TEMIC
Semiconductors

HM 65787

64 K × 1 High Speed CMOS SRAM

Short description. Please refer to the full datasheet available on TEMIC web for detailed technical information.

Introduction

The HM 65787 is a high speed CMOS static RAM organized as 65536×1 bit. It is manufactured using TEMIC's high performance CMOS technology.

Access times as fast as 15 ns are available with maximum power consumption of only 495 mW.

The HM 65787 features fully static operation requiring no external clocks or timing strobes. The automatic power-down feature reduces the power consumption by 60 % when the circuit is deselected.

Easy memory expansion is provided by an active low chip select ($\overline{CS}$) and three state drivers.

All inputs and outputs of the HM 65787 are TTL compatible and operate from single 5V supply thus simplifying system design.
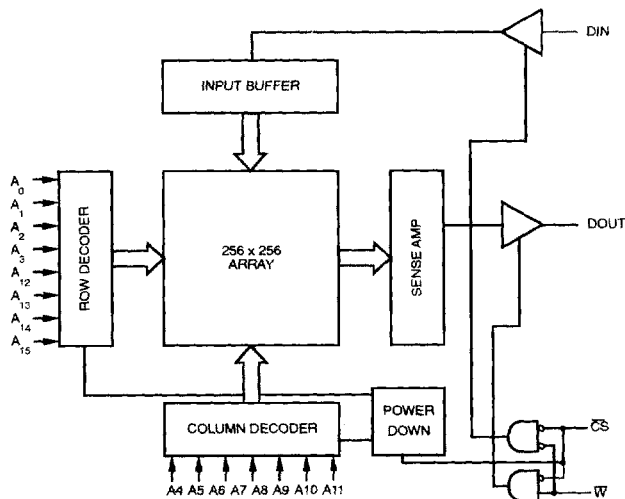
The HM 65787 is processed following the test methods of MIL STD 883.
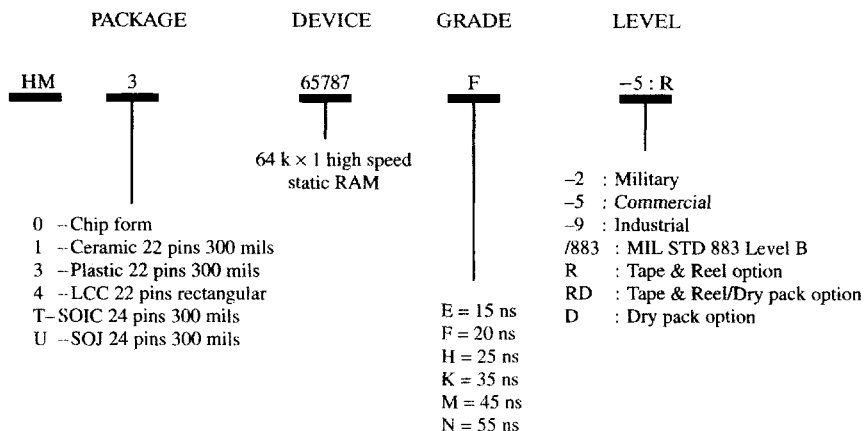
Features

- Fast access time
  Commercial : 15/20/25/35/45/55 ns
  Industrial military : 20/25/35/45/55 ns
- Low power consumption
  Active : 320 mW (typ)
  Standby : 75 mW (typ)
- Wide temperature range :
  $-55°C$ to $+125°C$

- 300 mils width package
- TTL compatible inputs and outputs
- Asynchronous
- Capable of withstanding greater than 2000 V electrostatic discharge
- Single 5 volt supply

Interface

Block Diagram

Ordering Information

PACKAGE	DEVICE	GRADE	LEVEL

HM   3   65787   F   –5 : R

64 k × 1 high speed
static RAM

0 – Chip form
1 – Ceramic 22 pins 300 mils
3 – Plastic 22 pins 300 mils
4 – LCC 22 pins rectangular
T– SOIC 24 pins 300 mils
U – SOJ 24 pins 300 mils

–2 : Military
–5 : Commercial
–9 : Industrial
/883 : MIL STD 883 Level B
R : Tape & Reel option
RD : Tape & Reel/Dry pack option
D : Dry pack option

E = 15 ns
F = 20 ns
H = 25 ns
K = 35 ns
M = 45 ns
N = 55 ns

Military Version

The following table gives package/access time/process flow available combinations

Temp. range	Packages	Access Time (ns)					Std process 65787
		20 (F)	25 (H)	35 (K)	45 (M)	55 (N)	Mil flows (including SMD5962–89696 SMD5962–86015)
M	1	●	●	●	●	●	●
	4	●	●	●	●	●	●
	0	X	X	X	X	●	●

● = product in production

X = call sales office for availibility