PEAK 703P

ATX 5 Vsb connector   AT power connector   Intel® FW82801 (ICH4)   Serial Port   IDE (40-pin)

Parallel Port

Socket 478/ uFCBGA2 479 for
Intel® Pentium® M/ Celeron® M

USB 2.0 port

PS/2 KB/Mouse

LAN port

VGA port

Intel® 852GME   200-pin SODIMM   PCI / ISA Interface
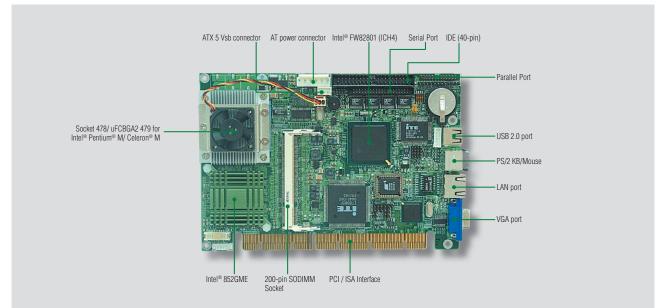   Socket

Main Features

- **Socket 478 for Intel® Pentium® M/Celeron® M up to 2 GHz with 400 MHz FSB**
- **Intel® 852GM/ICH4 Chipsets**
- **1 x 184-pin DIMM, Supports DDR 200/266 SDRAM Memory up to**
- **1 GB**

- **1 x Intel® 82541ER Gigabit Ethernet**
- **4 x USB 2.0 Port, 4 x Serial Port, 1 x LVDS Interface**

Product Overview

The PEAK 703P is a half-size PCI-ISA SBC featuring Intel® Pentium® M/Celeron® M processors with a 400 MHz FSB. The incorporates Intel® 852GM and ICH4 chipsets support un-buffered non-ECC DDR 200/266 memory up to 1 GB with 400/533 MHz FSB and an integrated graphic controller with shared 64 MB memory, as well as LVDS LCD and dual display support.

The South Bridge ICH4 manages Ultra ATA 100, a CompactFlash socket, a parallel port, four serial ports, four USB ports, a Gigabit Ethernet LAN port, an audio interface, and more. The PEAK 703P offers a cost effective solution with various processor speeds and versatile I/O for industrial applications.

Specifications

CPU Support
- Single 478 uFCPGA/479 uFCBGA socket
- Supports Intel® Pentium® M: 1 or 2 MB L2 Cache, 400 MHz FSB, speeds up to 1.8 GHz
- Supports Intel® Celeron® M: 512 KB or 1 MB L2 Cache, 400 MHz FSB, speeds up to 1.5 GHz

Main Memory
- 1 x 200-pin SODIMM for up to 1 GB Unbuffered non-ECC DDR 200/266 SDRAM
- DDR 333/400 is also compatible but runs at 266 MHz

Chipset
- Intel® 852GM
- Intel® 82801DB (ICH4)

BIOS
- Award System BIOS / 4 Mbit flash ROM
- ACPI(Advanced Configuration & Power Interface) support when 5 Vsb power available.
- APM (Advanced Power Management) support

On-board LAN
- 1 x Intel® 82541ER Gigabit Ethernet LAN
- 1 x RJ45 with LED
- Boot from LAN support

Display
- Intel® 852GM with integrated graphics, up to 64 MB of Dynamic Video
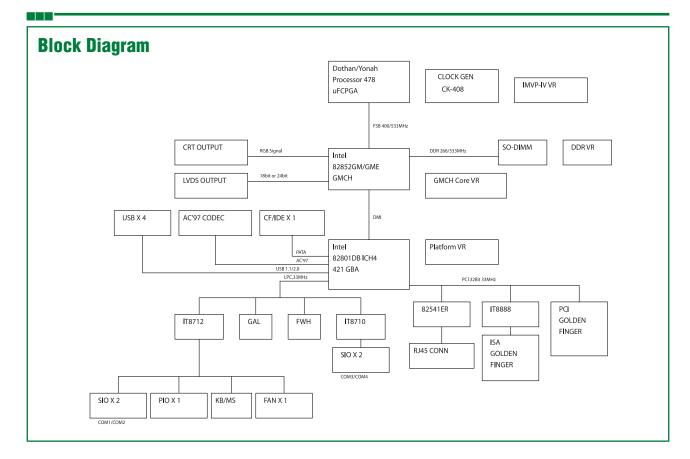
Memory Allocation
- VGA interface: D-sub 15-pin for standard CRT
- CRT Resolution: 1600 x 1200 at 85 Hz and up to 1920 x 1440 at 60 Hz
- Internal LVDS: Supports 18/24-bit single pixels or 18-bit dual pixels LVDS panel (Resolution up to 1280 x 1024)
- Dual display: CRT + LVDS LCD

