M8048
8-Bit Microcontroller

AMI
AMERICAN MICROSYSTEMS, INC.

Digital Soft Megacells

Features

- Functionally compatible with the industry standard
- Uses AMI's ASIC Standard Library for technology independence
- Up to 256 bytes of data memory
- Up to 4K bytes of RAM or ROM program memory
- Memory down-load mode
- 8-bit timer/counter
- Power saving modes
- Equivalent gates:
  Standard Cell - 2,770; Gate Array - 3,470

Description

M8048 is an 8-bit microcontroller. This microcode-free design is software compatible (including instruction execution times) with industry standard discrete devices. It can address data RAM of up to 256 bytes and program RAM or ROM of up to 4k bytes. If program memory is implemented with RAM a special down-load mode is available to program the RAM. An 8-bit timer/counter and 27 I/O lines are available, and both internal and external interrupts are supported.

The M8048 has two power saving modes; soft power down mode and hard power down mode. In soft power down mode the clock to the ALU is stopped but the timer/counter and interrupts are still active. In hard power down mode the clock to the entire M8048 is stopped.

A per-use fee is associated with this megacell. Contact the factory for more information.

LOGIC SYMBOL

M8048

Inputs	Outputs
BI0-7	BO0-7
IB0-7	NBEN
CI0-7	OB0-7
NX1	NB0-7
NDLW	OC0-7
NDLR	NCB0-7
NINT	FA0-7
NSS	FO0-7
T0	NFWE
T1	M0-11
NRES	PSEN
EA	DLM
SSH	NMOE
NTST	ALE
FI0-7	T0O
MD0-7	T0EN
HIM	PROG
	NWR
	NRD
	NMWE
	NFOE
	XOFF

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