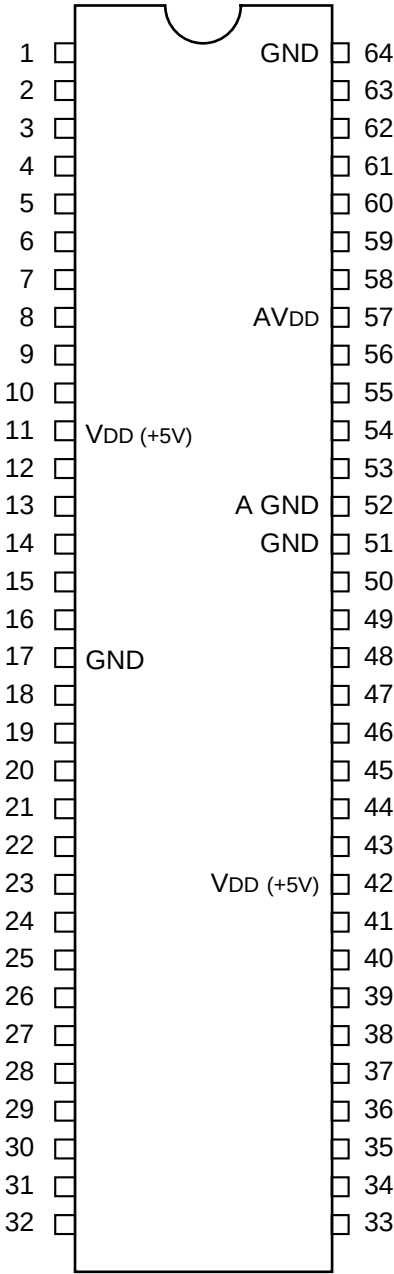

C-MOS 16-BIT MICRO COMPUTER
—TOP VIEW—



53	P60/AN0	P10/WAIT	3
54	P61/AN1	P11/IRQ0	4
55	P62/AN2	P12/A18/ADTRG/IRQ1	5
56	P63/AN3	P13/A17/IRQ2	6
		P14/A16/IRQ3	7
		P15/AS	8
		P16/RD	9
		P17/WR	10
58			18
59	P70/TXD2	P20/D0	19
60	P71/RXD2	P21/D1	20
61	P72/SCK2/A19	P22/D2	21
62	P73/TXD1	P23/D3	22
63	P74/RXD1	P24/D4	23
	P75/SCK1	P25/D5	24
		P26/D6	25
		P27/D7	26
12	MD0	P30/A0	27
13	MD1	P31/A1	28
14	MD2	P32/A2	29
		P33/A3	30
		P34/A4	31
16	NMI	P35/A5	32
		P36/A6	33
15	RES	P37/A7	34
		P40/A8	35
		P41/A9	36
		P42/A10	37
		P43/A11	38
		P44/A12/IRQ4	39
		P45/A13/IRQ5	40
		P46/A14/IRQ6	41
		P47/A15/IRQ7	42
			43
		P50/TMC1	44
		P51/FTI1	45
		P52/FTI2/TMRI	46
		P53/TMO	47
1	EXTAL	P54/FTOB1/FTCI1	48
2	XTAL	P55/FTOB2/FTCI2	49
		P56/FTOA1	50
		P57/FTOA2/Ø	

