FUJITSU

CMOS 2M-BIT MASK-PROGRAMMABLE READ ONLY MEMORY

MB832000

2M-BIT(262,144 x 8) CMOS READ ONLY MEMORY

The Fujitsu MB832000 is a CMOS Si-gate mask-programmable static read only memory organized as 262,144 words by 8 bits.

The MB832000 has TTL-compatible I/O and 3-state output level with fully-static operation (i.e. no need of clock signal) and a single +5V power supply is required. Also, the MB832000 is designed for applications such as character generator or program storage which require large memory capacity and high-speed/low-power operation.
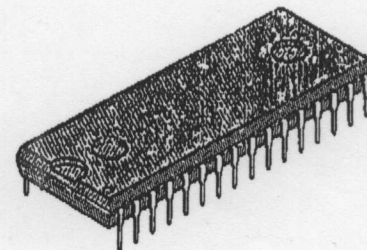
- Organization: 262,144 words x 8 bits
- Access time: 200 ns
- Completely static operation: No clock required
- TTL compatible Input/Output
- Three state ouput
- Single +5V power supply
- Power dissipation:
    220 mW max. (Active)
    16.5mW max. (Standby, TTL input level)
    275 µW max. (Standby, CMOS input level)
- 32-pin DIP(Pin compatible with MBM27C1001)

PLASTIC PACKAGE
DIP-32P-M01

ABSOLUTE MAXIMUM RATINGS (see NOTE)
(Referenced to GND)

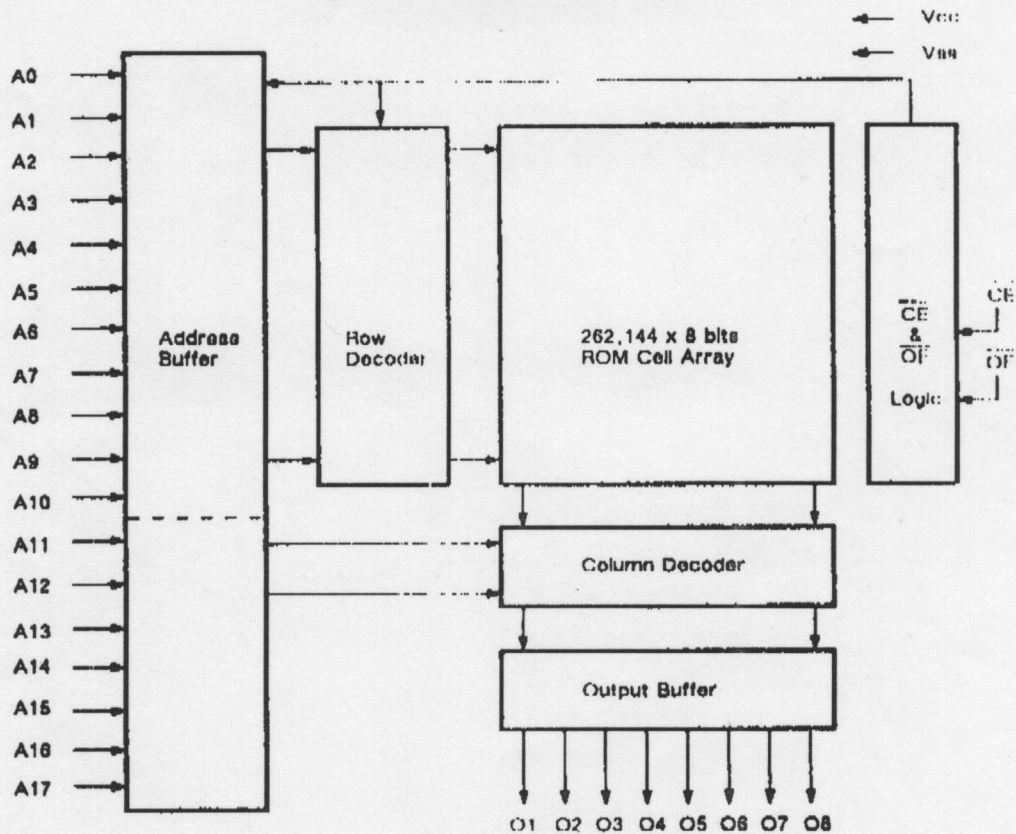| Rating	Symbol	Value	Unit
Supply Voltage	V_{CC}	-0.3 to +7.0	V
Input Voltage	V_{IN}	-0.5 to VCC+0.5	V
Output Voltage	V_{OUT}	-0.5 to VCC+0.5	V
Temperature Under Bias	T_{BIAS}	-10 to +85	°C
Storage Temperature Range	T_{STG}	-45 to +125	°C

NOTE: Permanent device damage may occur if the above Absolute Maximum Ratings are exceeded. Functional operation should be restricted to the conditions as detailed in the operational sections of this data sheet. Exposure to absolute maximum rating conditions for extended periods may affect device reliability

PIN ASSIGNMENT
MB832000

	Pin		Pin	
NC	1		32	Vcc
A16	2		31	NC
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	O8
O1	13		20	O7
O2	14		19	O6
O3	15		18	O5
Vss	16		17	O4

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.

Fig. 1—MB832000 BLOCK DIAGRAM

TRUTH TABLE

$\overline{CE}$	$\overline{OE}$	Mode	Output	Power Mode
H	X	Not Selected	High-Z	Standby
L	H	Not Selected	High-Z	Active
L	L	Selected	Data Out	Active

CAPACITANCE (TA=25°C, f=1MHz)

Parameter	Symbol	Min	Typ	Max	Unit
Output Capacitance (VOUT=0V)	C_{OUT}			15	pF
Input Capacitance (VIN=0V)	C_{IN}			10	pF