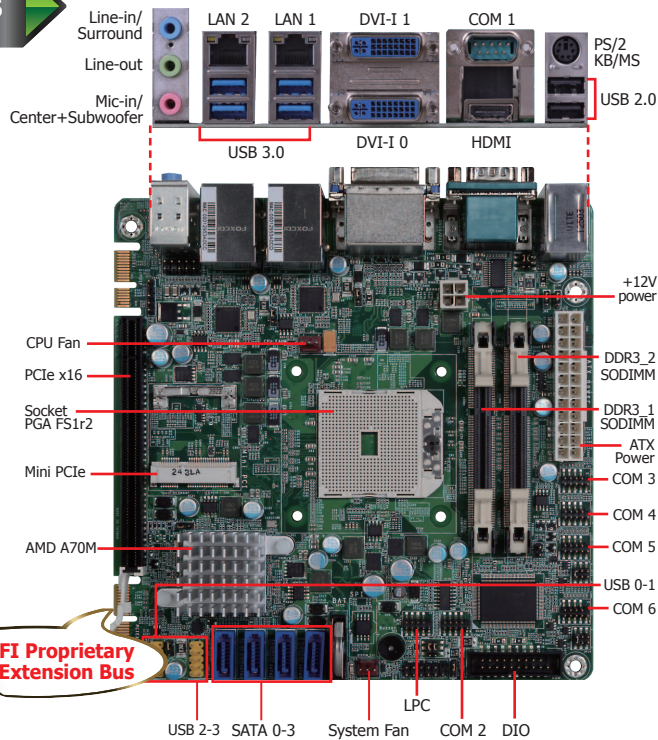




AMD® Embedded R-Series Mini-ITX

CM100-C

R-Series



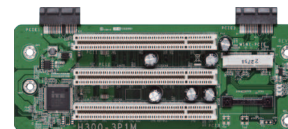
Features

MEMORY	2 DDR3 SODIMM up to 16GB
EXPANSION	1 PCIe x16 2 DFI Proprietary Extension Bus 1 Mini PCIe
DISPLAY OUTPUTS	3 independent displays 1 HDMI, 2 DVI-I (DVI-D signal)
LAN	2 LAN
COM	6 COM
USB	10 USB: 4 USB 3.0, 6 USB 2.0
STORAGE	4 SATA 3.0
DIO	8-bit DIO

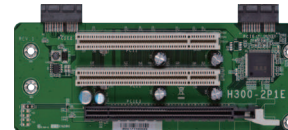


6 Riser Cards for DFI Proprietary Extension Bus

H Series:



H300-3P1M

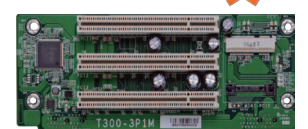


H300-2P1E

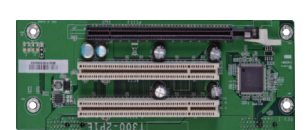


H300-2E

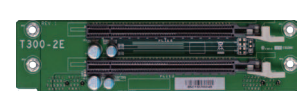
T Series:



T300-3P1M



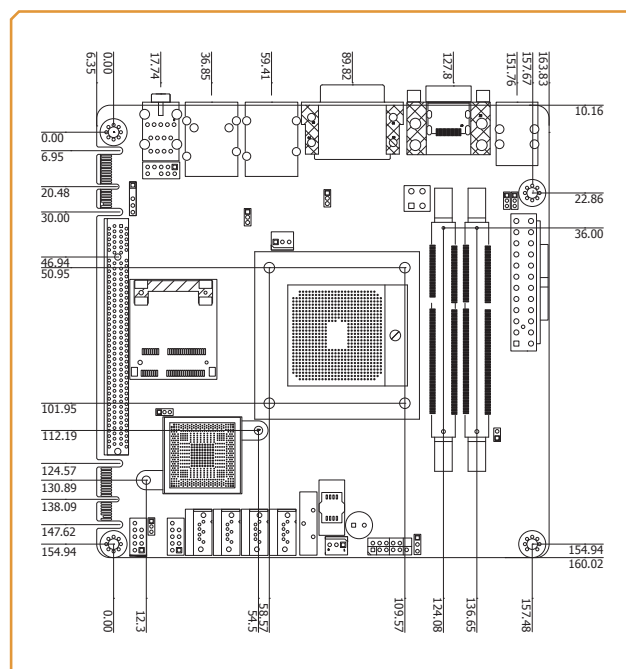
T300-2P1E



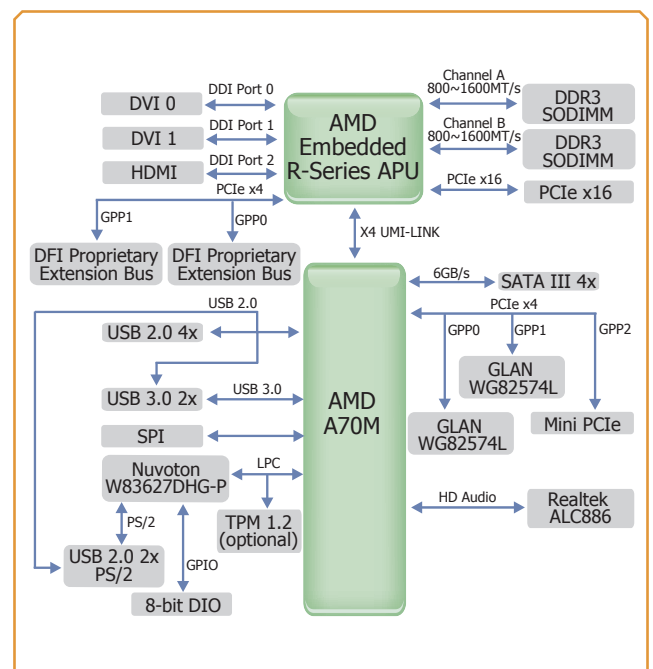
T300-2E



Mechanical Drawing



Block Diagram



CM100-C

► Specifications

APU

- AMD® Embedded R-Series APUs
 - : R-464L Quad-core 2.3GHz, 35W
 - : R-460H Quad-core 1.9GHz, 35W
 - : R-272F Dual-core 2.7GHz, 35W
 - : R-268D Dual-core 2.5GHz, 35W
- PGA (FS1r2) socket
- 32nm process technology

