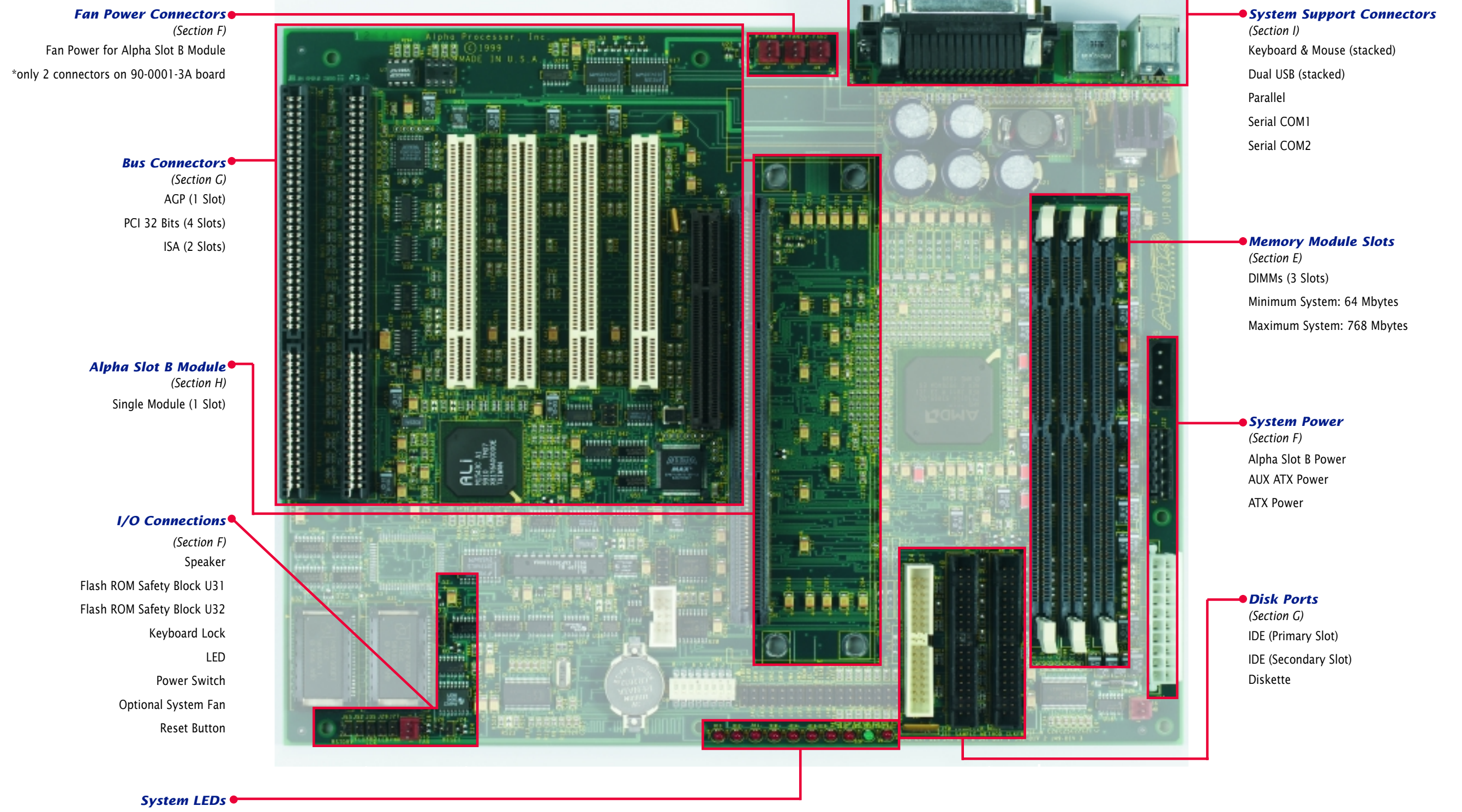


### UP1000

#### Quick Start Installation Guide



www.alpha-processor.com

51-0035-08

# B

## Unpack & Set Up

The UP1000 Kit from Alpha Processor, Inc. is a single processor system. A single motherboard supports one Alpha Slot B Module.



