

# TOSHIBA MOS MEMORY PRODUCTS

TMM24512AP/AF 65,536 WORD×8 BIT ONE TIME  
PROGRAMMABLE READ ONLY MEMORY  
SILICON STACKED GATE MOS

## TMM24512AP/AF-20/25

PRELIMINARY

### DESCRIPTION

The TMM24512AP/AF is a 65,536 word x 8 bit one time programmable read only memory and molded in a 28 pin plastic Package. The TMM24512AP/AF's access time is 200ns/250ns, and has low power standby mode which reduces the power dissipation without increasing

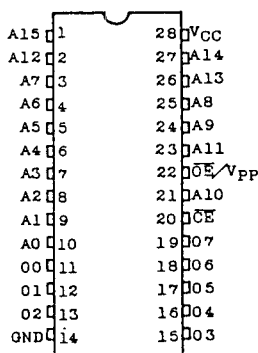
access time. The electrical characteristics and programming method are the same as U.V. EPROM TMM27512 AD's. Once programmed, the TMM24512AP/AF can not be erased because of using plastic DIP without transparent window.

### FEATURES

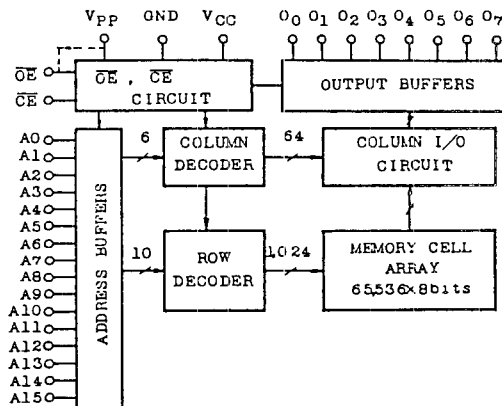
- Fast access time: 200ns, 250ns
- Low power dissipation
  - Active: 120mA
  - Standby: 35mA
- Single 5V power supply

- Full static operation
- High speed programming mode I, II
- Inputs and outputs TTL compatible
- Pin compatible with TMM27512D/AD
- Standard 28 pin DIP plastic package : TMM24512AP
- Plastic Flat Package : TMM24512AF

### PIN CONNECTION (TOP VIEW)



### BLOCK DIAGRAM



### PIN NAMES

A0 ~ A15	Address Inputs
00 ~ 07	Outputs (Inputs)
CE	Chip Enable Input
OE/V <sub>PP</sub>	Output Enable Input / Program Supply Voltage
V <sub>CC</sub>	Power Supply Voltage (+5V)
GND	Ground

### MODE SELECTION

MODE \ PIN	OE (20)	OE/V <sub>PP</sub> (22)	V <sub>CC</sub> (23)	00 ~ 07 (11 ~ 13, 15 ~ 19)	POWER
Read	L	L	5V	Data Out	Active
Output Deselect	*	H		High Impedance	
Standby	H	*		High Impedance	
Program	L	V <sub>PP</sub>	6V <sup>1)</sup> 6.25V <sup>2)</sup>	Data In	Active
Program Inhibit	H	V <sub>PP</sub>		High Impedance	
Program Verify	L	L		Data Out	

\*: H or L

- 1): HIGH SPEED PROGRAMMING MODE I
- 2): HIGH SPEED PROGRAMMING MODE II