

Am2147/Am21L47

4096x1 Static RAM



DISTINCTIVE CHARACTERISTICS

- High speed — access times down to 35 ns maximum
- Automatic power-down when deselected
- Low power dissipation
- High output drive
- TTL compatible interface levels
- No power-on current surge

GENERAL DESCRIPTION

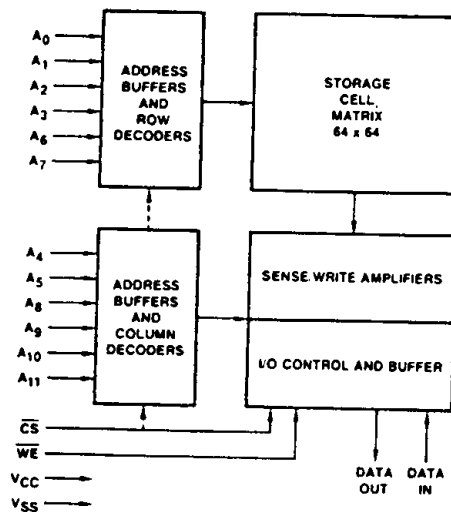
The Am2147/Am21L47 Series are high-performance, 4096 x 1-bit, static, read/write, random-access memories. It is organized as 4096 words by one bit per word. All interface signal levels are identical to TTL specifications, providing good noise immunity and simplified system design. All inputs are purely capacitive MOS loads. The outputs will drive up to seven standard TTL loads or up to six Schottky TTL loads.

Only a single +5-volt power supply is required. When deselected ($\overline{CS} \geq V_{IH}$), the Am2147 automatically enters a

power-down mode which reduces power dissipation by more than 85%. When selected, the chip powers up again with no access time penalty.

Data In and Data Out use separate pins on the standard 18-pin package. Data Out is the same polarity as Data In. Data Out is a three-state signal allowing wired-or operation of several chips. Data In and Data Out may be connected together for operation in a common data bus environment.

BLOCK DIAGRAM



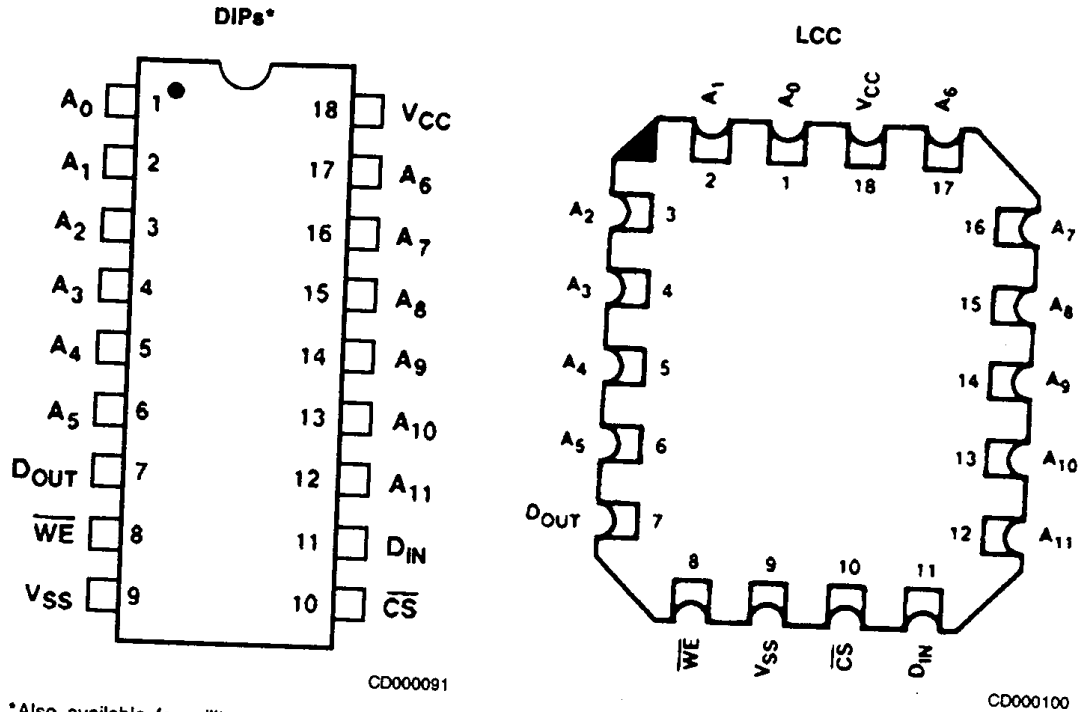
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PRODUCT SELECTOR GUIDE

Part Number	Am2147-35	Am2147-45	Am21L47-45	Am2147-55	Am21L47-55	Am2147-70	Am21L47-70
Maximum Access time (ns)	35	45	45	55	55	70	70
Maximum Active Current (mA)	180	180	125	180	125	160 (180 mil)	125
Maximum Standby Current (mA)	30	30	15	30	15	20 (30 mil)	15
Full Military Operating Range Version		Yes		Yes		Yes	

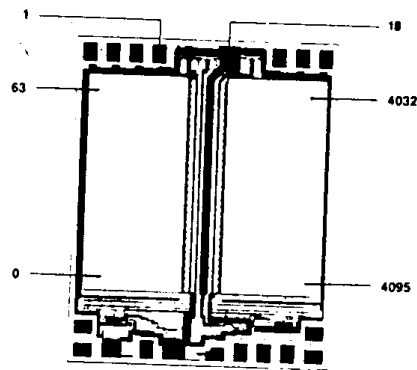
CONNECTION DIAGRAMS Top View



*Also available for military customers in an 18-Pin Ceramic Flatpack. Pinout is identical to DIPs.
Note: Pin 1 is marked for orientation.

BIT MAP

Address Designators	
External	Internal
A ₀	A ₂
A ₁	A ₅
A ₂	A ₄
A ₃	A ₃
A ₄	A ₈
A ₅	A ₇
A ₆	A ₁
A ₇	A ₀
A ₈	A ₁₁
A ₉	A ₉
A ₁₀	A ₁₀
A ₁₁	A ₆



Die Size: 0.130 x 0.106