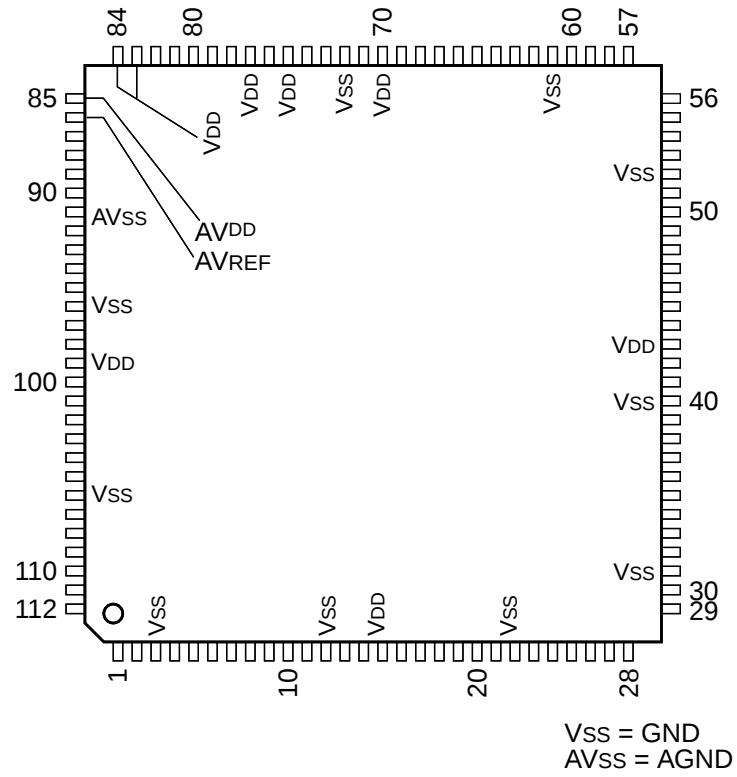


C-MOS 32-BIT RISC MICROCOMPUTER

—TOP VIEW—



PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I/O	PB14/TP14/ $\overline{\text{IRQ6}}$	39	O	A15	77	—	V _{DD}
2	I/O	PB15/TP15/ $\overline{\text{IRQ7}}$	40	—	V _{SS}	78	O	$\overline{\text{WDTOVF}}$
3	—	V _{SS}	41	O	A16	79	I	$\overline{\text{RES}}$
4	I/O	AD0	42	O	A17	80	I	MD0
5	I/O	AD1	43	—	V _{DD}	81	I	MD1
6	I/O	AD2	44	O	A18	82	I	MD2
7	I/O	AD3	45	O	A19	83	—	V _{DD}
8	I/O	AD4	46	O	A20	84	—	V _{DD}
9	I/O	AD5	47	O	A21	85	—	AV _{DD}
10	I/O	AD6	48	O	$\overline{\text{CS0}}$	86	I	AVREF
11	I/O	AD7	49	O	$\overline{\text{CS1/CASH}}$	87	I	PC0/AN0
12	—	V _{SS}	50	O	$\overline{\text{CS2}}$	88	I	PC1/AN1
13	I/O	AD8	51	O	$\overline{\text{CS3/CASL}}$	89	I	PC2/AN2
14	I/O	AD9	52	—	V _{SS}	90	I	PC3/AN3
15	—	V _{DD}	53	I/O	PA0/ $\overline{\text{CS4/TIOCA0}}$	91	—	AV _{SS}
16	I/O	AD10	54	I/O	PA1/ $\overline{\text{CS5/RAS}}$	92	I	PC4/AN4
17	I/O	AD11	55	I/O	PA2/ $\overline{\text{CS6/TIOCB0}}$	93	I	PC5/AN5
18	I/O	AD12	56	I/O	PA3/ $\overline{\text{CS7/WAIT}}$	94	I	PC6/AN6
19	I/O	AD13	57	I/O	PA4/ $\overline{\text{WRL (WR)}}$	95	I	PC7/AN7
20	I/O	AD14	58	I/O	PA5/ $\overline{\text{WRH (LBS)}}$	96	—	V _{SS}
21	I/O	AD15	59	I/O	PA6/ $\overline{\text{RD}}$	97	I/O	PB0/TP0/TIOCA2
22	—	V _{SS}	60	I/O	PA7/ $\overline{\text{BACK}}$	98	I/O	PB1/TP1/TIOCB2
23	O	A0 (HBS)	61	—	V _{SS}	99	—	V _{DD}
24	O	A1	62	I/O	PA8/ $\overline{\text{BREQ}}$	100	I/O	PB2/TP2/TIOCA3
25	O	A2	63	I/O	PA9/ $\overline{\text{AH/IRQOUT/ADTRG}}$	101	I/O	PB3/TP3/TIOCB3
26	O	A3	64	I/O	PA10/ $\overline{\text{DPL/TIOCA1}}$	102	I/O	PB4/TP4/TIOCA4
27	O	A4	65	I/O	PA11/ $\overline{\text{DPH/TIOCB1}}$	103	I/O	PB5/TP5/TIOCB4
28	O	A5	66	I/O	PA12/ $\overline{\text{IRQ0/DACK0/TCLKA}}$	104	I/O	PB6/TP6/TOCXA4/TCLKC
29	O	A6	67	I/O	PA13/ $\overline{\text{IRQ1/DREQ0/TCLKB}}$	105	I/O	PB7/TP7/TOCXB4/TCLKD
30	O	A7	68	I/O	PA14/ $\overline{\text{IRQ2/DACK1}}$	106	—	V _{SS}
31	—	V _{SS}	69	I/O	PA15/ $\overline{\text{IRQ3/DREQ1}}$	107	I/O	PB8/TP8/RXD0
32	O	A8	70	—	V _{DD}	108	I/O	PB9/TP9/TXD0
33	O	A9	71	O	CK	109	I/O	PB10/TP10/RXD1
34	O	A10	72	—	V _{SS}	110	I/O	PB11/TP11/TXD1
35	O	A11	73	I	EXTAL	111	I/O	PB12/TP12/ $\overline{\text{IRQ4/SCK0}}$
36	O	A12	74	I	XTAL	112	I/O	PB13/TP13/ $\overline{\text{IRQ5/SCK1}}$
37	O	A13	75	—	V _{DD}			
38	O	A14	76	I	NMI			

