Advanced Information

KM681000/KM681000L — CMOS SRAM

T-46-23-14

128K x 8 Bit Static RAM

FEATURES

- Fast Access Time 70, 80, 100, 120ns (max.)
- Low Power Dissipation
  - Standby (TTL) : 3 mA (max.)
  - (CMOS): 100 μA (max.)
  - Operating : 100 mA (max.)
- Single 5V ± 10% Power Supply
- TTL compatible inputs and output
- Full Static Operation
  - No clock or refresh required
- Tri-state Output
- Low Data Retention Current: 50 μA (max.)
- Battery Back-up Operation
  - 2V (min.) Data Retention
- Standard 32-pin DIP (600mil) and 32-pin SOP (450mil)

GENERAL DESCRIPTION

The KM681000/L is a 1,048,576-bit high-speed Static Random Access Memory organized as 131,072 words by 8 bit.

The device is fabricated using Samsung's advanced CMOS process.

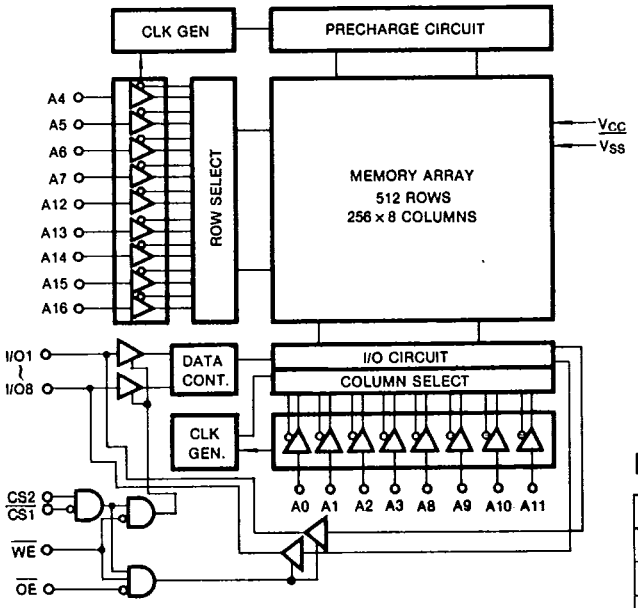
The KM681000/L has an output enable input for precise control of the data outputs.

It also has a chip enable inputs for the minimum current power down mode.

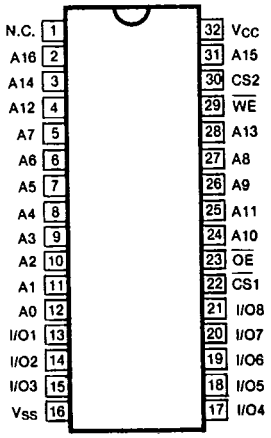
The KM681000/L has been designed for high speed and low power applications.

It is particularly well suited for battery back-up nonvolatile memory application.

FUNCTIONAL BLOCK DIAGRAM



PIN CONFIGURATIONS



PIN NAMES

Pin Name	Pin Function
A_0-A_{16}	Address Inputs
$\overline{WE}$	Write Enable
$\overline{CS}$1, CS2	Chip Select
$\overline{OE}$	Output Enable
I/O_1-I/O_8	Data Inputs/Outputs
V_{CC}	Power (+5V)
V_{SS}	Ground
N.C.	No Connection