

Product Preview
256K x 16 CMOS Dynamic RAM
Fast Page Mode – 1 CAS, 2 Write Enables

MCM54170B
MCM5L4170B
MCM5V4170B

The MCM54170B is a 0.6 μ CMOS high-speed, dynamic random access memory. It is organized as 262,144 sixteen-bit words and fabricated with CMOS silicon-gate process technology. Advanced circuit design and fine line processing provide high performance, improved reliability, and low cost.

The MCM54170B requires only 10 address lines; row and column address inputs are multiplexed. The device is packaged in a standard 400-mil SOJ plastic package, a 100-mil zig-zag in-line package (ZIP), and a 400-mil thin-small-outline-package (TSOP).

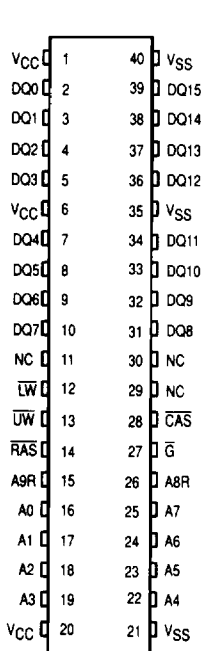
- Three-State Data Output
- Fast Page Mode
- TTL-Compatible Inputs and Outputs
- RAS Only Refresh
- CAS Before RAS Refresh
- Hidden Refresh
- Self Refresh (MCM5V4170B only)
- 1024 Cycle Refresh:

MCM54170B = 16 ms
MCM5L4170B and MCM5V4170B = 128 ms

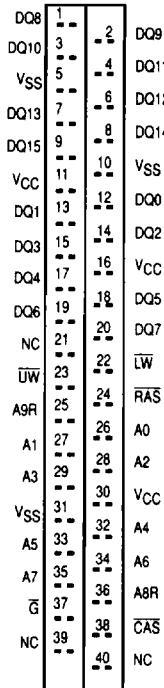
- Fast Access Time (t_{RAC})
 - MCM54170B-70, MCM5L4170B-70, and MCM5V4170B-70 = 70 ns (Max)
 - MCM54170B-80, MCM5L4170B-80, and MCM5V4170B-80 = 80 ns (Max)
 - MCM54170B-10, MCM5L4170B-10, and MCM5V4170B-10 = 100 ns (Max)
- Low Active Power Dissipation:
 - MCM54170B-70, MCM5L4170B-70, and MCM5V4170B-70 = 385 mW (Max)
 - MCM54170B-80, MCM5L4170B-80, and MCM5V4170B-80 = 330 mW (Max)
 - MCM54170B-10, MCM5L4170B-10, and MCM5V4170B-10 = 303 mW (Max)
- Low Standby Power Dissipation:
 - MCM54170B, MCM5L4170B, and MCM5V4170B = 5.5 mW (Max, TTL Levels)
- Battery Backup Power Dissipation:
 - MCM5L4170B = 1.7 mW (Max, battery backup mode, $t_{RC} = 125 \mu s$)
- Self Refresh Power Dissipation:
 - MCM5V4170B = 1.1 mW (Max, self refresh mode)

This document contains information on a new product. Specifications and information herein are subject to change without notice.

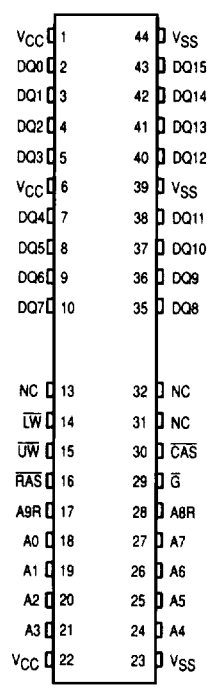
PIN ASSIGNMENTS – MCM54170B



256K X 16 DRAM
40-Pin 400-mil SOJ



256K X 16 DRAM
40-Pin 475-mil ZIP



256K X 16 DRAM
40/44-Pin 400-mil TSOP

PIN NAMES	
A0–A7, A8R, A9R . . .	Address Input
DQ0–DQ15	Data Input/Output
LW, UW	Read/Write Enable
RAS	Row Address Strobe
CAS	Column Address Strobe
VCC	Power Supply (+ 5 V)
VSS	Ground
NC	No Connection
G-bar	Output Enable