I/O Interface
- Serial port: 1 x 40-pin box header, RS232 x 4 (OM2 RS232/422/485 by switch)
- USB 2.0: 4 ports (USB 1 is edge connector, USB 2 via box Header, USB 3 ~ 4 via pin header)
- HDD: Ultra ATA 100/66/33 support, 1 x 40-pin connector
- CF: 1 x CompactFlash socket
- Parallel Port: 1 x 26-pin connector
- PS/2 Keyboard/Mouse: 1 x 6-pin Mini-Din connector

Block Diagram

- Digital I/O port: 8 sets of general purpose I/O each with TTL level interface
- 1 x on-board buzzer / 1 x IrDA Header / 1 x on-board 2-pin header for reset
- 5-pin for key lock, 2-pin for power LED, 2-pin for HDD Power LED
- I/O On Bracket
  1 x VGA DB-15 connector
  1 x RJ45 Gigabit Ethernet LAN port
  1 x Mini-DIN for Keyboard/Mouse
  1 x USB 2.0 Port

Watchdog Timer

- 1 ~ 128 second time-out intervals

On-board RTC

- On-chip RTC with battery back up
- 1 x External Li-Ion battery

IDE

- HDD: Ultra ATA 100/66/33 support, 1 x 40-pin connector
- 1 x CompactFlash socket

ISA Support

- 1 x ITE 8888F PCI to ISA Bridge
- Supports a Maximum of 4 ISA slots on the backplane (PCI-ISA Backplane)

System Monitor

- One fan speed (For CPU)
- System monitor controller derived from IT8712
- 7 voltage (For Vcore, +1.05 V, +1.2 V, +2.5 V, +3 V, +5 V, +5 Vsb)
- 2 temperature (one for CPU internal use, another for external system use)

Dimensions

- Half-size PCI-ISA SBC:186.5 mm (L) x 127.5 mm (W) (7.3" x 5.0")

Power Input

- Power source from backplane through PCI/ISA golden finger
- Supports either AT or ATX Power Supplies
- +3.3 V is converted from +5 V not directly from backplane or power supply
- +5 Vsb (standby power) is connected from backplane through 3-pin connector
- 6-pin power input connector for standalone operation

Power Requirements

- Full Loading: Windows 2000 running HCT 9.5 and K power utility (CPU and System 100% Loading)
- +12 V: 0.12 A
- +5 V: 6.9 A

Environment

- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 90% (Non-condensing)

Certifications

- CE approval
- FCC Class A

Ordering Information

- **PEAK 703P(LF) (P/N: 10P00703P00X0)** RoHS Compliant
  Half-Size PISA SBC with Intel® 852GM Chipsets, Supports Intel® Pentium® M/ Celeron® M / Dothan CPU with FSB 400 MHz System Bus, up to 1.8 GHz+, 32-bit/33 MHz, Max. 1 GB DDR SDRAM Memory support (DDR 266), with Chipset integrated graphics VGA controller, supports USB 2.0 x 4, COM port x 4, LVDS x 1 and 82541ER Gigabit Intel LAN x 1

- **PEAK 703P(LF)-C65 (P/N:10P00703P01X0)** RoHS Compliant
  Half-Size PCI/ISA SBC with Intel® 852GM Chipset, On-board Intel® Celeron® M 600 MHz w/512KB L2, 400 MHz FSB , 32-bit/33 MHz, Max. 1 GB DDR SDRAM Memory support (DDR 266), with chipset integrated graphics VGA controller, supports USB 2.0 x 4, COM port x 4, LVDS x 1 and 82541ER Gigabit Intel® LAN x 1