]	SBB (reg), [ads]	SBB \$m(reg), [ads]	SBB (reg)+, [ads]	SBB -(reg), [ads]	SBB #m, [ads]
06c	AND [reg], [ads]	AND \$m, [ads]	AND \$m(PC), [ads]	AND (reg), [ads]	AND \$m(reg), [ads]	AND (reg)+, [ads]	AND -(reg), [ads]	AND #m, [ads]
07c	OR [reg], [ads]	OR \$m, [ads]	OR \$m(PC), [ads]	OR (reg), [ads]	OR \$m(reg), [ads]	OR (reg)+, [ads]	OR -(reg), [ads]	OR #m, [ads]
10c	XOR [reg], [ads]	XOR \$m, [ads]	XOR \$m(PC), [ads]	XOR (reg), [ads]	XOR \$m(reg), [ads]	XOR (reg)+, [ads]	XOR -(reg), [ads]	XOR #m, [ads]
11c	CMP [reg], [ads]	CMP \$m, [ads]	CMP \$m(PC), [ads]	CMP (reg), [ads]	CMP \$m(reg), [ads]	CMP (reg)+, [ads]	CMP -(reg), [ads]	CMP #m, [ads]
12c	ADDQ q#m, [ads]	ADCQ q#m, [ads]	SUBQ q#m, [ads]	SBBQ q#m, [ads]	ANDQ q#m, [ads]	ORQ q#m, [ads]	XORQ q#m, [ads]	CMPQ q#m, [ads]
13c	NOT [ads]	LSH [ads]	RSH [ads]	INC [ads]	DEC [ads]	SEX [ads]	NOP	NOP

	c0	c1	c2	c3	c4	c5	c6	c7
00c	[ctrl]	[ctrl2]	[flgs]	JMP [ads]	JSR [ads]	[bra]	[bra2]	MOVQ q#m, [ads]
01c	MOV [reg], [ads]	MOV \$m, [ads]	MOV \$m(PC), [ads]	MOV (reg), [ads]	MOV \$m(reg), [ads]	MOV (reg)+, [ads]	MOV -(reg), [ads]	MOV #m, [ads]
02c	ADD [reg], [ads]	ADD \$m, [ads]	ADD \$m(PC), [ads]	ADD (reg), [ads]	ADD \$m(reg), [ads]	ADD (reg)+, [ads]	ADD -(reg), [ads]	ADD #m, [ads]
03c	ADC [reg], [ads]	ADC \$m, [ads]	ADC \$m(PC), [ads]	ADC (reg), [ads]	ADC \$m(reg), [ads]	ADC (reg)+, [ads]	ADC -(reg), [ads]	ADC #m, [ads]
04c	SUB [reg], [ads]	SUB \$m, [ads]	SUB \$m(PC), [ads]	SUB (reg), [ads]	SUB \$m(reg), [ads]	SUB (reg)+, [ads]	SUB -(reg), [ads]	SUB #m, [ads]
05c	SBB [reg], [ads]	SBB \$m, [ads]	SBB \$m(PC), [ads]	SBB (reg), [ads]	SBB \$m(reg), [ads]	SBB (reg)+, [ads]	SBB -(reg), [ads]	SBB #m, [ads]
06c	AND [reg], [ads]	AND \$m, [ads]	AND \$m(PC), [ads]	AND (reg), [ads]	AND \$m(reg), [ads]	AND (reg)+, [ads]	AND -(reg), [ads]	AND #m, [ads]
07c	OR [reg], [ads]	OR \$m, [ads]	OR \$m(PC), [ads]	OR (reg), [ads]	OR \$m(reg), [ads]	OR (reg)+, [ads]	OR -(reg), [ads]	OR #m, [ads]
10c	XOR [reg], [ads]	XOR \$m, [ads]	XOR \$m(PC), [ads]	XOR (reg), [ads]	XOR \$m(reg), [ads]	XOR (reg)+, [ads]	XOR -(reg), [ads]	XOR #m, [ads]
11c	CMP [reg], [ads]	CMP \$m, [ads]	CMP \$m(PC), [ads]	CMP (reg), [ads]	CMP \$m(reg), [ads]	CMP (reg)+, [ads]	CMP -(reg), [ads]	CMP #m, [ads]
12c	ADDQ q#m, [ads]	ADCQ q#m, [ads]	SUBQ q#m, [ads]	SBBQ q#m, [ads]	ANDQ q#m, [ads]	ORQ q#m, [ads]	XORQ q#m, [ads]	CMPQ q#m, [ads]
13c	NOT [ads]	LSH [ads]	RSH [ads]	INC [ads]	DEC [ads]	SEX [ads]	NOP	NOP

