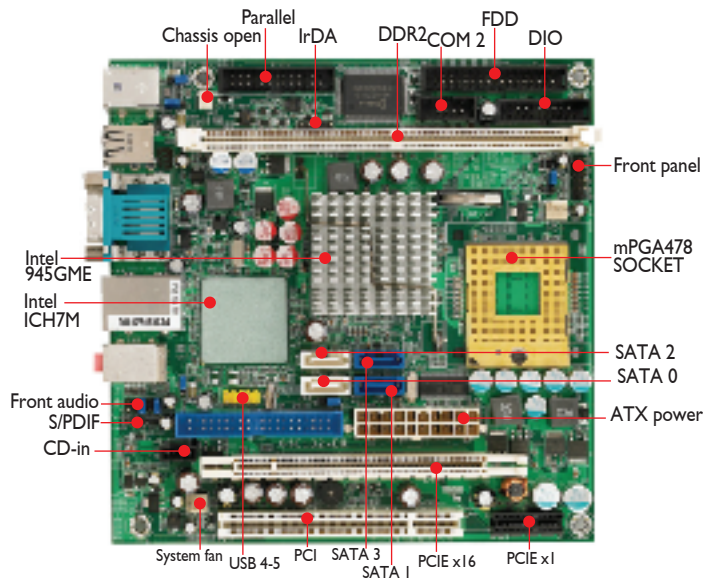


Mini-ITX Form Factor CTI32-B/-BR

Preliminary

Intel® Core 2 Duo (Napa Refresh)
945GME / ICH7M(-B), ICH7R(-BR)



Specifications

PROCESSOR

- Intel® Core™ Duo/Solo mobile processor
- Intel® Core™ 2 Duo mobile processor
- Intel® Core™ processor-based Celeron® M 65nm mobile processor
- 667MHz/533MHz Front Side Bus
- Processor socket : mPGA478

CHIPSET

- Intel® chipset
- Intel® 945GME Express chipset
- Intel® 82801GBM I/O Controller Hub (ICH7M) (-B)
- Intel® 82801GBM I/O Controller Hub (ICH7R) (-BR)

SYSTEM MEMORY

- One 240-pin DDR2 DIMM socket
- Supports 400MHz, 533MHz and 667MHz DDR2 SDRAM
- Supports maximum of 2GB system memory using 256Mbit, 512Mbit or 1Gbit technology for x8 and x16 devices

BIOS

- Award BIOS
- 4Mbit flash memory

ENERGY EFFICIENT DESIGN

- Supports ACPI specification and OS Directed Power Management
- Supports ACPI STR (Suspend to RAM) function
- Wake-On-Events include:
 - Wake-On-PS/2 Keyboard/Mouse
 - Wake-On-USB Keyboard/Mouse
 - Wake-On-LAN
 - Wake-On-Ring
 - RTC timer to power-on the system
- System power management supported
- MicrosoftR/IntelR APM 1.2 compliant
- Soft Power supported - ACPI v1.0a specification
- AC power failure recovery

DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature and overheat alarm
- Monitors CPU(V)/1.05V/1.5V/dimm(V)/12V/VBAT(V)/3.3V/V3.3sb(V) voltages and failure alarm
- Monitors CPU/system fan speed and failure alarm
- Read back capability that displays temperature, voltage and fan speed
- Watchdog timer function

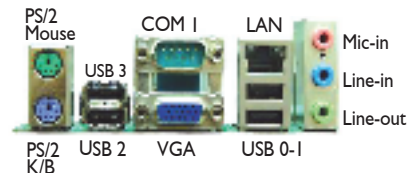
ONBOARD GRAPHICS FEATURES

- Integrated Intel Graphics Media Accelerator 950
 - 250MHz core render clock and 200MHz core display clock
 - Up to 224 MB maximum video memory
 - 2048x1536 maximum resolution