INPUT

$\overline{\text{ADTRG}}$	: A/D CONVERSION TRIGGER
AN0 - AN7	: ANALOG
$\overline{\text{BREQ}}$	: BUS REQUEST
$\overline{\text{DREQ0}}, \overline{\text{DREQ1}}$	: DMA REQUEST
EXTAL	: CRYSTAL OSCILLATION OR EXTERNAL CLOCK
$\overline{\text{IRQ0}} - \overline{\text{IRQ7}}$	: MASKABLE INTERRUPT REQUEST
LBS	: LOW BYTE STROBE
MD0 - MD2	: MODE CONTROL
NMI	: NON-MASKABLE INTERRUPT REQUEST
$\overline{\text{RES}}$	: RESET
RXD0, RXD1	: RECEIVE DATA
TCLKA - TCLKD	: ITU TIMER CLOCK
$\overline{\text{WAIT}}$	: WAIT
$\overline{\text{WR}}$	: WRITE
$\overline{\text{WRH}}$	: HIGH ORDER WRITE
$\overline{\text{WRL}}$	: LOW ORDER WRITE
XTAL	: CRYSTAL OSCILLATION

OUTPUT

A0 (HBS) - A21	: ADDRESS BUS
$\overline{\text{AH}}$	: ADDRESS HOLD
$\overline{\text{BACK}}$	: BUS REQUEST ACKNOWLEDGE
$\overline{\text{CASH}}$	: HIGH ORDER COLUMN ADDRESS STROBE
$\overline{\text{CASL}}$	: LOW ORDER COLUMN ADDRESS STROBE
CK	: SYSTEM CLOCK
$\overline{\text{CS0}} - \overline{\text{CS7}}$	: CHIP SELECT
$\overline{\text{DACK0}}, \overline{\text{DACK1}}$	: DMA ACKNOWLEDGE
$\overline{\text{IRQOUT}}$	: SLAVE INTERRUPT REQUEST
$\overline{\text{RAS}}$	: ROW ADDRESS STROBE
$\overline{\text{RD}}$	: READ
TOCXA4	: ITU OUTPUT COMPARE A (CH4)
TOCXB4	: ITU OUTPUT COMPARE B (CH4)
TP0 - TP15	: TIMING PATTERN
$\overline{\text{TXD0}}, \overline{\text{TXD1}}$	: TRANSMISSION DATA
$\overline{\text{WDTOVF}}$	: WATCHDOG TIMER OVERFLOW

INPUT/OUTPUT

AD0 - AD15	: DATA BUS
DPH	: HIGH ORDER DATA BUS PARITY
DPL	: LOW ORDER DATA BUS PARITY
PA0 - PA15	: PORT A
PB0 - PB15	: PORT B
PC0 - PC7	: PORT C
SCK0, SCK1	: SERIAL CLOCK
TIOCA0 - TIOCA4	: ITU INPUT CAPTURE/OUTPUT COMPARE A (CH0 - 4)
TIOCB0 - TIOCB4	: ITU INPUT CAPTURE/OUTPUT COMPARE B (CH0 - 4)

