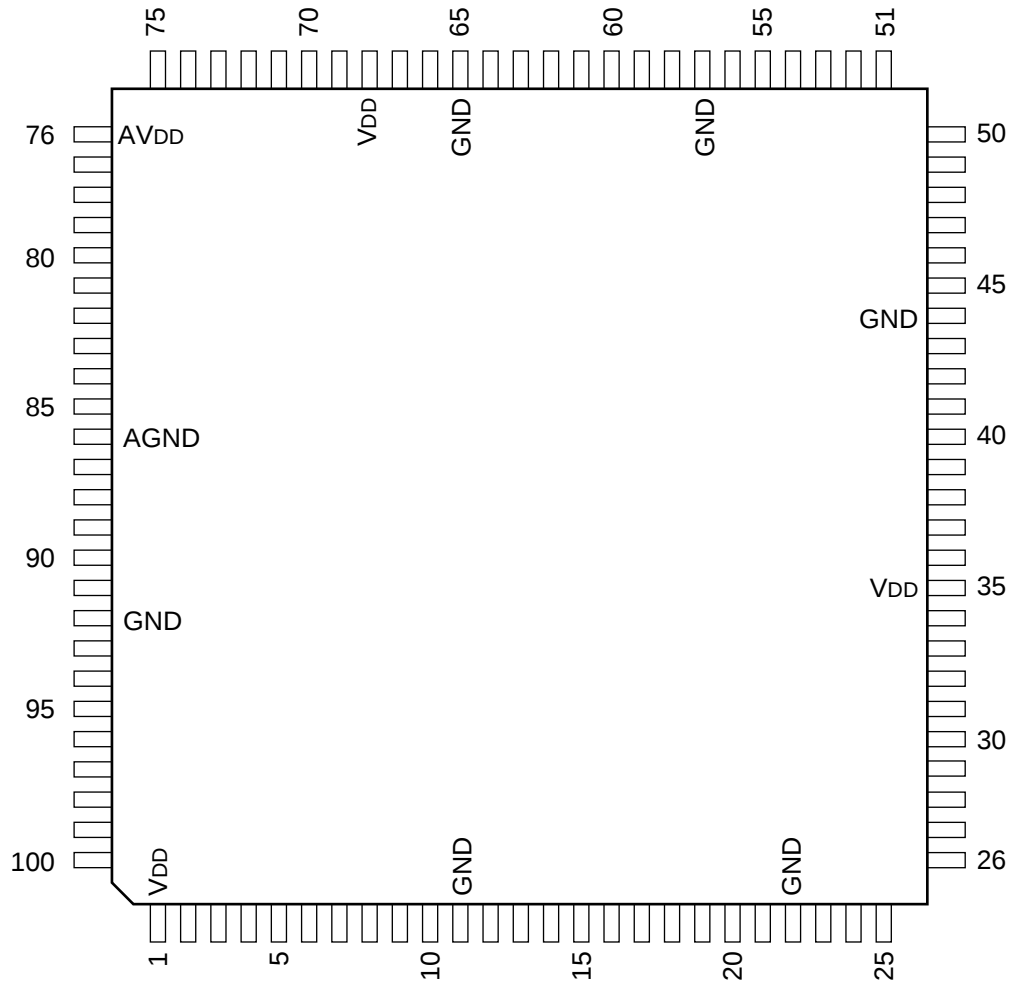


C-MOS 16-BIT SINGLE CHIP MICROCOMPUTER

—TOP VIEW—



PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	—	V _{DD}	35	—	V _{DD}	69	I/O	P63/ $\overline{\text{AS}}$
2	I/O	TIOCA3/TP8/PB0	36	I/O	A0/P10	70	I/O	P64/ $\overline{\text{RD}}$
3	I/O	TIOCB3/TP9/PB1	37	I/O	A1/P11	71	I/O	P65/ $\overline{\text{HWR}}$
4	I/O	TIOCA4/TP10/PB2	38	I/O	A2/P12	72	I/O	P66/ $\overline{\text{LWR}}$
5	I/O	TIOCB4/TP11/PB3	39	I/O	A3/P13	73	I	MD0
6	I/O	TOCXA4/TP12/PB4	40	I/O	A4/P14	74	I	MD1
7	I/O	TOCXB4/TP13/PB5	41	I/O	A5/P15	75	I	MD2
8	I/O	$\overline{\text{CS7/DREQ0/TP14/PB6}}$	42	I/O	A6/P16	76	—	AV _{DD}
9	I/O	$\overline{\text{ADTRG/DREQ1/TP15/PB7}}$	43	I/O	A7/P17	77	I	V _{REF}
10	O	$\overline{\text{RES0}}$	44	—	GND	78	I	P70/AN0
11	—	GND	45	I/O	A8/P20	79	I	P71/AN1
12	I/O	TXD0/P90	46	I/O	A9/P21	80	I	P72/AN2
13	I/O	TXD1/P91	47	I/O	A10/P22	81	I	P73/AN3
14	I/O	RXD0/P92	48	I/O	A11/P23	82	I	P74/AN4
15	I/O	RXD1/P93	49	I/O	A12/P24	83	I	P75/AN5
16	I/O	$\overline{\text{IRQ4/SCK0/P94}}$	50	I/O	A13/P25	84	I/O	P76/AN6/DA0
17	I/O	$\overline{\text{IRQ5/SCK1/P95}}$	51	I/O	A14/P26	85	I/O	P77/AN7/DA1
18	I/O	D0/P40	52	I/O	A15/P27	86	—	AGND
19	I/O	D1/P41	53	I/O	A16/P50	87	I/O	P80/ $\overline{\text{RFSH/IRQ0}}$
20	I/O	D2/P42	54	I/O	A17/P51	88	I/O	P81/ $\overline{\text{CS3/IRQ1}}$
21	I/O	D3/P43	55	I/O	A18/P52	89	I/O	P82/ $\overline{\text{CS2/IRQ2}}$
