iSBC 341™
28-PIN MULTIMODULE EPROM

- On-board memory expansion for iSBC 86/05, iSBC 88/25, and iSBC 88/40 microcomputers
- Supports JEDEC 24/28-pin standard memory devices, including EPROMs, byte-wide RAMs, and E²PROMs
- Sockets for up to 64K bytes of expansion with Intel® 27128 EPROMs
- On-board expansion provides “no wait state” memory access with selected devices
- Simple, reliable mechanical and electrical interface

The iSBC 341 28-pin MULTIMODULE EPROM board provides simple, low-cost expansion of the on-board EPROM capacity of the iSBC 86/05 Single Board Computer, the iSBC 88/25 Single Board Computer and the iSBC 88/40 Measurement and Control Computer. Four additional 28-pin sockets support JEDEC 24/28-pin standard devices, including EPROMs, byte-wide static and pseudo-static RAMs.

The MULTIMODULE expansion concept provides the optimum mechanism for incremental memory expansion. Mounting directly on the microcomputer, the benefits include low cost, no additional power requirements beyond the memory devices, and higher performance than MULTIBUS-based memory expansion.
FUNCTIONAL DESCRIPTION

The iSBC 341 28-pin MULTIMODULE EPROM option effectively doubles the number of sockets available for EPROM on the base microcomputer board on which it is mounted. The iSBC 341 board contains six 28-pin sockets. Two of the sockets have extended pins which mate with two of the sockets on the base board. Two of the EPROMs which would have been inserted in the base board are then reinserted in the iSBC 341 sockets. Additional interface pins also connect chip select lines and power. The mechanical integrity of the assembly is assured with nylon hardware securing the unit in two places.

Through its unique interface, the iSBC 341 board can support 8 or 16-bit data paths. The data path width is determined by the base board — being 8 bits for the iSBC 88/40 and iSBC 88/25 microcomputers, and 8/16 bits for the iSBC 86/05 board.

SPECIFICATIONS

Word Size
8 or 8/16 bits (determined by data path width of base board).

Memory Size
32K bytes with available technology (JEDEC standard defines device pin-out to 128K-bit devices).

<table>
<thead>
<tr>
<th>Device Size (Bytes)</th>
<th>EPROM Type</th>
<th>Max. iSBC 341 Capacity (Bytes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2K x 8</td>
<td>2716</td>
<td>8K</td>
</tr>
<tr>
<td>4K x 8</td>
<td>2732</td>
<td>16K</td>
</tr>
<tr>
<td>8K x 8</td>
<td>2764</td>
<td>32K</td>
</tr>
<tr>
<td>16K x 8</td>
<td>27128</td>
<td>64K</td>
</tr>
</tbody>
</table>

Access Time
Varies according to base board and memory device access time. Consult data sheet of base board for details.

Memory Addressing
Consult data sheet of base board for addressing data.

POWER REQUIREMENTS

<table>
<thead>
<tr>
<th>Devices</th>
<th>Max. Current @ 5V ± 5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2716</td>
<td>420 mA</td>
</tr>
<tr>
<td>2732, 2732A</td>
<td>600 mA</td>
</tr>
<tr>
<td>2764</td>
<td>600 mA</td>
</tr>
</tbody>
</table>

NOTE:
1. Incremental power drawn from host board for four additional devices.

Auxiliary Power
There are no provisions for auxiliary power (battery backup) on the iSBC 341 option.

Physical Characteristics

WIDTH — 3.4 in. (8.64 cm)  
LENGTH — 2.7 in. (6.86 cm)  
HEIGHT — 0.78 in. (1.98 cm)  
WEIGHT — 5 oz (141.5 gm)

*Includes height of mounted memory devices and base board.

All necessary mounting hardware (nylon screws, spacers, nuts) is supplied with each kit.

Environmental Characteristics

OPERATING TEMPERATURE — 0°C to +55°C  
RELATIVE HUMIDITY — to 90% (without condensation)

Reference Manuals

All necessary documentation for the iSBC 341 module is included in the CPU board Hardware Reference Manuals (NOT SUPPLIED)

iSBC 86/05 — Order No. 143153-001
iSBC 88/25 — Order No. 143825-001
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.

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC 341</td>
<td>28-Pin MULTIMODULE EPROM</td>
</tr>
</tbody>
</table>