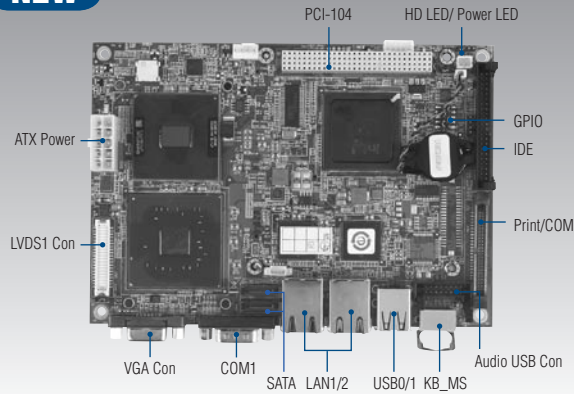


# PCM-4390

## Onboard Intel® Core™ Duo EPIC CPU Module

NEW



### Features

- EPIC form factor (115 mm x 165 mm)
- Embedded Intel® Core™ Duo Processor on board and support for PCI-104 bus
- SODIMM socket supports up to 1 GB DDR2 SDRAM
- Display Combination: CRT + LVDS, LVDS + LVDS display support
- Support four COM ports & eight USB 2.0 ports
- Support two SATAII ports
- Dual 10/100/1000 Mbps PCI Ethernet interface
- Support USB-DOM

### Specifications

#### General

- **CPU** Embedded Intel Core Duo Processor, up to 1.66 GHz
- **System Chipset** Intel 945GM GMCH/ICH7M Chipset
- **BIOS** AWARD® 4 Mbit Flash BIOS
- **System Memory** 200-pin SODIMM socket Rate II (DDR2) 128 MB to 1 GB, accept 128/256/512/1 G (DDR2) 400/533/667 DRAM
- **Power Management** APM1.2, ACPI support
- **SSD** USB-DOM
- **Watchdog Timer** Single chip Watchdog 255-level interval timer, setup by software
- **Expansion Interface** PCI-104
- **Battery** 2-pin wafer box for external Battery on board

#### I/O

- **I/O Interface** 1 x EIDE (UDMA 33), 1 x K/B (optional), 1 x KB/mouse, 3 x RS232, 1 x RS232/422/485, 1 x LPT
- **USB** 8 x USB 2.0 compliant Ports (2 ports on board connector, 6 ports pinhead)
- **Audio** ICH7M AC97 3D surround stereo sound Supports Line -in, Line-out, Microphone-in (with PCM-410 option)
- **IrDA** N/A
- **GPIO** 8-bit general purpose input/output

#### Ethernet

- **Chipset** Broadcom BCM5721
- **Speed** 10/100/1000 Mbps
- **Interface** 2 x RJ45
- **Standard** IEEE 802.3u 100Base-T

#### Display

- **Chipset** Intel 945GM chip integrated. (Extreme Graphics 2)
- **Memory Size** Optimized Shared Memory Architecture, supports up to 64 MB frame buffer using system memory
- **Resolution** CRT Display mode: pixel resolution up to 1600 x 1200 at 85-Hz and 2048 x 1536 at 75-Hz  
LCD Display mode: Dual channel LVDS panel supports up to UXGA panel resolution with frequency range from 25 MHz to 112 MHz

- **LCD Interface** 2 Dual Channel (LVDS1 x 36-bit, LVDS2 x 48-bit (Optional)) LVDS
- **LVDS** Hirose connector support up to 2 channel (2 x 18-bit) LVDS LCD Panel
- **Dual Independent** CRT + 36-bit LVDS  
LVDS + LVDS

#### Mechanical and Environmental

- **Dimension (LxW)** 115 x 165 mm (4.5" x 6.5")
- **Weight** 0.85 kg (weight of total package)
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F)
- **Operating Humidity** 0% ~ 90% relative humidity, non-condensing