22	—	GND	56	I/O	A19/P53	90	I/O	P83/ $\overline{\text{CS1/IRQ3}}$
23	I/O	D4/P44	57	—	GND	91	I/O	P84/ $\overline{\text{CS0}}$
24	I/O	D5/P45	58	I/O	P60/ $\overline{\text{WAIT}}$	92	—	GND
25	I/O	D6/P46	59	I/O	P61/ $\overline{\text{BREQ}}$	93	I/O	PA0/TP0/ $\overline{\text{TEND0/TCLKA}}$
26	I/O	D7/P47	60	I/O	P62/ $\overline{\text{BACK}}$	94	I/O	PA1/TP1/ $\overline{\text{TEND0/TCLKB}}$
27	I/O	D8/P30	61	O	$\emptyset$	95	I/O	PA2/TP2/TIOCA0/TCLKC
28	I/O	D9/P31	62	I	$\overline{\text{STBY}}$	96	I/O	PA3/TP3/TIOCB0/TCLKD
29	I/O	D10/P32	63	I	$\overline{\text{RES}}$	97	I/O	PA4/TP4/TIOCA1/A23/ $\overline{\text{CS6}}$
30	I/O	D11/P33	64	I	NMI	98	I/O	PA5/TP5/TIOCB1/A22/ $\overline{\text{CS5}}$
31	I/O	D12/P34	65	—	GND	99	I/O	PA6/TP6/TIOCA2/A21/ $\overline{\text{CS4}}$
32	I/O	D13/P35	66	I	EXTAL	100	I/O	PA7/TP7/TIOCB2/A20
33	I/O	D14/P36	67	I	XTAL			
34	I/O	D15/P37	68	—	V _{DD}			

INPUT

<u>ADTRG</u>	; A/D CONVERTER TRIGGER
<u>AN0 - AN7</u>	; ANALOG
<u>BREQ</u>	; BUS REQUEST
<u>DREQ0, DREQ1</u>	; DMA REQUEST
<u>EXTAL</u>	; CRYSTAL OSCILLATOR AND EXTERNAL CLOCK
<u>IRQ0 - IRQ5</u>	; INTERRUPT REQUEST
<u>MD0 - MD2</u>	; MODE SELECT
<u>NMI</u>	; NON-MASKABLE INTERRUPT
<u>RES</u>	; RESET
<u>RXD0, RXD1</u>	; RECEIVE DATA
<u>STBY</u>	; STANDBY
<u>TCLKA-TCLKD</u>	; CLOCK
<u>VREF</u>	; A/D AND D/A CONVERTER REFERENCE VOLTAGE
<u>WAIT</u>	; WAIT
<u>XTAL</u>	; CRYSTAL OSCILLATOR

