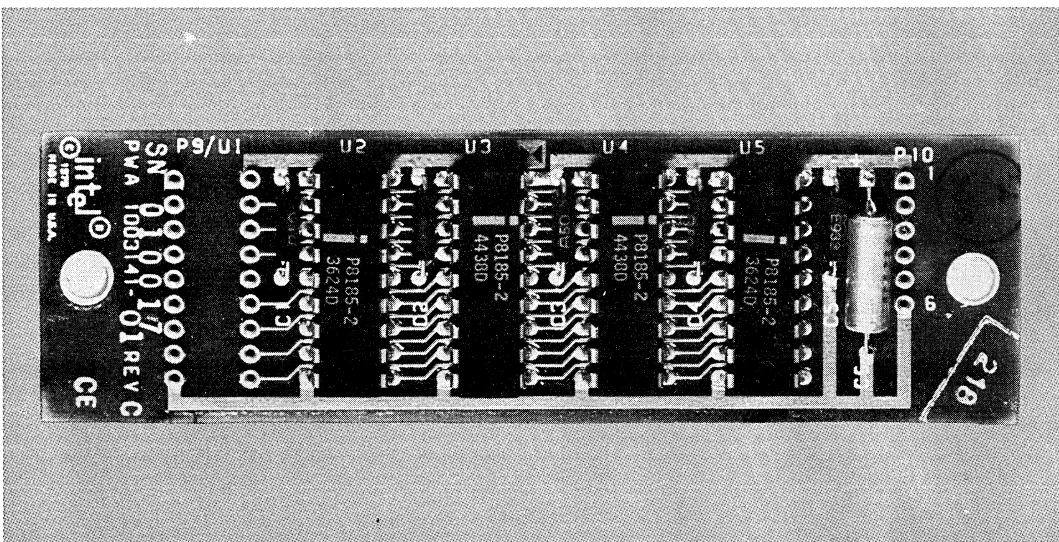




iSBC™ 301 4K-BYTE RAM MULTIMODULE™ BOARD

- On-board memory expansion to 8K bytes for iSBC™ 80/24 and iSBC™ 88/40 Single Board Computers
- Provides 4K bytes of static RAM directly on-board
- Uses 5 MHz (8185-2) RAMs
- Single +5V supply
- 0.5 watts incremental power dissipation
- On-board memory expansion eliminates MULTIBUS system bus latency and increases system throughput
- Reliable mechanical and electrical interconnection

The Intel iSBC 301 4K-Byte RAM MULTIMODULE Board provides simple, low cost expansion to double the RAM capacity on the iSBC 80/24 or iSBC 88/40 Single Board Computer to 8K bytes. This offers system designers a new level of flexibility in defining and implementing system memory requirements. Because memory is configured on-board, it can be accessed as quickly as the existing iSBC 80/24 or iSBC 88/40 memory, eliminating the need for accessing the additional memory via the MULTIBUS system bus. As a result, the iSBC 301 board provides a high speed, cost effective solution for systems requiring incremental RAM expansion. Incremental power required by the iSBC 301 module is minimal, dissipating only 0.5 watts.



iSBC 301

FUNCTIONAL DESCRIPTION

The iSBC 301 board measures 3.95" by 1.20" and mounts above the RAM area on the iSBC 80/24 or iSBC 88/40 single board computer. It expands the on-board RAM capacity from 4K bytes to 8K bytes. The iSBC 301 MULTIMODULE board contains four 1K byte static RAM devices and a socket for one of the RAM devices on the iSBC 80/24 or iSBC 88/40 board. To install the iSBC 301 MULTIMODULE board, one of the RAMs is removed from the host board and inserted into the socket on the iSBC 301 board. The add-on board is then mounted into the vacated RAM socket on the host board. Pins ex-

tending from the RAM socket mate with the device's socket underneath (see Figure 1). Additional pins mate to the power supply and chip select lines to complete the electrical interface. The MULTIMODULE board is then secured at two additional points with nylon hardware to insure mechanical security of the assembly. With the iSBC 80/24 or iSBC 88/40 board mounted in the top slot of an iSBC 604 or iSBC 614 cardcage, sufficient clearance exists for mounting the iSBC 301 option. If the iSBC 80/24 or iSBC 88/40 board is inserted into some other slot, the combination of boards will physically (but not electrically) occupy two cardcage slots.