CHIPSET

- AMD® A70M Fusion Controller Hub

SYSTEM MEMORY

- Two 204-pin DDR3 SODIMM sockets
- Supports DDR3 (1.5V), LVDDR3 (1.35V), ULVDDR3 (1.25V) up to 1600MHz
- Supports dual channel memory interface
- Supports up to 16GB system memory
- DRAM device technologies: 1Gb, 2Gb, 4Gb and 8Gb DDR3 DRAM technologies are supported for x8 and x16 devices, unbuffered, non-ECC

EXPANSION SLOTS

- 1 PCIe x16 slot
- 2 DFI Proprietary Extension Bus for PCIe/PCI expansion
- 1 Mini PCIe slot (PCIe and USB signals)
 - Supports half size Mini PCIe card

ONBOARD GRAPHICS FEATURES

- AMD Radeon™ Dual Graphics technology delivers enhanced 3D graphics rendering performance
- Display ports: 1 HDMI, 2 DVI (DVI-D signal)
- HDMI, DVI: resolution up to 1920x1200 @ 60Hz
- DirectX 11, Hardware H.264, VC-1, MPEG-2, DivX at 1080p@60fps

ONBOARD AUDIO FEATURES

- Realtek ALC886 5.1-channel High Definition Audio
- Audio outputs: Mic-in/Center+Subwoofer, line-in/surround and line-out
- S/PDIF audio interface

ONBOARD LAN FEATURES

- 2 Intel® WG82574L PCI Express Gigabit Ethernet controllers
- Integrated 10/100/1000 transceiver
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab

SERIAL ATA (SATA) INTERFACE

- 4 SATA 3.0 ports with data transfer rate up to 6Gb/s
- Integrated Advanced Host Controller Interface (AHCI) controller

USB INTERFACE

- XHCI Host Controller supports up to 4 super speed USB 3.0 ports

EEPROM (optional)

- 32~128KB

NVRAM (optional)

- 4~8MB

TRUSTED PLATFORM MODULE (TPM) - optional

- Provides a Trusted PC for secure transactions
- Provides software license protection, enforcement and password protection

REAR PANEL I/O PORTS

- 1 mini-DIN-6 port for PS/2 mouse/keyboard
- 4 USB 3.0/2.0/1.1 ports
- 2 USB 2.0/1.1 ports
- 1 DB-9 serial port
 - Supports RS232 (RS232 and/or Power)
- 1 HDMI port
- 2 DVI-I ports (DVI-D signal)
- 2 RJ45 LAN ports
- Line-in/surround, Line out, and Mic-in/Center+Subwoofer jacks

I/O CONNECTORS

- 2 connectors for 4 external USB 2.0/1.1 ports
- 5 connectors for 5 external serial ports
 - 2 RS232/422/485
 - 2 RS232
 - 1 RS232 (RS232 and/or Power)
- 1 8-bit Digital I/O connector
- 1 front audio connector for line-out and mic-in jacks
- 1 S/PDIF connector
- 4 SATA 3.0 ports
- 1 24-pin ATX power connector
- 1 4-pin 12V power connector
- 1 chassis intrusion connector
- 1 front panel connector
- 2 fan connectors

BIOS

- AMI BIOS
 - 32Mbit SPI BIOS

ENERGY EFFICIENT DESIGN

- ACPI v3.0 specification
- System Power Management
- Wake-On-Events include:
 - Wake-On-PS/2 KB/Mouse
 - Wake-On-USB KB/Mouse
 - Wake-On-LAN
 - RTC timer to power-on the system
- AC power failure recovery

DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature and overheat alarm
- Monitors VDD/VDDNB/VDDIO/1.1V/1.2V/3.3V/5V/12V 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
 - Watchdog timeout programmable via software from 1 to 255 seconds

OS SUPPORT

- Windows XP Professional x86 & SP3 (32-bit)
- Windows 7 Ultimate x86 & SP1 (32-bit)
- Windows 7 Ultimate x64 & SP1 (64-bit)
- Windows 8 Enterprise x86 (32-bit)
- Windows 8 Enterprise x64 (64-bit)

TEMPERATURE

- Operating: 0°C to 60°C
- Storage: -40°C to 85°C

HUMIDITY

- 10% to 90%

DIMENSIONS

- Mini-ITX form factor
- 170mm (6.7") x 170mm (6.7")

CERTIFICATION

- CE
- FCC Class B
- RoHS

► Packing List

• 1 CM100-C motherboard
• 1 Serial ATA data cable
• 1 I/O shield
• 1 QR (Quick Reference)
• 1 DVD

► Optional Items

• USB port cable
• Serial ATA data cable
• Serial ATA power cable
• COM port cable
• I/O shield
• PS/2 Keyboard/Mouse cable