

Specifications

PROCESSOR

- Socket P 478-pin Micro FCPGA for:
 - Embedded Intel® Core™2 Duo / Celeron® M processor
- 1066/800/667MHz FSB
- Intel® 45nm transistor technology
- Intel® Trusted Execution Technology (Intel® TXT)
- Intel® Virtualization Technology (Intel® VT) DMA
- Supports Data Bus Inversion (DBI)
- Supports Message Signaled Interrupt (MSI)
- Supports Intel® architecture with Intel® Wide Dynamic Execution

CHIPSET

- Intel® chipset
 - Intel® GM45 Express chipset
 - Intel® ICH9M I/O Controller Hub

SYSTEM MEMORY

- Two 204-pin SODIMM sockets
- Supports DDR3 800/1066MHz
- Supports up to 8GB system memory
- 64-bit wide per channel
- 256Mb, 512Mb, 1Gb and 2Gb memory technologies
- Supports non-ECC x8 and x16 DIMMs
- Supports DDR3 On-Die Termination (ODT)
- Supports partial writes to memory using data mask signals (DM)

GRAPHICS FEATURES

- Internal graphics features
 - Intel® GMA 4500 integrated graphics engine
 - 533MHz core render clock
 - Supports 3D, 2D and video capabilities, DX10 and OpenGL 2.1
- Integrated graphics interface
 - Analog CRT
 - Integrated 300MHz
 - Analog monitor supports up to QXGA
 - LVDS interface
 - Panel support up to UXGA (1600x1200)
 - 25MHz-112MHz single/dual channel up to 2x24bpp panel support

AUDIO FEATURES

- Supports High Definition Audio on Azalia interface (depends on the CODEC used on the carrier board)

LAN FEATURES

- Intel® 82567LM PCI Express Gigabit Ethernet controller
- Integrated 10/100/1000 transceiver
- Supports Full Duplex flow control (IEEE 802.3x)
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab
- Supports power down / link down power saving

SERIAL ATA INTERFACE

- Supports up to 4 Serial ATA interfaces compliant with SATA 1.0 specification
- SATA speed up to 3Gb/s (SATA 2.0)

EXPANSION SLOTS

- Supports 1 PCI Express x16
- Supports up to 4 PCI Express x1 (PCIe 1.1)
- Supports up to 4 PCI (PCI 2.3)
- Supports 8 USB interfaces
- Supports 8 DIO
- Supports LPC interface
- Supports SMBus interface

IDE INTERFACE

- Supports up to 2 IDE devices
- Supports up to Ultra ATA 100
- Bus Master IDE controller (PATA)

DAMAGE FREE INTELLIGENCE

- Monitors CPU temperature and overheat alarm
- Monitors CPU fan speed and failure alarm

CONNECTORS

- COM Express connectors
 - Two 220-pin COM Express standard connectors
 - Module connector pin: Tyco 3-1827231-6
- 1 CPU fan connector

BIOS

- 32 Mbit SPI BIOS (optional)

POWER CONSUMPTION

- 40.83 W with Intel® Core™2 Duo at 2.53GHz and 2x 2GHz DDR3 SODIMM

TEMPERATURE

- Operating: 0°C to 60°C
- Non-operating: -40°C to 85°C

HUMIDITY

- Operating: 10% to 90%

POWER

- Input: 12V, 5VSB (optional)

PCB

- Dimensions
 - Basic COM Express® form factor
 - 95mm (3.74") x 125mm (4.9")
- Compliance
 - PICMG COM Express® R1.0, Type 2

CERTIFICATION

- CE
- FCC Class B
- UL
- RoHS

Ordering Information

Model Name	Part Number	Description
CA900-B	770-CA9001-000K	Intel® Core™2 Duo/ Celeron® M processors

Packing List

• 1 CA900-B board
• 1 QR (Quick Reference)
• 1 CD

Optional Items

• COM630-B carrier board kit
• Heat sink with fan: 552-100020-001G