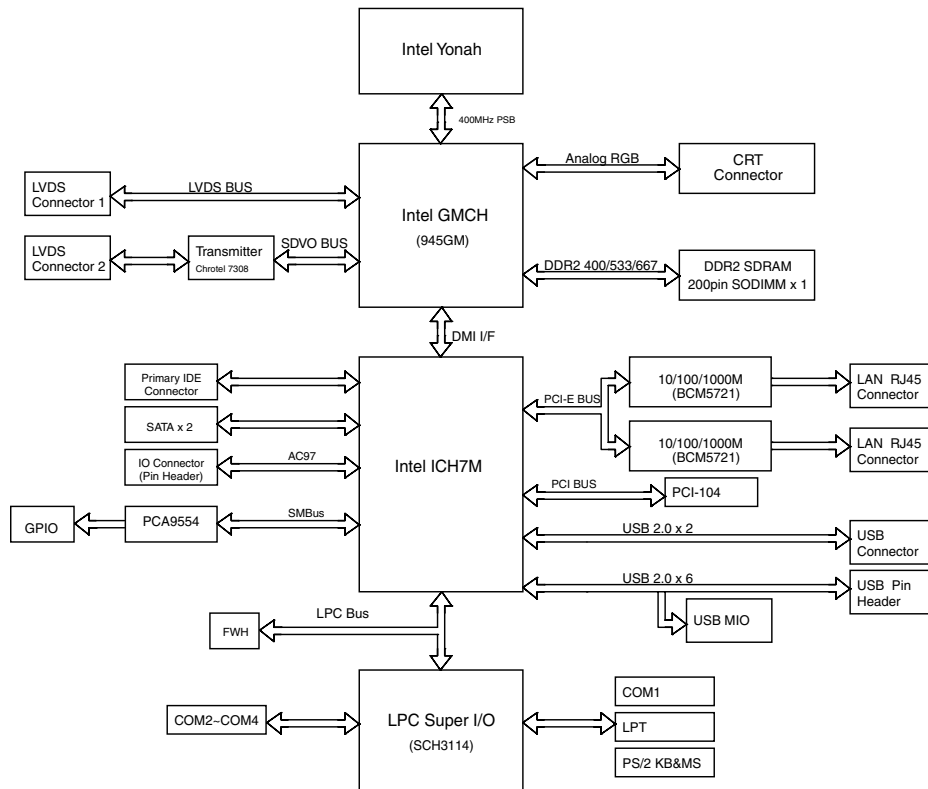
#### Power

- **Power Supply Voltage** ATX, +5 V ± 5%, +3 V ± 5%, 5VSB ± 5%, ±12 V, ± 5% (Optional)  
(12 V optional for PC/104 add on card and LCD inverter)
- **Power Consumption** (Core Duo 1.2 GHz with 512 MB DDR2 memory)  
Typical: 3.75 A @ 5 V, 0.49 A @ 3.3 V,  
1.08 A @ 5 VSB, 0.48 A @ 12 V

### Packing List

- 1 x PCM-4390 SBC
- 1 x Mini Jumper Pack (p/n:9689000002)
- 1 x Startup Manual
- 1 x Utility CD
- 1 x 3 COM and LPT cable (p/n:1700002034)
- 1 x ATX power cable (p/n:1700002055)
- 1 x 6P-6P PS/2 KB/MS (p/n:1700060202)
- 1 x USB CABLE for 10 Pin port 29 CM (p/n:1700001267)
- 1 x IDE cable (p/n:1701440504)
- 1 x USB CABLE 20 Pin port 30 CM (p/n:1700004891)
- 1 x SATA cable (p/n:1700071000)
- 1 x RS422/485 cable (p/n:1703040157)

## Board Diagram



## Ordering Information

Number	CPU	L2 Cache	Chipset	Giga	LVDS1	LVDS2 (Optional)	USB2.0	COM	GPIO	LPT	CF	USB-DOM	Audio	PCI-104	Thermal Solution	Operation Temp.
PCM-4390F-S6A1E	Core Duo 1.66 GHz	2 MB	945 GM	2	36-bit	48-bit	8	4 ports	8	1	-	Yes	Optional	Yes	Active	0-60° C
PCM-4390F-S2A1E	Core Duo 1.2 GHz	2 MB	945 GM	2	36-bit	48-bit	8	4 ports	8	1	-	Yes	Optional	Yes	Passive	0-60° C
PCM-4390F-S0A1E	Celeron M 1.06 GHz	1 MB	945GM	2	36-bit	48-bit	8	4 ports	8	1	-	Yes	Optional	Yes	Passive	0-60° C

### Optional Accessories

- **PCD-USBH11-MS0256** USB-DOM, 256 MB, -40 ~ 85° C
- **PCD-USBH11-MS0512** USB-DOM, 512 MB, -40 ~ 85° C
- **PCD-USBH11-MS1024** USB-DOM, 1 GB, -40 ~ 85° C
- **PCD-USBH11-MS2048** USB-DOM, 2 GB, -40 ~ 85° C
- **PCM-410B-00A1E** HD Audio/USB module for PCM-4372/4390
- **PCM-410C-00A1E** COM/LPT daughter board for EPIC