

Intel i2107A

4096-bit (4096 x 1) Dynamic RAM

1973-75

Specifications

- 4096-bit (4096 x 1) Fully Decoded Dynamic RAM
- Introduced 1973-75
- NMOS
- Low Cost Per Bit
- Low Standby Power
- Easy System Interface
- Only One High Voltage Input Signal – Chip Enable
- Low Level Address, Data, Write Enable, Chip Select Inputs
- Address Registers Incorporated on the Chip
- Simple Memory Expansion: Chip Select Input Lead
- Fully Decoded: On Chip Address Decode
- Output is Three-State and TTL Compatible
- 22-pin Dual In-Line Package

Type	Access Time Max.	Cycle Time Max.	Power Dissipation Max. Operating/Standby	Supplies [V]
2107A	300ns	700ns	458mW/10mW	+12, +5, -5
2107A-1	280ns	550ns	516mW/16mW	+12, +5, -5
2107A-4	350ns	840ns	450mW/10mW	+12, +5, -5
2107A-5	420ns	970ns	376mW/11mW	+12, +5, -5
2107A-8	420ns	970ns	376mW/11mW	+12, +5, -5

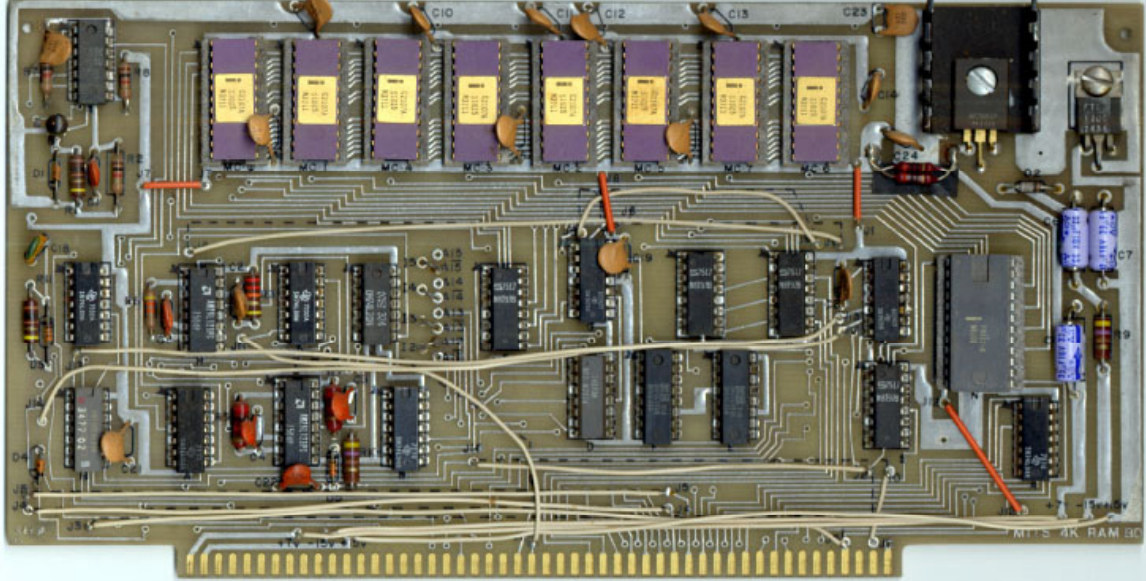
The Intel 2107A is a 4096 word by 1-bit dynamic N-channel MOS RAM. It was designed for memory applications where very low cost and large bit storage are important design objectives. The 2107A uses dynamic circuitry, which reduces the operation and standby power dissipation.

Reading information from the memory is non-destructive. Refreshing is accomplished by performing one read cycle on each of the 64 row addresses. Each row address must be refreshed every two milliseconds. The memory is refreshed whether Chip Select is a logic one or a logic zero.

The 2107A is fabricated with N-channel silicon gate technology. This technology allows the design and production of high performance, easy-to-use MOS circuits and provides a higher functional density on a monolithic chip than other MOS technologies [2].

Intel i2107A

MITS Altair 8800 4K RAM Board



MITS Altair 8800 4K Ram Board, Rev 0 with 8 Intel C2107A DRAMs

Intel i2107A

Part Numbers

Type C Packages

Part Number	Package Description	Values
		
C2107A	1. Type C gray ceramic package w/gold cap and gold pins.	\$15-\$60
C2107A	2. Type C purple ceramic package w/gold cap and gold pins. Photo on file.	\$15-\$60
C2107A-1	Type C package	\$15-\$60
C2107A-4	Type C package	\$15-\$60
C2107A-5	Type C package	\$15-\$60
		
C2107A-8	Type C purple ceramic package w/gold cap and gold pins.	\$15-\$60

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References

[1] Intel (1975). Intel Data Catalog, 2107A-8 Data Sheet, p. 2-79

[2] Intel (1977). Intel Component Data Catalog, 2107A Family Data Sheet, p. 2-48