Remove the components carefully from their cartons and anti-static packaging bags.  
**Always take appropriate electrostatic discharge safety measures when handling boards or modules.**

Contents of the **UP1000 Kit** are:

#### Carton 1

##### Hardware

- UP1000 Standard ATX Motherboard
- Alpha Slot B Module Support Fixture (Goalpost)
- Goalpost Cover w/captive screw
- Installation Guide
- Product Warranty Card
- Read Me First Sheet
- UP1000 User Manual

##### Software

- UP1000 Installation Diskette P/N 62-0019-1A

#### Carton 2

##### Hardware

- Alpha Slot B Module
- Installation Guide
- Product Warranty Card

### Components

Prepare for the UP1000 installation with the following components:

#### Level 1 – Required to Test Motherboard with Slot B Module

- |   |  |                                    |
|---|--|------------------------------------|
| <input type="checkbox"/> Power Supply(s)            | <input type="checkbox"/> Memory Modules    | <input type="checkbox"/> Hard Disk |
| <input type="checkbox"/> Video Card                 | <input type="checkbox"/> Monitor           | <input type="checkbox"/> Speaker   |
| <input type="checkbox"/> Keyboard                   | <input type="checkbox"/> Mouse             |                                    |
| <input type="checkbox"/> Assorted Peripheral Cables | <input type="checkbox"/> Floppy Disk Drive |                                    |

#### + Level 2 – Required to Load Operating System

- |                                   |   |  |
|-----------------------------------|---|--|
| <input type="checkbox"/> CD Drive | <input type="checkbox"/> Setup Diskette | <input type="checkbox"/> Operating System CD |
|-----------------------------------|---|--|

# C

## Mounting Requirements

### Chassis Mounting Holes

Identify the **nine** standard ATX mounting holes.

Check for the **four** Slot B goalpost mounting holes.

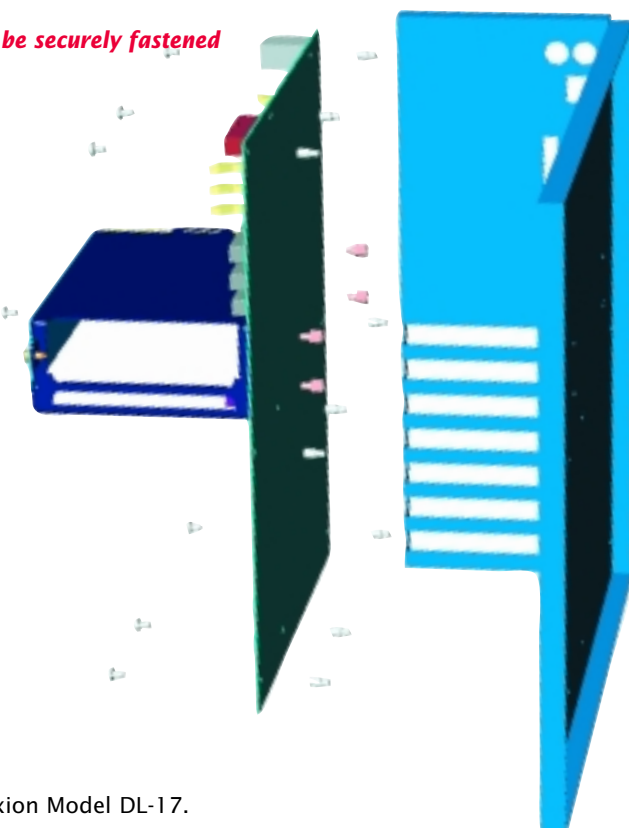


For chassis or enclosures without this mounting hole pattern, obtain a drill template from our website,

[http://www.alpha-processor.com/products/downloads/customer\\_support/UP1000/UP1000\\_drill\\_template.pdf](http://www.alpha-processor.com/products/downloads/customer_support/UP1000/UP1000_drill_template.pdf)