Features

- Intel® Core™ Duo / Solo mobile / Core™ 2 Duo mobile / Core™ processor-based Celeron® M 65nm mobile processor / 945GME (ICH7x)
- 400 / 533 / 667MHz DDR2 SDRAM
- Intel® Graphics Media Accelerator 950
- 1 PCI Express x 16 slot
- RAID 0, RAID 1, RAID 0+1 and RAID 5 (-BR)

I/O Connectors



ONBOARD AUDIO FEATURES

- Realtek ALC655 AC'97 audio CODEC
- 16-bit stereo full-duplex CODEC with 48KHz sampling rate
- High quality differential CD input
- S/PDIF interface
- 5.1-channel audio output

ONBOARD LAN FEATURES

- One Realtek RTL8111B PCI Express Gigabit controller
- Supports 10Mbps, 100Mbps and 1Gbps data transmission
- IEEE 802.3 (10/100Mbps) and IEEE 802.3ab (1Gbps) compliant

SERIAL ATA INTERFACE

- Supports two SATA (Serial ATA) interfaces which are compliant with SATA 1.0 specification (-B)
- Supports four SATA (Serial ATA) interfaces which are compliant with SATA 1.0 specification (-BR)
- SATA speed up to 1.5Gb/s (-B)
- SATA speed up to 3Gb/s (-BR)
- RAID 0, RAID 1, RAID 0+1 and RAID 5 (-BR)

IDE INTERFACE

- One IDE connector supports up to two IDE devices
- Supports Ultra ATA 100/66/33

REAR PANEL I/O PORTS

- 1 mini-DIN-6 PS/2 mouse port
- 1 mini-DIN-6 PS/2 keyboard port
- 1 DB-9 serial port
- 1 DB-15 VGA port
- 1 RJ45 LAN port
- 4 USB 2.0/1.1 ports
- Mic-in, line-in and line-out

I/O CONNECTORS

- 1 connector for 2 additional external USB 2.0/1.1 ports
- 1 DIO connector
- 1 parallel connector
- 1 connector for an external serial port
- 1 front audio connector for line-out and mic-in jacks
- 1 CD-in internal audio connector
- 1 S/PDIF-in/out connector
- 1 connector for IrDA interface
- 2 Serial ATA connectors (-B)
- 4 Serial ATA connectors (-BR)
- 1 40-pin IDE connector
- 1 floppy connector
- 1 20-pin ATX power connector
- 1 chassis open connector
- 1 front panel connector
- 2 fan connectors

Mini-ITX Form Factor

CTI32-B/-BR

EXPANSION SLOTS

- 1 PCI Express x16 slot
- 1 PCI Express x1 slot
- 1 PCI slot

Note:

PCI Express x1 and PCI share the same slot.

TEMPERATURE

- 0°C to 60°C

HUMIDITY

- 10% to 90%

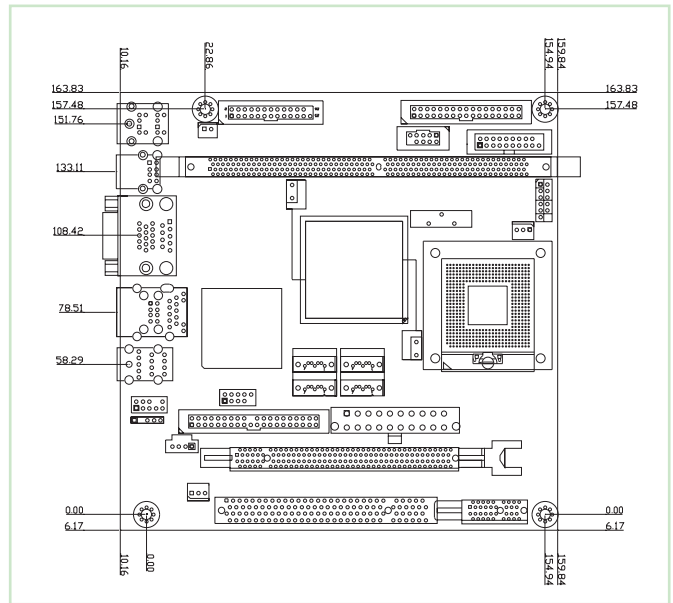
PCB

- 8 layers, Mini-ITX form factor
- 17cm (6.7") x 17cm (6.7")

