

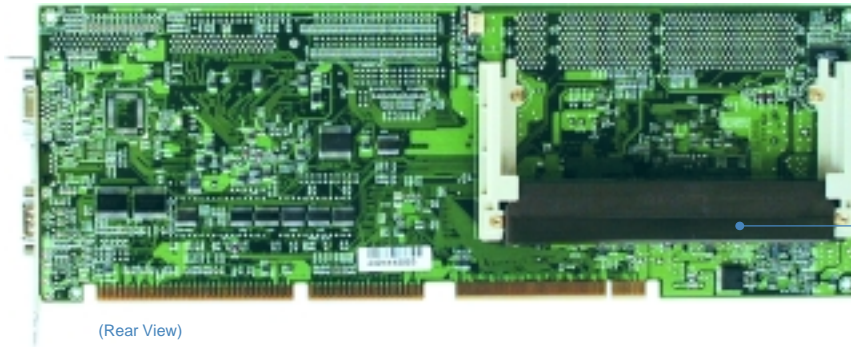
The AP686AF/BF/CF/DF series are full-size PICMG single board computers that feature the Intel 440BX chipset and support Intel Pentium II or Pentium III processors up to 600MHz and higher.

The deluxe **AP686DF** is perfect for telecommunication/telephony applications. The **AP686CF** adds on-board C&T 69000 AGP CRT/LCD panel accelerator with embedded 2MB SDRAM for applications that require video. The **AP686BF** also has the C&T 69000 accelerator and adds Intel 82559 10/100Base-TX Fast Ethernet controller for applications that demand network connectivity. The flagship **AP686AF** has all the features mentioned and adds Adaptec AIC-7890 Ultra2 SCSI controller.

All AP686 series boards have the following standard features: Two PCI Enhanced IDE ports to connect up to four Ultra DMA-33 devices and one socket for DiskOnChip provides the option for diskless operation. A long list of I/O functions include two serial ports (one supports selectable RS-232/422/485), one multi-mode parallel port, two USB ports, one 4-bit digital I/O, and one IrDA interface. Watchdog Timer and Health Monitoring with CPU temperature alarm support completes this high performance and reliable series.

■ Specifications

- CPU Support**
 Supports Slot 1 Intel Pentium II or Pentium III processors up to 600MHz and higher.
- System Chipset**
 Intel 440BX AGPset. 100MHz FSB.
- System Memory**
 Three 168-pin DIMM sockets support up to 768MB memory (ECC capable).
- Solid State Disk**
 One 32-pin DIP socket supports M-Systems DiskOnChip 2000 up to 144MB.
- VGA Controller**
 C&T 69000 AGP Flat Panel/CRT accelerator with integrated 2MB video memory, supports resolutions and color depth up to 1280x1024 x 8bpp (AP686AF/BF/CF only).
- SCSI Controller**
 Adaptec AIC-7890AB Ultra-Wide SCSI controller with 68-pin connector (AP686AF only).
- Ethernet Controller**
 Intel SB82559 10/100Base-TX Ethernet Controller with RJ-45 connector (AP686AF/BF only).
- IDE Interface**
 Two Enhanced IDE port supports up to four IDE or Ultra DMA-33 devices.
- FDD Interface**
 One FDD interface supporting up to two floppy drives.
- Serial Port**
 Two 16550 serial ports on-board, one RS-232 and one RS-232/422/485.
- Parallel Port**
 One multi-mode parallel with support for EPP, ECP and SPP.
- Universal Serial Bus**
 Two on-board USB port headers.
- Digital I/O**
 4-bit digital input / 4-bit digital output header.
- IR Interface**
 On-board IRDA header support one IR Interface.
- Keyboard**
 5-pin header keyboard connector.
- PS/2 Keyboard + Mouse**
 On-board 6-pin Mini-Din PS/2 keyboard + mouse connector.
- Watchdog Timer**
 7 hardware level time-out intervals (0.5/1/2/4/16/32/64 seconds).
 16 Software level time-out intervals (0/2/4/6/8/10/12/14/16/18/20/22/24/26/28/30 seconds).
- Health Monitoring**
 On-board Winbond W83783S health monitoring with CPU temperature alarm.
- BIOS**
 256K Award flash BIOS.
- Bus Interface**
 ISA/PCI bus (PICMG).
- RTC Battery**
 Dallas RTC Battery.



Slot 1 CPU Slot Supports Intel Pentium II/III Processors Up To 600MHz and Higher

■ Ordering Information

● AP686AF Features:

- Full-size PICMG Slot 1 Pentium II / III single board computer
- Intel 440BX chipset with 3 168-pin DIMM support up to 768MB SDRAM
- One SSD socket supports up to 144MB DiskOnChip 2000
- On-board C&T 69000 **Flat Panel / CRT accelerator** with 2MB video RAM
- On-board Adaptec AIC-7890AB **Ultra-Wide SCSI** controller
- On-board Intel SB82559 **10/100Base-TX Ethernet** controller
- Two Enhanced IDE ports with Ultra DMA/33 support & one floppy port
- Two serial ports, one parallel port, two USB ports, one Digital I/O & one IrDA
- Supports health monitoring with CPU temperature alarm

● AP686BF Features:

- Full-size PICMG Slot 1 Pentium II / III single board computer
- Intel 440BX chipset with 3 168-pin DIMM support up to 768MB SDRAM
- One SSD socket supports up to 144MB DiskOnChip 2000
- On-board C&T 69000 **Flat Panel / CRT accelerator** with 2MB video RAM
- On-board Intel SB82559 **10/100Base-TX Ethernet** controller
- Two Enhanced IDE ports with Ultra DMA/33 support & one floppy port
- Two serial ports, one parallel port, two USB ports, one Digital I/O & one IrDA
- Supports health monitoring with CPU temperature alarm

● AP686CF Features:

- Full-size PICMG Slot 1 Pentium II / III single board computer
- Intel 440BX chipset with 3 168-pin DIMM support up to 768MB SDRAM
- One SSD socket supports up to 144MB DiskOnChip 2000
- On-board C&T 69000 **Flat Panel / CRT accelerator** with 2MB video RAM
- Two Enhanced IDE ports with Ultra DMA/33 support & one floppy port
- Two serial ports, one parallel port, two USB ports, one Digital I/O & one IrDA
- Supports health monitoring with CPU temperature alarm

● AP686DF Features:

- Full-size PICMG Slot 1 Pentium II / III single board computer
- Intel 440BX chipset with 3 168-pin DIMM support up to 768MB SDRAM
- One SSD socket supports up to 144MB DiskOnChip 2000
- Two Enhanced IDE ports with Ultra DMA/33 support & one floppy port
- Two serial ports, one parallel port, two USB ports, one Digital I/O & one IrDA
- Supports health monitoring with CPU temperature alarm

■ Physical Dimension / Operating Environment

● Dimension / Weight

13.25" X 4.83" / 338mm X 122mm
1.000 lb / 454 g (AP686AF)

● Operating Conditions

Temperature: 32°F to 158°F / 0°C to 70°C
Humidity: 10% to 90% RH
Power: 8.18A at +5V and 0.24A at +12V