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 Socket
- PCI/ISA Interface

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 1GB**
- **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 1GB 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 1GB 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

Display

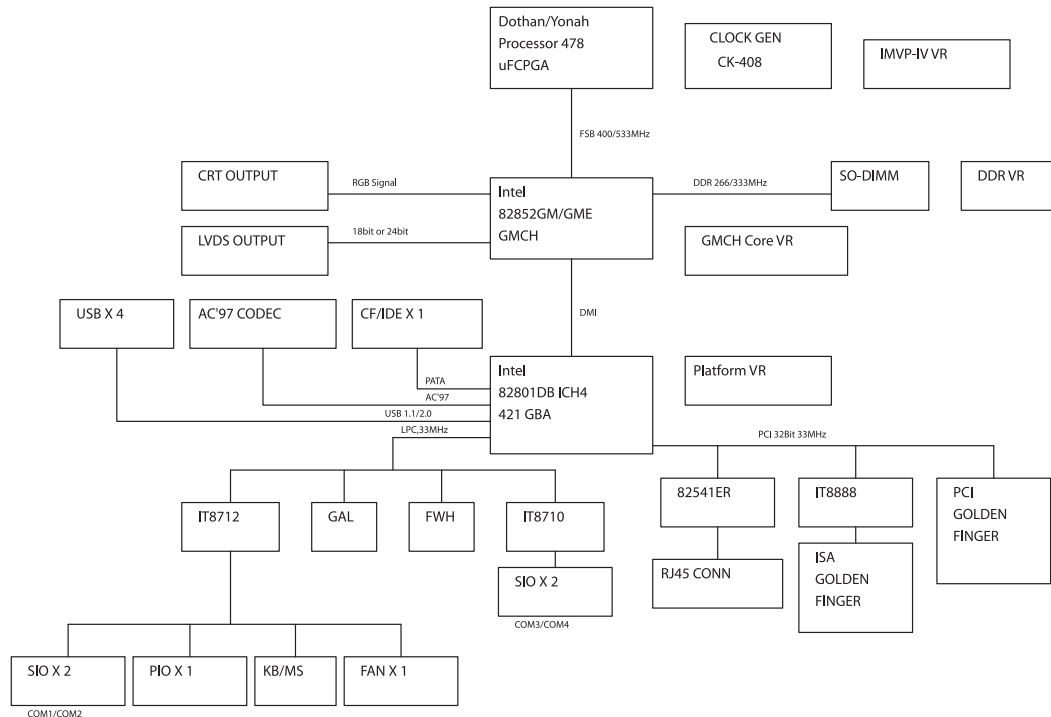- Intel® 852GM with integrated graphics, up to 64 MB of Dynamic Video

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
- 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

Block Diagram

Block diagram showing:
- Dothan/Yonah Processor 478 uFCPGA
- CLOCK GEN CK-408
- IMVP-IV VR
- FSB 400/533MHz
- CRT OUTPUT — RGB Signal
- LVDS OUTPUT — 18bit or 24bit
- Intel 82852GM/GME GMCH
- DDR 266/333MHz — SO-DIMM
- DDR VR
- GMCH Core VR
- USB X 4
- AC'97 CODEC
- CF/IDE X 1
- DMI
- PATA / AC'97 / USB 1.1/2.0 / LPC,33MHz
- Intel 82801DB ICH4 421 GBA
- Platform VR
- PCI 32Bit 33MHz
- IT8712
- GAL
- FWH
- IT8710
- SIO X 2 (COM3/COM4)
- 82541ER — RJ45 CONN
- IT8888 — ISA GOLDEN FINGER
- PCI GOLDEN FINGER
- SIO X 2 (COM1/COM2)
- PIO X 1
- KB/MS
- FAN X 1

Watchdog Timer
* 1 to 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:186.5mm (L) x 127.5mm (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)**
  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. 1GB 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)**
  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. 1GB 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