

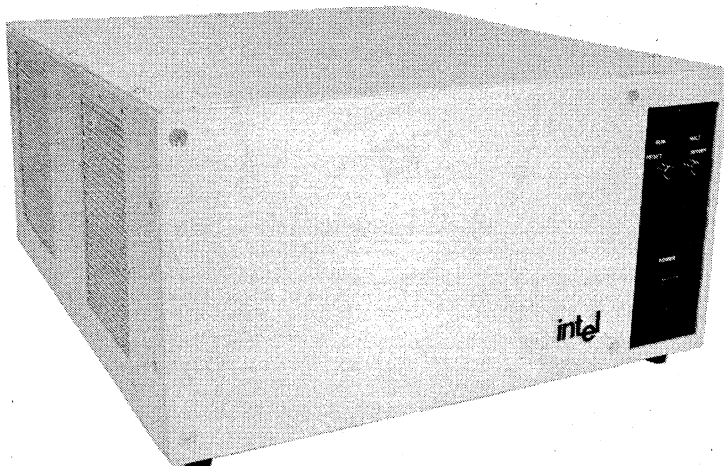


iSBC® 661 SYSTEM CHASSIS

- Eight-Slot MULTIBUS® Chassis with Parallel Priority Circuitry
- UL, FCC and CSA Approved for Data Processing Equipment
- 230 Watt Power Supply with Power Fail Warning
- Designed for Slide Rack Mounting or Table-Top Use
- Extra-Wide Cardcage Slot Spacing for ISBX™ MULTIMODULE™ Board Clearance
- Configurable for Front or Rear Access to MULTIBUS® Circuit Boards
- Five Connector Ports for I/O Cabling
- Operational from 47 Hz to 63 Hz, 100/120/220/240 VAC ± 10%

The iSBC 661 System Chassis is an advanced MULTIBUS (IEEE) 796 chassis which incorporates unique usability and service features not found on competitive products. This chassis is designed for rack-mount or table-top applications and reliably operates up to an ambient temperature of 50°C. Additionally, this system chassis is certified by UL, CSA and FCC for data processing equipment.

An application requiring multiprocessing will find this eight-slot MULTIBUS chassis particularly well suited to its needs. Parallel priority bus arbitration circuitry has been integrated into the backplane. This permits a bus master to reside in each slot. Extra-wide inter-slot spacing on the cardcage allows the use of plug-on MULTIMODULE boards without blocking adjacent slots. For this reason, the iSBC 661 System Chassis provides the slot-functionality of most 16-slot chassis. Standard logic recognizes a system AC power failure and generates a TTL signal for use in powerdown control. Additionally, current limiting and over-voltage protection are provided at all outputs.



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FUNCTIONAL DESCRIPTION

Mechanical Features

The iSBC 661 System Chassis houses, cools, powers, and interconnects up to eight iSBC single board computers and their MULTIMODULE boards for the MULTIBUS System Bus. Based on Intel's iSBC 608 Cardcage, the chassis provides 0.8 inches of board center-to-center clearance on six slots, and 1.2 inches or more of center-to-center clearance on two slots. This permits the users of standard MULTIMODULE boards and custom wire-wrap boards to plug into the MULTIBUS System Bus without blocking adjacent slots. All slots provide enough clearance for iSBC MULTIMODULE boards, and two slots can accommodate iSBX MULTIMODULE boards.

High-technology MULTIBUS applications requiring rack-mount, or laboratory table-top use will find the iSBC 661 System Chassis ideal. Standard 19" slid-rack mounting is possible with user-provided slides attached to the side panels. Slide mounting holes are provided in the chassis for the slide-rails listed

under User Supplied Options. Rubber feet are included on the chassis for convenient table-top use.

The chassis is constructed of burnished aluminum which has been coated with corrosion-resistant chromate. It contains a system control module which presents the front panel control switches to the user, and holds the I/O cabling bulkhead to the rear. The chassis has the unique feature of being configurable for either front or rear access to MULTIBUS circuit boards.

This is accomplished by a simple procedure involving removal of the system control module, reversing it end-for-end, and re-securing it to the chassis. The system chassis is shipped in a configuration such that the MULTIBUS boards are installed from the front.

