

MSM511000RS

1,048,576-WORD × 1-BIT DYNAMIC RAM <Fast Page>

GENERAL DESCRIPTION

The MSM511000RS is a new generation dynamic RAM organized as 1,048,576 words by 1 bit. The technology used to fabricate the MSM511000RS is OKI's silicon gate CMOS process technology. The device operates from a single +5V power supply. Its I/O pins are TTL compatible.

FEATURES

- Silicon gate, N-well CMOS, 1-transistor memory cell
 - 1,048,576 words by 1 bit
 - Standard 18-pin plastic DIP
 - Family organization
- | Family | Access Time (MAX) | Cycle Time (MIN) | Power Dissipation | |
|----------------|-------------------|------------------|-------------------|---------------|
| | | | Operating (MAX) | Standby (MAX) |
| MSM511000-10RS | 100 ns | 190 ns | 385 mW | 11 mW |
| MSM511000-12RS | 120 ns | 220 ns | 330 mW | |
- Single +5V supply, ±10% tolerance
 - Input: TTL compatible, address input, data input latch
 - Output: TTL compatible, tristate, nonlatch
 - Refresh: 512 cycles/8 ms
 - Common I/O capability using "Early Write" operation
 - Fast page mode, read modify write capability
 - CAS before RAS refresh, CAS before RAS hidden refresh, RAS only refresh capability
 - "Gated" CAS
 - Built-in V_{BB} generator circuit

FUNCTIONAL BLOCK DIAGRAM