**Slot B goalpost must be securely fastened to chassis backplate.**



# D

## Attach to Chassis

### Motherboard & Goalpost to Chassis Assembly

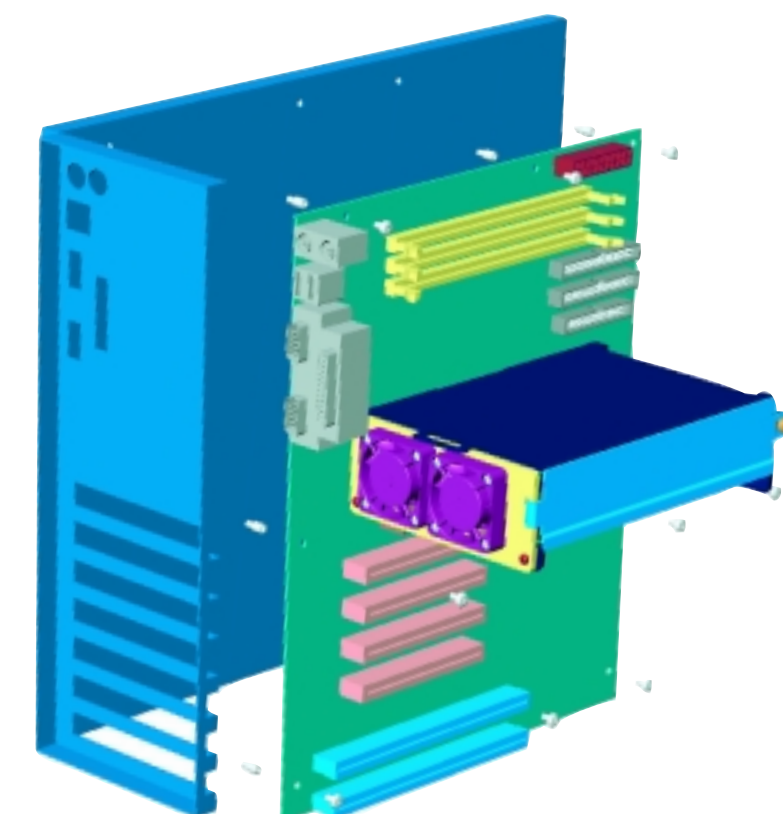
The goalpost fixture holds one Alpha Slot B Module securely in place on the UP1000 motherboard.

**Requirements for attaching motherboard and goalpost fixture to the chassis are:**

- Fastening Hardware – Four Alpha Slot B hex male/female spacer screws and spacer washers.
  - Four M4x6mm long Phillips pan head screws.
  - Assorted standoffs, screws, and miscellaneous hardware supplied by chassis vendor.
- Tools – Phillips head screwdriver, Flat head screwdriver, torque wrench, nut driver (1/4”).
- Proper chassis mounting holes drilled for goalpost captive nuts.

**Use this mounting technique:**

1. Align the goalpost fixture holes with the corresponding motherboard clearance holes.
2. Affix goalpost to motherboard from the backside using four hex male/female spacer screws and spacer washers and torque to 8 inch/lbs.
3. Secure this assembly to the chassis with the standoffs and screws supplied by the chassis vendor.
4. Secure M4x6mm screws through chassis to female thread of hex male/female spacer screws (four places) and spacer washers.



The chassis shown is an Axxion Model DL-17.

# E

## Install Memory DIMMs

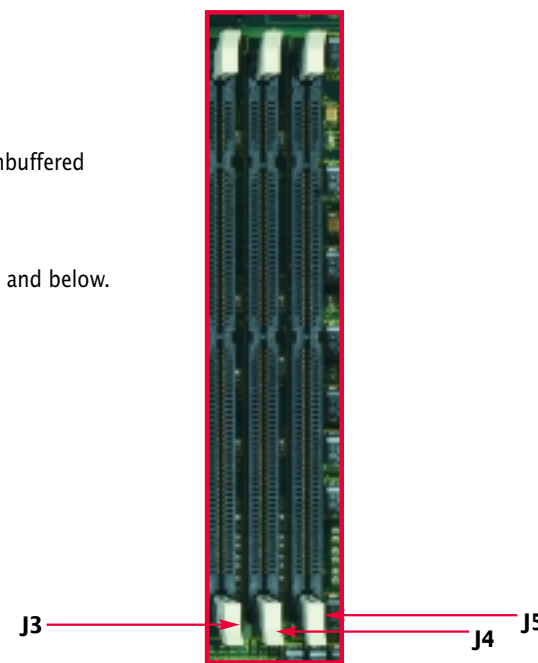
### Memory Configuration



The memory subsystem is composed of:

- Three (3) independent slots.
- Each slot accepts 168 pin PC100 SDRAM Unbuffered SPD DIMMs.

Before installing DIMMs, carefully review the picture and guidelines shown to the right and below.



### Memory Guidelines

- Slot 2 (J5) **must** be populated first.
- DIMM size can be 64 MB, 128 MB, or 256 MB.
- Each slot can use DIMMs of a different type, size, and speed.
- Memory is supported in a size range between 64 MB (min) to 768 MB (max).

