

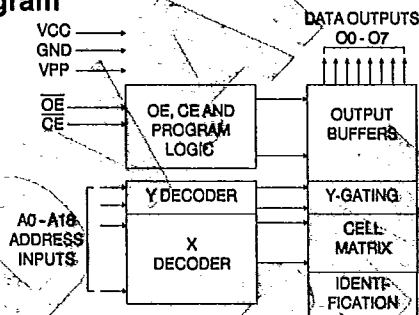
AT27C040

T-46-13-29

Features

- Low Power CMOS Operation
 - 100 μ A max. Standby
 - 25 mA max. Active at 5 MHz
- Fast Read Access Time - 120ns
- JEDEC Standard Package
 - 32-Lead 600 mil Cerdip
- 5V $\pm$ 10% Supply
- High Reliability CMOS Technology
 - 2000V ESD Protection
 - 200mA Latchup Immunity
- Rapid Programming - 100 μ s/byte (typical)
- Two-Line Control
- CMOS and TTL Compatible Inputs and Outputs
- Integrated Product Identification Code
- Full Military, Industrial and Commercial Temperature Ranges

Block Diagram



Description

The AT27C040 chip family is a low-power, high-performance 4,194,304 bit Ultraviolet Erasable and Electrically Programmable Read Only Memory (EPROM) organized as 512K x 8 bits. The AT27C040 requires only one 5V power supply in normal read mode operation. Any byte can be accessed in less than 120ns, eliminating the need for speed reducing WAIT states on high-performance microprocessor systems.

Atmel's 1.2 micron scaled CMOS technology provides for significantly lower active power consumption than similar NMOS designs. Power consumption is typically 20mA in active mode and less than 20 μ A in standby mode.

Pin Configurations

Pin Name	Function
A0-A18	Addresses
O0-O7	Outputs
CE	Chip Enable
OE	Output Enable
NC	No Connect

VPP	1	32	VCC
A16	2	31	A18
A15	3	30	A17
A12	4	29	A14
A7	5	28	A13
A6	6	27	A8
A5	7	26	A9
A4	8	25	A11
A3	9	24	OE
A2	10	23	A10
A1	11	22	CE
A0	12	21	O7
O0	13	20	O6
O1	14	19	O5
O2	15	18	O4
GND	16	17	O3

4 MEGABIT
(512K x 8)
UV
Erasable
CMOS
EPROM

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Advance
Information





Ordering Information

t _{ACC} (ns)	I _{CC} (mA)		Ordering Code	Package	Operation Range
	Active	Standby			
120	25	0.1	AT27C040-12DC	32DW6	Commercial (0°C to 70°C)
150	25	0.1	AT27C040-15DC	32DW6	Commercial (0°C to 70°C)
150	30	0.1	AT27C040-15DI	32DW6	Industrial (-40°C to 85°C)
			AT27C040-15DM	32DW6	Military (-55°C to 125°C)
			AT27C040-15DM/883	32DW6	Military/883C Class B, Fully Compliant (-55°C to 125°C)
200	25	0.1	AT27C040-20DC	32DW6	Commercial (0°C to 70°C)
200	30	0.1	AT27C040-20DI	32DW6	Industrial (-40°C to 85°C)
			AT27C040-20DM	32DW6	Military (-55°C to 125°C)
			AT27C040-20DM/883	32DW6	Military/883C Class B, Fully Compliant (-55°C to 125°C)
250	25	0.1	AT27C040-25DC	32DW6	Commercial (0°C to 70°C)
250	30	0.1	AT27C040-25DI	32DW6	Industrial (-40°C to 85°C)
			AT27C040-25DM	32DW6	Military (-55°C to 125°C)
			AT27C040-25DM/883	32DW6	Military/883C Class B, Fully Compliant (-55°C to 125°C)

Package Type	
32DW6	32 Lead, 0.600" Wide, Windowed, Ceramic Dual Inline Package (Cerdip)