(V_{DD} = + 5 V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	EXTAL	17	—	V _{SS} (GND)	33	I/O	P37/A7	49	I/O	P56/FTOA1
2	O	XTAL	18	I/O	P20/D0	34	I/O	P40/A8	50	I/O	P57/FTOA2/Ø
3	I/O	P10/ $\overline{\text{WAIT}}$	19	I/O	P21/D1	35	I/O	P41/A9	51	—	V _{SS} (GND)
4	I/O	P11/ $\overline{\text{IRQ0}}$	20	I/O	P22/D2	36	I/O	P42/A10	52	—	A GND
5	I/O	P12/A18/ $\overline{\text{ADTRG}}$ / $\overline{\text{IRQ1}}$	21	I/O	P23/D3	37	I/O	P43/A11	53	I	P60/AN0
6	I/O	P13/A17/ $\overline{\text{IRQ2}}$	22	I/O	P24/D4	38	I/O	P44/A12/ $\overline{\text{IRQ4}}$	54	I	P61/AN1
7	I/O	P14/A16/ $\overline{\text{IRQ3}}$	23	I/O	P25/D5	39	I/O	P45/A13/ $\overline{\text{IRQ5}}$	55	I	P62/AN2
8	I/O	P15/ $\overline{\text{AS}}$	24	I/O	P26/D6	40	I/O	P46/A14/ $\overline{\text{IRQ6}}$	56	I	P63/AN3
9	I/O	P16/ $\overline{\text{RD}}$	25	I/O	P27/D7	41	I/O	P47/A15/ $\overline{\text{IRQ7}}$	57	—	AV _{DD}
10	I/O	P17/ $\overline{\text{WR}}$	26	I/O	P30/A0	42	—	V _{DD}	58	I/O	P70/TXD2
11	—	V _{DD}	27	I/O	P31/A1	43	I/O	P50/TMCI	59	I/O	P71/RXD2
12	I	MD0	28	I/O	P32/A2	44	I/O	P51/FTI1	60	I/O	P72/SCK2/A19
13	I	MD1	29	I/O	P33/A3	45	I/O	P52/FTI2/TMRI	61	I/O	P73/TXD1
14	I	MD2	30	I/O	P34/A4	46	I/O	P53/TMO	62	I/O	P74/RXD1
15	I/O	RES	31	I/O	P35/A5	47	I/O	P54/FTOB1/FTCI1	63	I/O	P75/SCK1
16	I	NMI	32	I/O	P36/A6	48	I/O	P55/FTOB2/FTCI2	64	—	V _{SS} (GND)

AV_{DD}/A GND : REFERENCE VOLTAGE FOR A/D CONVERTOR

INPUT

ADTRG	;	EXTERNAL TRIGGER FOR A/D CONVERTOR
AN0-AN3	;	ANALOG INPUTS
EXTAL	;	CONNECTED TO CRYSTAL OSCILLATOR
FTCI1, FTCI2	;	*FRT COUNTER CLOCK (CHANNEL 1, 2)
FTI1, FTI2	;	*FRT INPUT CAPTURE (CHANNEL 1, 2)
IRQ0-IRQ7	;	INTERRUPTION REQUEST 0-7
MD0-MD2	;	MODE SETTING
NMI	;	NON MASKABLE INTERRUPTION
P60-P63	;	PORT 6
RXD1, RXSD2	;	RECEIVE DATA (CHANNEL 1, 2)
TMCI	;	8-BIT TIMER CLOCK
TMRI	;	8-BIT TIMER COUNTER RESET
WAIT	;	WAIT
*FRT	;	FREE RUNNING TIMER

OUTPUT

A0-A19	;	ADDRESS BUS
AS	;	ADDRESS STROBE
FTOA1, FTOA2	;	*FRT OUTPUT COMPARE A (CHANNEL 1, 2)
FTOB1, FTOB2	;	*FRT OUTPUT COMPARE B (CHANNEL 1, 2)
RD	;	READ
TMO	;	8-BIT TIMER
TXD1, TXD2	;	TRANSMISSION DATA (CHANNEL 1, 2)
WR	;	WRITE
XTAL	;	CONNECTED TO CRYSTAL OSCILLATOR
Ø	;	SYSTEM CLOCK

INPUT/OUTPUT

D0-D7	;	DATA BUS
P10-P17	;	PORT 1
P20-P27	;	PORT 2
P30-P37	;	PORT 3
P40-P47	;	PORT 4
P50-P57	;	PORT 5
P70-P7	;	PORT 7
RES	;	RESET
SCK1, SCK2	;	SERIAL CLOCK (CHANNEL 1, 2)

MD2	MD1	MD0	ACTUATION MODE	CONTENT
0	0	0	MODE 0	——
0	0	1	MODE 1	EXTENTION MINIMUM MODE (ROM REACTIVE)
0	1	0	MODE 2	EXTENTION MINIMUM MODE (ROM EFFECTIVE)
0	1	1	MODE 3	EXTENTION MINIMUM MODE (ROM REACTIVE)
1	0	0	MODE 4	EXTENTION MINIMUM MODE (ROM EFFECTIVE)
1	0	1	MODE 5	——
1	1	0	MODE 6	HARDWARE STANDBY MODE
1	1	1	MODE 7	SINGLE CHIP MODE

0 ; LOW LEVEL
1 ; HIGH LEVEL