Electrical Features

The iSBC 661 System Chassis is powered by the iSBC 640 power supply. This is a standard Intel power supply which has been adopted by several MULTIBUS vendors throughout the industry. It sup-

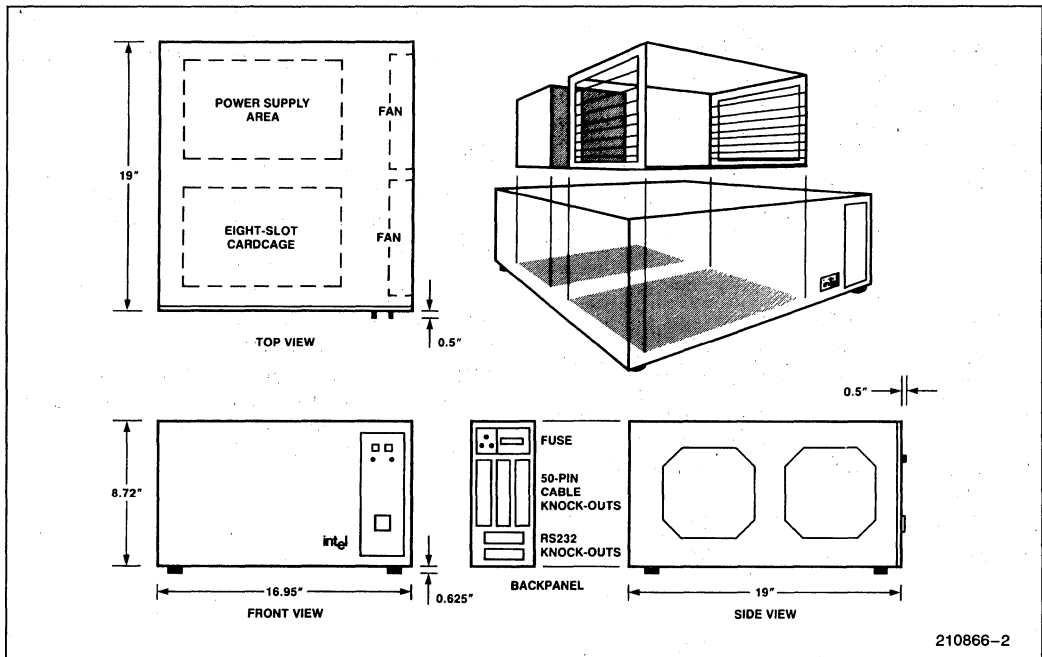


Figure 1. ISBC® 661 System Chassis Dimensions

210866-2

plies 230 watts of power, power fail warning, and remote sensing of +5 volts. Its electrical and operational parameters are listed under Specifications.

The cardcage of the iSBC 661 System Chassis implements a user-changeable parallel priority bus arbitration scheme by using plug-in jumper connections. Six different priority schemes are allowed, each scheme fixing the priority to the eight MULTIBUS board slots. Bus contention among eight busmasters in a multiprocessing environment can be managed using this approach.

Noise minimizing ground traces are strategically interleaved between signal and address lines on the system bus. This provides the enhanced noise immunity and minimized signal-to-signal coupling which is particularly important in high speed, high board count microcomputer systems.

SPECIFICATIONS

Electrical Parameters

OUTPUT POWER

Table 1. Output Power Levels iSBC® 661-1

Voltage	Output Current (max.)	Current Limits (amps)	Over-Voltage Protection
+12V	4.5A	4.7-6.8	15V ±1V
+5V	30.0A	31.5-45.0	6.2V ±0.4V
-5V	1.75A	1.8-3.2	-6.2V ±0.4V
-12V	1.75A	1.8-3.2	-15V ±1V

Operational Parameters

Input AC Voltage—100/120/220/240 VAC ±10% (User selects via external switch), 47-63 Hz

Power-Fail Indication and Hold-Up Time (triggered at 90% of VAC in)—TTL O.C. High 3 msec. (min.)

Output Ripple and Noise—1% Peak-to-Peak output nominal (DC to 0.5 MHz)

Operational Temperature—0°C to 50°C

Storage Temperature—-40°C to 70°C

Operational Humidity—10% to 85% relative, non-condensing

Remote Sensing—Provided for +5 VCD

Output Transient Response—50 μs or less for ±50% load change

Physical Characteristics

Width: 16.95 inches (43.05 cm)

Height: 8.72 inches (22.2 cm)

Depth: 19.00 inches (48.3 cm)

Weight: 41 pounds (21 kg)

Shipping Weight (approx.): 50 pounds (25 Kg)

Equipment Supplied

iSBC® 661-1—Eight-slot MULTIBUS system chassis with parallel priority arbitration circuitry and 230 watt linear power supply

Reference Manual

(Not included: order separately)

145340-001—iSBC 661 System Chassis Hardware Reference Manual

User Supplied Options

Compatible Rack-Mount Slides—Chassis Trak, Inc., P. O. Box 39100, Indianapolis, IN 46239; Part No. C300 S 122

ORDERING INFORMATION

Part Number Description

SBC 6611 Eight-slot MULTIBUS system chassis with parallel priority arbitration circuitry and 230 watt Linear Power Supply