TEMIC
Semiconductors

HM 65756

32 K × 8 High Speed CMOS SRAM

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

Description

The HM 65756 is a high speed CMOS static RAM organised as 32,768 × 8 bits. It is manufactured using TEMIC's high performance CMOS technology.

Access time as fast as 15 ns are available with maximum power consumption of only 880 mW.

The HM 65756 features fully static operation requiring no external clocks or timing strobes. The automatic power-down feature reduces the power consumption by 80 % when the circuit is deselected.

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

All inputs or outputs of the HM-65756 are TTL compatible and operate from single 5 V supply thus simplifying system design.
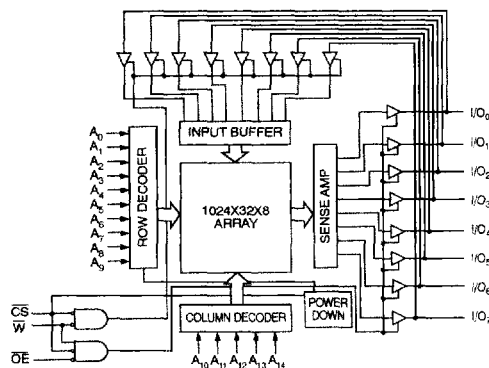
For military application the HM 65756 is processed according to the methods of the latest revision of the MIL STD 883.
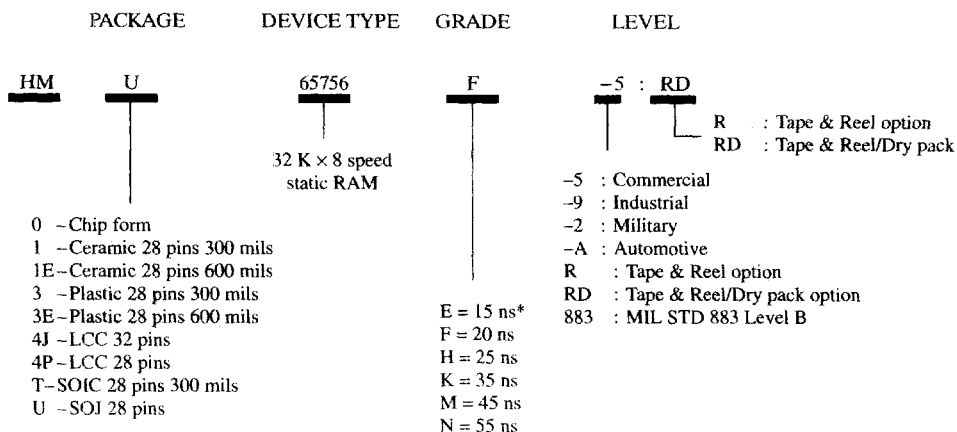
Features

- Fast access time
  Commercial : 15/20/25/35/45/55ns
  Industrial : 20/25/35/45/55ns
  Automotive/military : 25/35/45/55ns
- Low power consumption
  Active : 880 mW
  Standby : 220 mW
- Wide temperature range :
  − 55°C to + 125°C

- 300 and 600 mils width package
- TTL compatible inputs and outputs
- Asynchronous
- Capable of withstanding greater than 2 000 V electrostatic discharge
- Output enable
- Single 5 volt supply
- 3.3 v versions are also available (see L65756 spec)

Interface

Block Diagram

Ordering Information

PACKAGE   DEVICE TYPE   GRADE   LEVEL

HM   U   65756   F   −5 : RD

R   : Tape & Reel option
RD : Tape & Reel/Dry pack

32 K × 8 speed
static RAM

0 − Chip form
1 − Ceramic 28 pins 300 mils
1E − Ceramic 28 pins 600 mils
3 − Plastic 28 pins 300 mils
3E − Plastic 28 pins 600 mils
4J − LCC 32 pins
4P − LCC 28 pins
T − SOIC 28 pins 300 mils
U − SOJ 28 pins

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

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

* available in commercial range on PDIL.3 (code 3) and SOJ (code U). For other package please consult your sales office.

Military Version

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

Temp. range	Package	Access Time (ns)				Std process 65756
		25 (H)	35 (K)	45 (M)	55 (N)	Mil flows (including SMD5962–88662)
M	1	●	●	●	●	●
	1E	●	●	●	●	●
	4J	●	●	●	●	●
	4P	●	●	●	●	●
	0	X	X	X	●	●

● = product in production

X = call sales office for availability