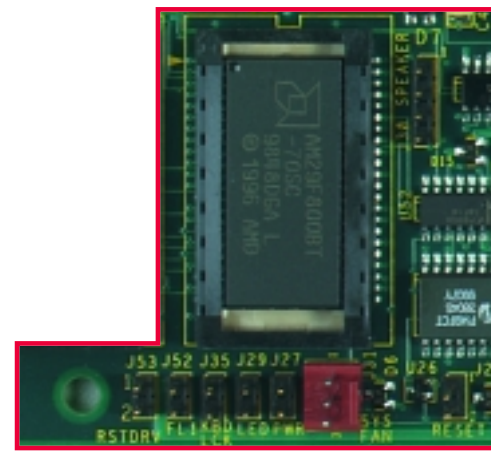
Total Memory	No. of DIMMs	Slot 2	Slot 1	Slot 0
64 MB	1	64 MB		
128 MB	1	128 MB		
128 MB	2	64 MB	64 MB	
256 MB	1	256 MB		
256 MB	2	128 MB	128 MB	
256 MB	3	128 MB	64 MB	64 MB
384 MB	2	256 MB	128 MB	
512 MB	2	256 MB	256 MB	
512 MB	3	256 MB	128 MB	128 MB
768 MB	3	256 MB	256 MB	256 MB

# F

## Attach Wires & Cables

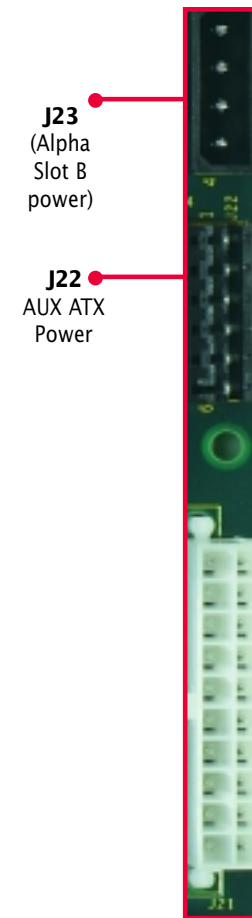
### I/O Connections

Make the following connections using the appropriate cables:



- J30** Speaker
- J24** Reset Button
- J31** Optional System Fan
- J27** Power Switch
- J29** LED
- J35** Keyboard Lock
- J52** Flash ROM Safety Block U31
- J53** Flash ROM Safety Block U32

### Power Connections



**J23**  
(Alpha Slot B power)

**J22**  
AUX ATX Power

**Connect both J21 and J23 power leads**  
Connect Auxiliary Power lead (J22) if available. To mate with this socket, use cable connector Molex 90331-0010 or equivalent.

**J21**  
12 V (ATX power)

### Fan Connections



**J32, J33**  
Alpha Slot B Module

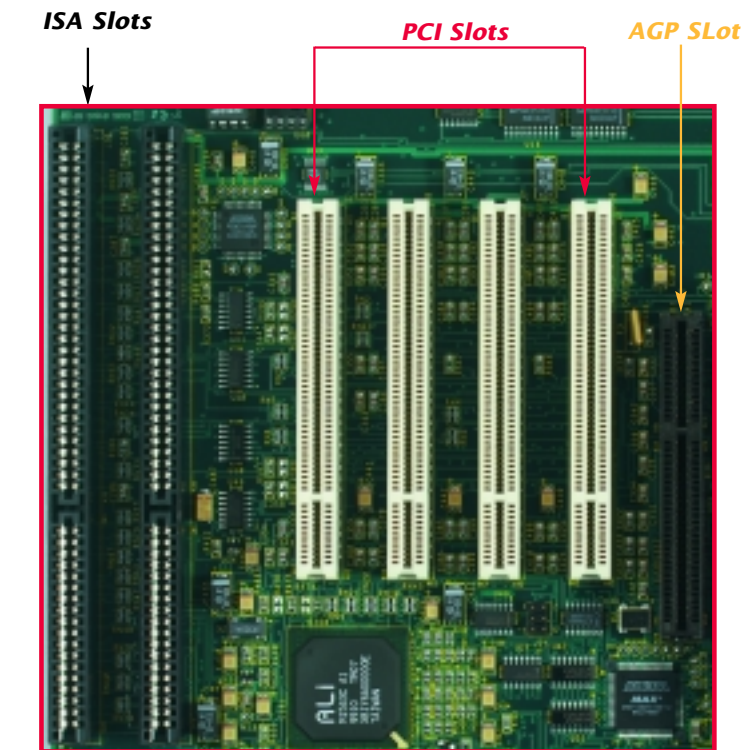
**J28**  
\*Optional Fan Connector  
Note: only present on 90-0001-2C

# G

## Install Cards & Cables

### Bus Connections

Use the following slots for access to ISA, PCI and AGP bus support.