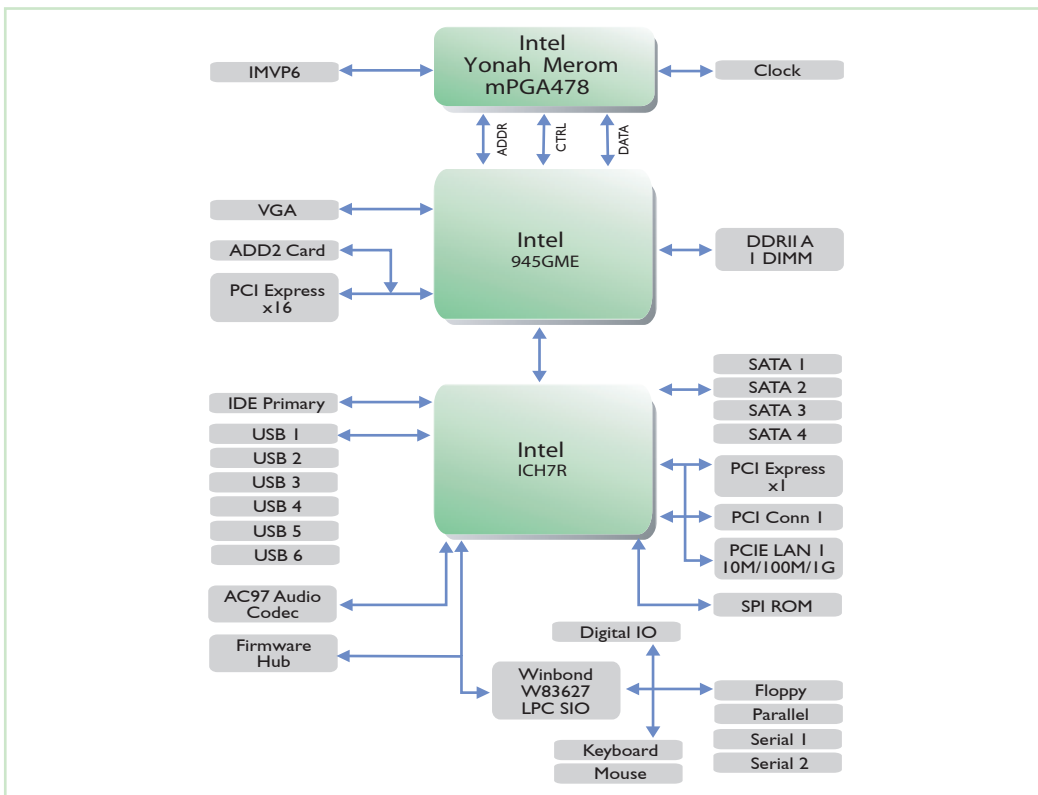
Packing List

- The system board
- A user's manual
- One IDE cable
- One USB port cable
- Two Serial ATA data cables
- Two Serial ATA power cables
- One "Main Board Utility" CD
- One RAID/AHCI driver floppy diskette
- One customized I/O shield (by request)

Mechanical Drawing



Block Diagram



Gaming Machine Application

ATM Application



Automation Application

Medical Equipment Application



Tel - Com Application

Transportation Application



Networking Application

Security Application

Ordering Information

Model	Description
CTI32-B	Intel® ICH7M, 2 SATA
CTI32-BR	Intel® ICH7R, 4 SATA, RAID 0,1,0+1 and 5

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