CTRL			CTRL2		
Mode	ASM	Mnemonic	Mode	ASM	Mnemonic
x0	RESET	RST	x0	STORE FLAGS	STF [reg] STF
x1	HALT	HLT	x1		NOP
x2	CALL	CAL q\$m	x2		NOP
x3		NOP	x3		NOP
x4		NOP	x4	BYTE SWAP	SWP [reg] SWP
x5		NOP	x5	EXCHANGE	EXG [reg],[reg] EXG
x6		NOP	x6	LINK	LNK [reg],#m LNK
x7	RETURN SUBROUTINE	RTS	x7	UNLINK	ULNK [reg] ULNK
FLGS			BRA		
Mode	ASM	Mnemonic	Mode	Mnemonic	Mnemonic
x0	AND IMM. FLAGS	ANF \$m	x0	IF N = 1	BIN \$m(PC) BIN
x1	OR IMM. FLAGS	ORF \$m	x1	IF Z = 1	BIZ \$m(PC) BIE
x2	XOR IMM. FLAGS	XOF \$m	x2	IF V = 1	BIV \$m(PC) BIV
x3	LOAD FLAGS	LDF [reg]	x3	IF C = 1	BIC \$m(PC) BIC
x4	AND IMM. STATUS	ANT \$m	x4	IF N != 1	BNN \$m(PC) BNN
x5	OR IMM. STATUS	ORT \$m	x5	IF Z != 1	BNZ \$m(PC) BNE
x6	XOR IMM. STATUS	XOT \$m	x6	IF V != 1	BNV \$m(PC) BNV
x7	LOAD STATUS	LDT [reg]	x7	IF C != 1	BNC \$m(PC) BNC
BRA2			ADS		
Mode	ASM	Mnemonic	Mode	ASM	Mnemonic
x0	IF A >= B	BGE	x0	REG	[reg]
x1	IF A > B	BGT	x1	DIR.	\$m
x2	IF A <= B	BLE	x2	DIR. PC + OFF.	\$m(PC)
x3	IF A < B	BLT	x3	REG IND.	(reg)
x4		NOP	x4	REG + OFF.	\$m(reg)
x5		NOP	x5	REG, POST INC.	(reg)+
x6		NOP	x6	SP, PRE DEC.	-(reg)
x7		NOP	x7		NOP



D0	CLK		~PC_ST	ALU_CVAL		RESERVED	RESERVED	1	D0	CTRL0
D1	GND		~OP1_ST	GND		RESERVED	GND		D1	CTRL1
D2	CLK1		~OP2_ST	~PC_EN		RESERVED	RESERVED		D2	GND
D3	CLK2		~IR_ST	COND_POS		RESERVED	RESERVED		D3	CTRL2
GND	RESERVED		GND	~F_ALUin		GND	RESERVED	5	D4	CTRL3
D4	RESERVED		~MDR_ST	~F_ST		RESERVED	RESERVED		D5	CTRL4
D5	RESERVED		~MEM_ST	~MAR_ST		RESERVED	RESERVED		GND	CTRL5
D6	GND		~REG_ST	GND		RESERVED	GND		D6	CTRL6
D7	RESERVED		~STAT_ST	RESERVED		RESERVED	RESERVED		D7	CTRL7
D8	RESERVED		RESERVED	RST_MODE		RESERVED	RESERVED	10	~A_DOUT	A0
GND	RESERVED		GND	DMA_MODE		GND	RESERVED		~MEM_DOUT	GND
D9	RESERVED		~F_DOUT	FLT_MODE		RESERVED	RESERVED		~SUM_DOUT	A1
D10	RESERVED		~PC_DOUT	FTCH_MODE		RESERVED	RESERVED		~ROM_DOUT	A2
D11	GND		~SUM_DOUT	GND		RESERVED	GND		RESERVED	A3
D12	RESERVED		~RSH_DOUT	RESERVED		RESERVED	RESERVED	15	GND	A4
D13	RESERVED		~SEX_DOUT	RESERVED		30 PIN			RESERVED	A5
GND	RESERVED		GND	RESERVED					RESERVED	A6
D14	RESERVED		~SWP_DOUT	RESERVED					~A_ST	A7
D15	RESERVED		~WRD_DOUT	RESERVED					~MEM_ST	GND
RESERVED	GND		~MDR_DOUT	GND				20	~SUM_ST	RESERVED
A0	RESERVED		~MEM_DOUT	RESERVED					~MAR_ST	RESERVED
A1	RESERVED		RESERVED	RESERVED					~OP_ST	RESERVED
GND	RESERVED		GND	RESERVED					GND	RESERVED
A2	RESERVED		~PC_AOUT	RESERVED					~PC_ST	RESERVED
A3	RESERVED		~MAR_AOUT	RESERVED				25	RESERVED	RESERVED
A4	GND		RESERVED	GND					RESERVED	RESERVED
A5	RESERVED		COND_N	RESERVED					RESERVED	GND
A6	RESERVED		COND_Z	RESERVED					RESERVED	RESERVED
GND	RESERVED		GND	RESERVED					RESERVED	RESERVED
A7	RESERVED		COND_V	RESERVED				30	RESERVED	RESERVED
A8	RESERVED		COND_C	RESERVED					GND	RESERVED
A9	GND		RESERVED	GND					RESERVED	RESERVED
A10	RESERVED		ALU_S0	RESERVED					RESERVED	RESERVED
A11	RESERVED		ALU_S1	RESERVED					RESERVED	RESERVED
GND	RESERVED		GND	RESERVED				35	RESERVED	GND
A12	RESERVED		ALU_S2	RESERVED					RESERVED	RESERVED
A13	RESERVED		ALU_S3	RESERVED					CLK1	RESERVED
A14	GND		ALU_M	GND					CLK2	RESERVED
A15	RESERVED		ALU_CSEL	RESERVED					GND	RESERVED
VCC	VCC		VCC	VCC				40	VCC	VCC
DATA			CONTROL							