**J20** ISA

**J19** ISA

**J9** PCI 32 bit

**J8** PCI 32 bit

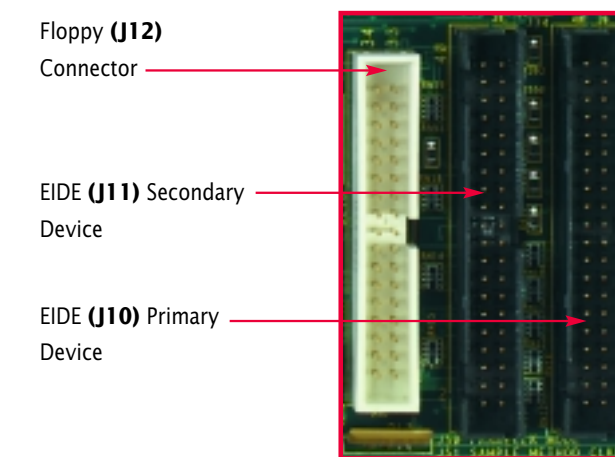
**J7** PCI 32 bit

**J6** PCI 32 bit

**J2** AGP

### I/O Ports

Use sockets J10, J11, J12 to connect various disk peripheral devices.



Floppy (**J12**) Connector

EIDE (**J11**) Secondary Device

EIDE (**J10**) Primary Device

# H

## Install Module

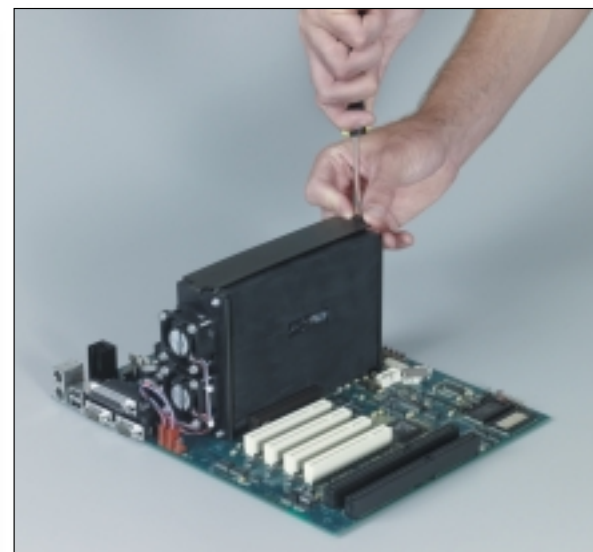
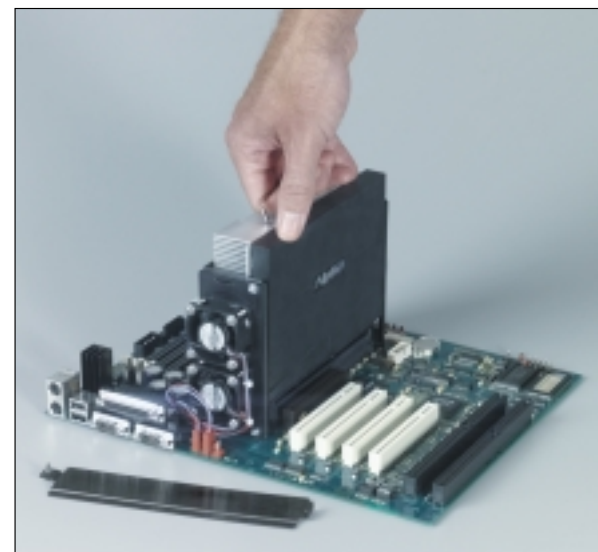
### Alpha Slot B Module



Use this component with special care. It weighs approximately three pounds. A wire handle provides a convenient mechanism for safely inserting the module.

