TOSHIBA MOS MEMORY PRODUCTS

8,192 WORD × 8 BIT CMOS STATIC RAM

**TC5564APL-15, TC5564APL-20
TC5564AFL-15, TC5564AFL-20**

PRELIMINARY

DESCRIPTION

TC5564APL is 65536 bits static random access memory organized as 8192 words by 8 bits using CMOS technology, and operates with a single 5V power supply.

Advanced circuit techniques provides low power feature with a maximum operating of 5mA/MHz. Operation current depends on cycle time.

TC5564APL has three control inputs. Two chip enables ($\overline{CE1}$, CE2) allow for device selection and data retention control. Output enable ($\overline{OE}$) input provides fast memory access. When device is placed in standby mode with chip off state, standby current is typically $0.01\mu A$. So the TC5564APL is suitable for use in various microprocessor application systems where low power and battery back up are required. Ultra low standby power allow not only battery but capacitance backup.

Pin assignment of TC5564APL is pin-compatible with the 64K bits EPROM (TMM2764D). RAM and EPROM are then interchangeable in the same socket, resulting in flexibility in the definition of the quantity of RAM versus EPROM in microprocessor application systems.

TC5564APL is offered in both a standard dual-in-line 28 pin plastic package (0.6 inch width) and small-out-line plastic flat package.
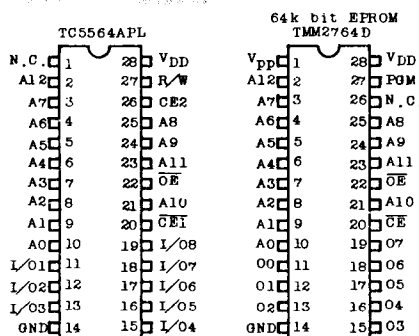
FEATURES

- Low Power Dissipation
  5mA/MHz (MAX.)   Operating
  $0.2\mu A$ (MAX.) at Ta = 25°C Standby
  $1.0\mu A$ (MAX.) at Ta = 60°C Standby
- 5V Single Power Supply
- Fully Static Operation
- Data Retention Voltage : 2.0~5.5V
- Plastic DIP and Plastic Flat Package
- Pin Compatible with 2764 type EPROM

- Access Time

	TC5564APL-15 TC5564AFL-15	TC5564APL-20 TC5564AFL-20
Address Access Time (MAX.)	150ns	200ns
$\overline{CE1}$ Access Time (MAX.)	150ns	200ns
CE2 Access Time (MAX.)	150ns	200ns
$\overline{OE}$ Access Time (MAX.)	70ns	100ns

- Directly TTL Compatible : All Inputs and Outputs
- Wide Temperature Operation : −40~85°C

PIN CONNECTION (TOP VIEW)

BLOCK DIAGRAM