

iSBC 508 I/O EXPANSION BOARD

iSBC-80 I/O expansion via direct bus interface

Four 8-bit terminated input ports

Four 8-bit output ports with buffered TTL drivers

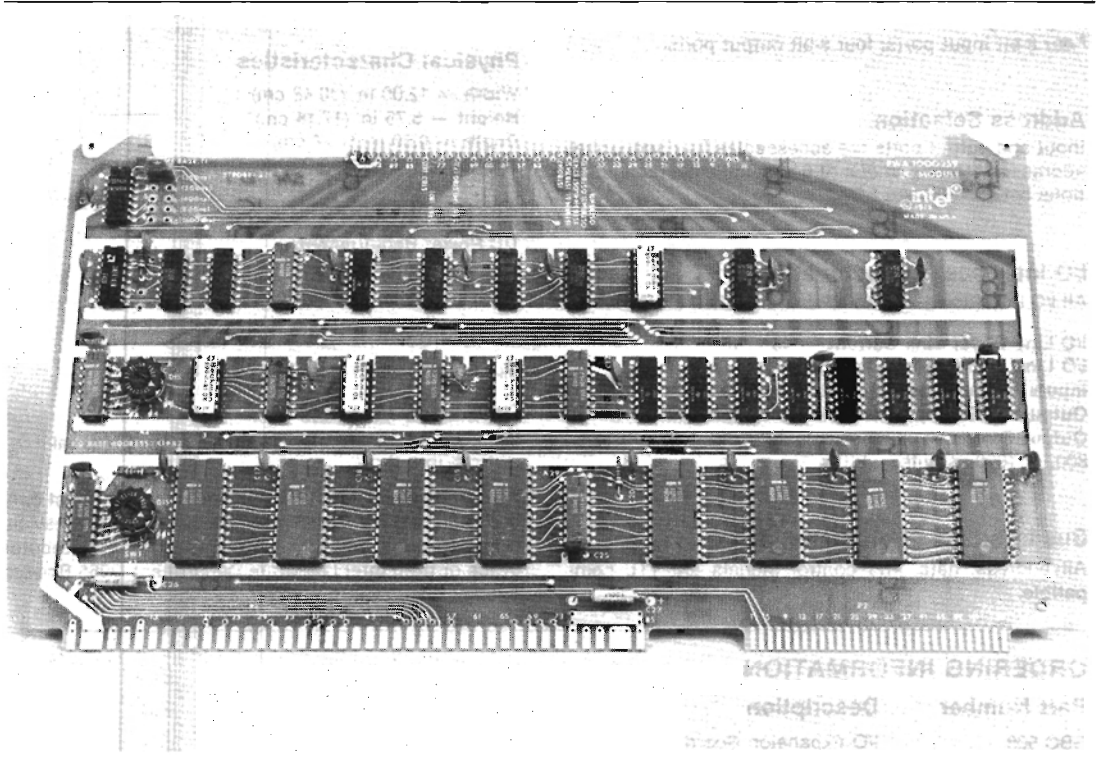
Selectable latched or unlatched input ports

Latched outputs with selectable width strobes

Switch selectable I/O port addresses

The iSBC-508 I/O Expansion Board is a member of Intel's complete line of iSBC 80 memory and I/O expansion boards. The iSBC 508 interfaces directly to any iSBC 80 single board computer via the system bus to expand input and output port capacity. Four 8-bit terminated input ports are contained on the board. Data is gated into the port while the strobe is present and latched if the strobe is removed. The iSBC 508 contains four 8-bit output ports. All output lines are driven by TTL level buffer drivers residing on the board. Output data is latched. A strobe signal of jumper selectable width is sent to the peripheral device during an output operation. Address selection is accomplished using two resident rotary switches to select one of 64 unique base addresses for all input and output ports. The board operates with a single +5V power supply.

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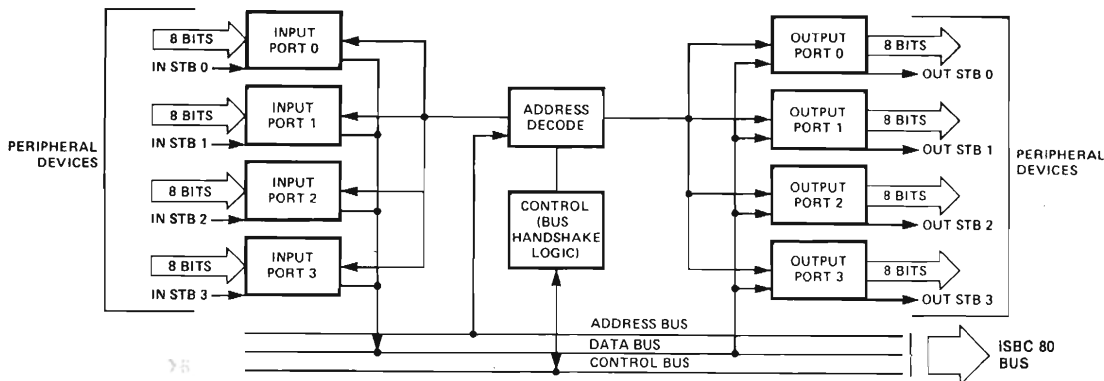


Figure 1. iSBC 508 I/O Expansion Board Block Diagram

SPECIFICATIONS

Word Size
8 bits

Capacity
Four 8-bit input ports; four 8-bit output ports.

Address Selection

Input and output ports are accessed as four sequential addresses starting in one of 64 switch selectable locations between 00 and FC₁₆.

I/O Interface Characteristics

All I/O interface data and control signals are TTL levels.

I/O Line Driver Sink Current — 48 mA
I/O Line Terminator Load — 1 kΩ pullup
Inputs — Data positive relative to data bus
Outputs — Data positive relative to data bus
Output Strobe — Jumper selectable to 100, 200, 400, 800, or 1600-ns pulse widths

Bus Interface Characteristics

All address, data, and control signals are TTL compatible.

Connectors

Bus Edge Connector — 86-pin double-sized PC edge connector with 0.156-in. contact centers
Mating Connector — Control Data VPB01E43A00A1

I/O Edge Connector — 100-pin double-sided PC edge connector with 0.1 in. contact centers
Mating Connector — Viking 3KH43/9AMK12

Physical Characteristics

Width — 12.00 in. (30.48 cm)
Height — 6.75 in. (17.15 cm)
Depth — 0.50 in. (1.27 cm)
Weight — 12 oz (415.2 gm)

Electrical Characteristics

DC Power Requirements
 $V_{CC} = +5V \pm 5\%$
 $I_{CC} = 2.6A \text{ max, } 1.9A \text{ typ}$

Environmental Characteristics

Operating Temperature — 0°C to 55°C

Reference Manuals

9800278 — iSBC 508 Hardware Reference Manual (NOT SUPPLIED)

Reference manuals are shipped with each product only if designated SUPPLIED (see above). 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

Part Number	Description
SBC 508	I/O Expansion Board