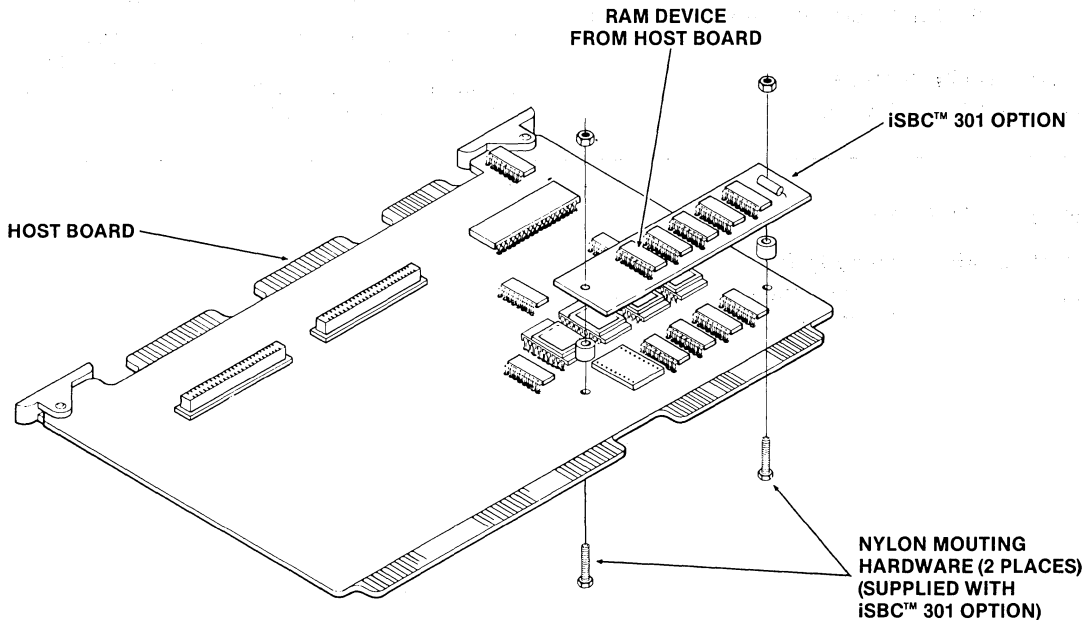


Figure 1. Installation of iSBC™ 301 4K-Byte RAM MULTIMODULE™ Board

ISBC 301

SPECIFICATIONS

Word Size

8 bits

Memory Size

4096 bytes of RAM

Access Time

Read: 140 ns (from READ command)

200 ns (from ALE)

Write: 150 ns (from READ command)

190 ns (from ALE)

Memory Addressing

Memory addressing for the ISBC 301 4K-Byte RAM MULTIMODULE Board is controlled by the host board via the address and chip select signal lines and is contiguous with the host board RAM.

ISBC 80/24 and ISBC 301 board: 02000-02FFF

ISBC 88/40 and ISBC 301 board: 00000-01FFF

Physical Characteristics

Width — 1.20 in. (3.05 cm)

Length — 3.95 in. (10.03 cm)

Height — .44 in. (1.12 cm) ISBC 301 Board

.56 in. (1.42 cm)

ISBC 301 Board + host board

Weight — .69 oz. (19 gm)

Electrical Characteristics

DC Power Requirements:

10 mA at +5 Volts incremental power

Environmental Characteristics

Operating Temperature — 0° to +55° C

Relative Humidity — to 90% (without condensation)

Reference Manuals

All necessary documentation for the ISBC 301 MULTIMODULE board is included in the CPU board Hardware Reference Manual (NOT SUPPLIED)

ISBC 80/24 — Order No. 142648-001

ISBC 88/40 — Order No. 124978-001

Manuals may be ordered from any Intel sales representative, distributor office, or from Intel Literature Department, 3065 Bowers Avenue, Santa Clara, California 95051.

SPECIFICATIONS

Part Number Description

SBC 301	4K Byte RAM MULTIMODULE Board
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