

FUJITSU MICROELECTRONICS

CMOS 16,384-BIT STATIC RANDOM ACCESS MEMORY

**MB8416A-12
MB8416A-15**

**ADVANCE
INFORMATION**

DESCRIPTION

The Fujitsu MB8416A is a 2048 word by 8-bit static random access memory fabricated with high density, high reliability Complementary MOS silicon-gate technology.

The memory utilizes asynchronous circuitry and may be maintained in any state for an indefinite period of time. All input and output pins are TTL-compatible, and a single 5 volt power supply

is used. It is possible to retain data at low power supply voltage.

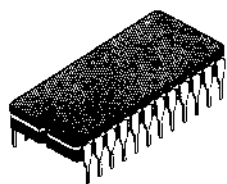
The MB8416A can be optimized for high performance applications such as microcomputer systems where fast access time and ease of use are required. Output Enable (OE) input permits the disable of all outputs when outputs are OR-tied. The MB8416A is packaged in an industry standard 24-pin dual in-line package.

FEATURES

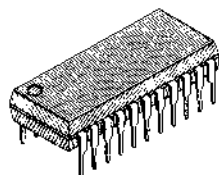
- Organized as 2048 words by 8-bits
- Address Access Time:
MB8416A-12 120ns Max.
MB8416A-15 150ns Max.
- Low Power Dissipation:
I_{CC} (Active) = 60mA Max.
I_{SB} (Standby) = 4mA Max.
I_{DR} (Data Retention) = 2mA Max.
- Completely static operation, no clocks required
- Single +5 Volt Power Supply, $\pm 10\%$ tolerance
- TTL compatible inputs/outputs
- Data Retention: 2.0V Min.
- Equal Access and Cycle Times
- Output timing reference levels: 0.8V to 2.2V
- Plug-in compatible with 16K EPROMs
- Pin compatible with HM6116, TC5517, μ PD446

TRUTH TABLE

DEVICE NUMBER	MB8416A				
PIN NUMBER	18	20	21	24	9-11 13-17
PIN NAME	CE	OE	WE	SUPPLY CURRENT	I/O
MODE					
WRITE	L	X	L	I _{CC}	D _{IN}
READ	L	L	H	I _{CC}	D _{OUT}
OUTPUT DISABLE	L	H	H	I _{CC}	HIGH Z
STANDBY	H	X	X	I _{SB}	HIGH Z

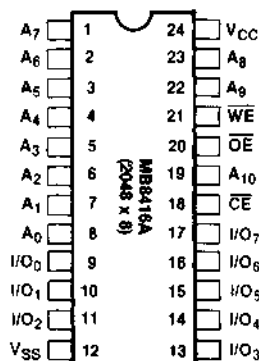


**CERDIP PACKAGE
DIP-24C-C03**



**PLASTIC PACKAGE
DIP-24C-M01**

PIN ASSIGNMENT



This device contains circuitry to protect the inputs against damage due to high static voltages or electric fields. However, it is advised that normal precautions be taken to avoid application of any voltage higher than maximum rated voltages to this high impedance circuit.