OUTPUT

<u>Ø</u>	; SYSTEM CLOCK
<u>A0 - A23</u>	; ADDRESS BUS
<u>AS</u>	; ADDRESS STROBE
<u>BACK</u>	; BUS REQUEST ACKNOWLEDGE
<u>CS0 - CS7</u>	; CHIP SELECT
<u>DA0, DA1</u>	; ANALOG
<u>HWR</u>	; HIGH WRITE
<u>LWR</u>	; LOW WRITE
<u>RD</u>	; READ
<u>RESO</u>	; RESET
<u>RFSH</u>	; REFRESH
<u>TEND0, TEND1</u>	; DMA END
<u>TOXA4</u>	; OUTPUT COMPARE XA4
<u>TOXB4</u>	; OUTPUT COMPARE XB4
<u>TP0 - TP15</u>	; TIMING PATTERN CONTROLLER
<u>TXD0, TXD1</u>	; TRANSMIT DATA

INPUT/OUTPUT

<u>D0 - D15</u>	; DATA BUS
<u>P10 - P17</u>	; PORT 1
<u>P20 - P27</u>	; PORT 2
<u>P30 - P37</u>	; PORT 3
<u>P40 - P47</u>	; PORT 4
<u>P50 - P53</u>	; PORT 5
<u>P60 - P66</u>	; PORT 6
<u>P70 - P77</u>	; PORT 7
<u>P80 - P84</u>	; PORT 8
<u>P90 - P95</u>	; PORT 9
<u>PA0 - PA7</u>	; PORT A
<u>PB0 - PB7</u>	; PORT B
<u>SCK0, SCK1</u>	; SERIAL CLOCK
<u>TIOCA0 - TIOCA4</u>	; INPUT CAPTURE/OUTPUT COMPARE A0 - A4
<u>TIOCB0 - TIOCB4</u>	; INPUT CAPTURE/OUTPUT COMPARE B0 - B4

		P66/LWR	72
43			71
	P17/A7	P65/HWR	
42	P16/A6	P64/RD	70
41	P15/A5	P63/AS	69
40	P14/A4	P62/BACK	60
39	P13/A3	P61/BREQ	59
38	P12/A2	P60/WAIT	58
37	P11/A1		
36	P10/A0	P77/AN7/DA1	85
		P76/AN6/DA0	84
52	P27/A15	P75/AN5	83
51	P26/A14	P74/AN4	82
50	P25/A13	P73/AN3	81
49	P24/A12	P72/AN2	80
48	P23/A11	P71/AN1	79
47	P22/A10	P70/AN0	78
46	P21/A9		
45	P20/A8	P84/CS0	91
		P83/CS1/IRQ3	90
34	P37/D15	P82/CS2/IRQ2	89
33	P36/D14	P81/CS3/IRQ1	88
32	P35/D13	P80/RTSH/IRQ0	87
31	P34/D12		
30	P33/D11	PA7/TP7/TIOCB2/A20	100
29	P32/D10	PA6/TP6/TIOCA2/A21/CS4	99
28	P31/D9	PA5/TP5/TIOCB1/A22/CS5	98
27	P30/D8	PA4/TP4/TIOCA1/A23/CS6	97
		PA3/TP3/TIOCB0/TCLKD	96
26	P47/D7	PA2/TP2/TIOCA0/TCLKC	95
25	P46/D6	PA1/TP1/TEND1/TCLKB	94
24	P45/D5	PA0/TP0/TEND0/TCLKA	93
23	P44/D4		
21	P43/D3	PB7/TP15/DREQ1/ADTRG	9
20	P42/D2	PB6/TP14/DREQ0/CS1	8
19	P41/D1	PB5/TP13/TOCXB4	7
18	P40/D0	PB4/TP12/TOCXA4	6
		PB3/TP11/TIOCB4	5
56	P53/A19	PB2/TP10/TIOCA4	4
55	P52/A18	PB1/TP9/TIOCB3	3
54	P51/A17	PB0/TP8/TIOCA3	2
53	P50/A16		
		VREF	77
75	MD2		
74	MD1	P95/SCK1/IRQ5	17
73	MD0	P94/SCK0/IRQ4	16
66	EXTAL	P93/RXD1	15
67	XTAL	P92/RXD0	14
61	∅	P91/TXD1	13
62	○ STBY	P90/TXD0	12
63	○ RES	RESO	10
64	NMI		