Use this procedure to install an Alpha Slot B Module:

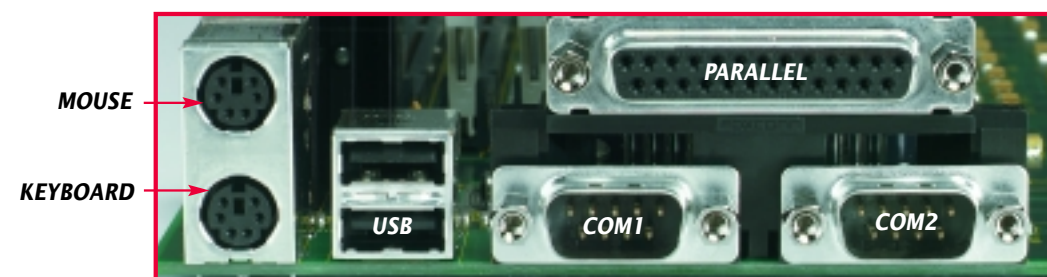
- Remove the goalpost cover.
- Insert Cartridge in Slot J1.
- Use an insertion force of 35 pounds to seat the module just below the goalpost.
- Place a goalpost cover over the installed module.
- Fasten the goalpost cover using its captive screw.



# I

## Final Tasks

### System Support



**MOUSE**

**KEYBOARD**

### Initial System Test

Follow this procedure to confirm the proper installation of the UP1000 system:

- Ensure that all cables and modules are seated properly.
- Turn on power.
- Listen for an audio signal (three beeps) indicating that the firmware has loaded.

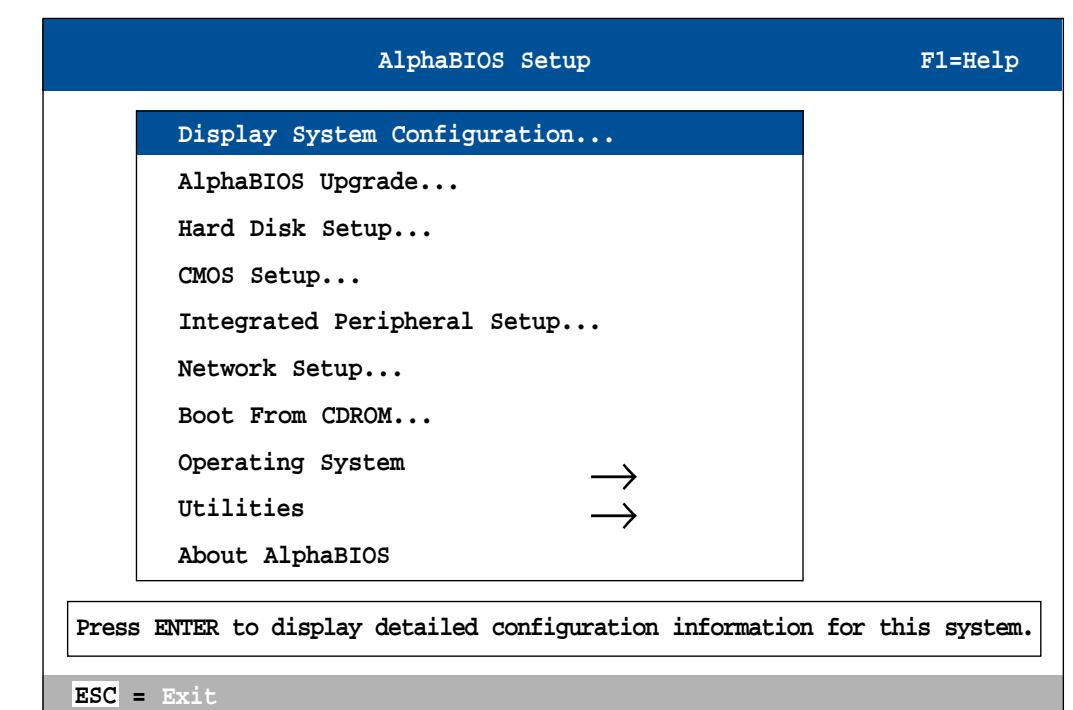
### Configuring Operating Software

This system automatically executes its initialization and testing sequences. After a brief interval, the OS install screen appears.



**Immediately press F2 to invoke the AlphaBIOS Setup Screen.**

### AlphaBIOS Setup Screen



### Load Linux Operating System

Use this procedure to install your Linux distribution software:

- Insert UP1000 Installation Diskette in the floppy drive.
- Insert Linux Operating System CD in CD-ROM drive.
- Highlight **Utilities > Run Maintenance Program** on the Setup menu.
- Begin the OS loading process by running the Alpha Processor Bootloader (APB) program.
- Instructions are listed in Chapter 4 of the *UP1000 User Manual*.

### Power Down Technique

- To power down a UP1000 system, press the Power Switch and hold it for at least five (5) seconds.

### Reference Materials

For additional product information, see the *UP1000 User Manual* (P/N 51-0036-0A). It also is available from our Web site: <http://www.alpha-processor.com>