

DE-1002

Intel® Atom™ E3845 Quad Core Power Efficient Fanless Computer,
2x PCI / 2x PCIe Expansion



Key Features

- Onboard Intel® Atom™ E3845 Processor Quad Core, 1.91GHz
- 2x DDR3L SO-DIMM Max. up to 8GB
- Dual Independent Display from 1x DVI-I and 1x DisplayPort
- 2x Intel® GbE Port, Support Wake-on-Lan and PXE
- 1x USB 3.0, 4x USB 2.0
- 6x RS232/422/485 Port with 5V/12V Power
- 4x Isolated DI, 4x Isolated DO
- 2x 2.5" SATA SSD/HDD Bay, 1x mSATA (Shared by Mini-PCIe Socket), 1x CFast Card and 1x SIM Card Socket
- 9~48VDC Power Input, Support AT/ATX Mode
- 2x Mini-PCIe Slot for Wi-Fi, GSM, or I/O Expansion
- 2x PCI or 2x PCIe x1 Expansion
- Power Ignition
- Compliant with EN50155 for Rail Transportation Applications

»»» Overview

DE-1000 Series Fanless Embedded PC supports Intel® Bay Trail platform, integrated with Intel® Atom™ E3845 Quad Core 1.91 GHz processor. Delivering the excellent quad-core processing power at only 10 watts power consumption, DE-1000 series is definitely an ideal solution for ultimate computing performance, energy efficiency, and superior reliability.

Designed with rich I/O, high flexibility and easy expansion capabilities, DE-1000 series is ideal for diverse industrial applications. It offers multiple I/O extension modules, including up to 2x PCI or 2x PCIe x1 slot for flexible integration of a variety of add-on cards; 2x mini-PCIe slot for GSM and WLAN wireless communication; it also supports three storage expansions: 2.5" SATA HDD, CFast and SIM card.

Supporting up to 6x LAN or 4x POE versions, and power ignition function, DE-1000 series can meet various applications, such as: surveillance, in-vehicle, and industrial automation applications, etc.

DE-1000 series supports wide temperature range from -20°C to +70°C, wide range (9~48V) DC power input, power protection, cable free and one-piece housing design, as well as compliant with EN50155 certification for rail transportation applications; it is designed to ensure stable operation in robust and harsh environments.

»»» Specifications

Processor System

- Onboard Intel® Atom™ Processor E3845 Quad Core, 1.91 GHz with AMI 64Mbit SPI BIOS.

Memory

- 2x 204-Pin DDR3L 1066 / 1333MHz SO-DIMM (un-buffered and non-ECC), Max. up to 8GB

Display

Dual Display

- 1x DVI and 1x DisplayPort
- 1x DVI-D and 1x VGA (w/ Optional Split Cable)
- 1x DisplayPort and 1x VGA (w/ DVI-I to VGA Adapter)

Expansion

- 2x PCIe x1 for DE-1002-EE Only
- 2x PCI for DE-1002-PP Only
- 2x Full-size Mini PCIe Socket for Wi-Fi / GSM / Expansion Module
- 2x Universal I/O Bracket

Ethernet

- 2x Intel® i210-AT GbE LAN Port, Support Wake-on-LAN and PXE

Audio

- Codec: Realtek ALC888S
- 1x Mic-in and 1x Speak-out

Watchdog Timer

- Software Programmable Supports 1~255 sec. System Reset

Storage

- 2x 2.5" SATA HDD Bay
- 1x Internal mSATA Slot (Shared by Mini-PCIe Socket)
- 1x External CFast Socket
- 1x External SIM Card Socket

I/O Ports

- 1x USB 3.0 Port
- 4x USB 2.0 Port
- 1x 4 Isolated DI & 4 Isolated DO Port
- 6x DB9 for COM1~6, Support RS232/422/485 with Auto Flow Control
- 1x PS/2 Port
- 2x Antenna Hole
- 1x Power Switch
- 1x AT/ATX Switch
- 1x Remote Power and Reset Connector

Digital Input & Output

- 4x Digital Input (Source Type)
 - Input Voltage (Dry Contact):
 - Logic 0: Close to GND
 - Logic 1: Open
 - Input Voltage:
 - Logic 0: 3V max.
 - Logic 1: 5V min. (DI to COM-)
- 4x Digital Output
 - Supply Voltage: 5~30VDC
 - Sink Current: 200 mA Max. Per Channel

Power

- Support AT, ATX Mode
- 1x 3-pin Terminal Block Connector with Power Input 9~48VDC
- 1x Optional AC/DC 12V/5A, 60W Power Adapter

Environment

- Operating Temperature: Ambient with Air Flow: -20°C to 70°C (with Industrial Grade Peripherals)
- Storage Temperature: -30°C to 85°C
- Relative Humidity: 10%~95% (non-condensing)

Physical

- Dimension (WxDxH, mm): 203 x 200 x 114.5 mm
- Weight: 3.66 kg
- Construction: Extruded Aluminum with Heavy Duty Metal
- Mounting: Wall

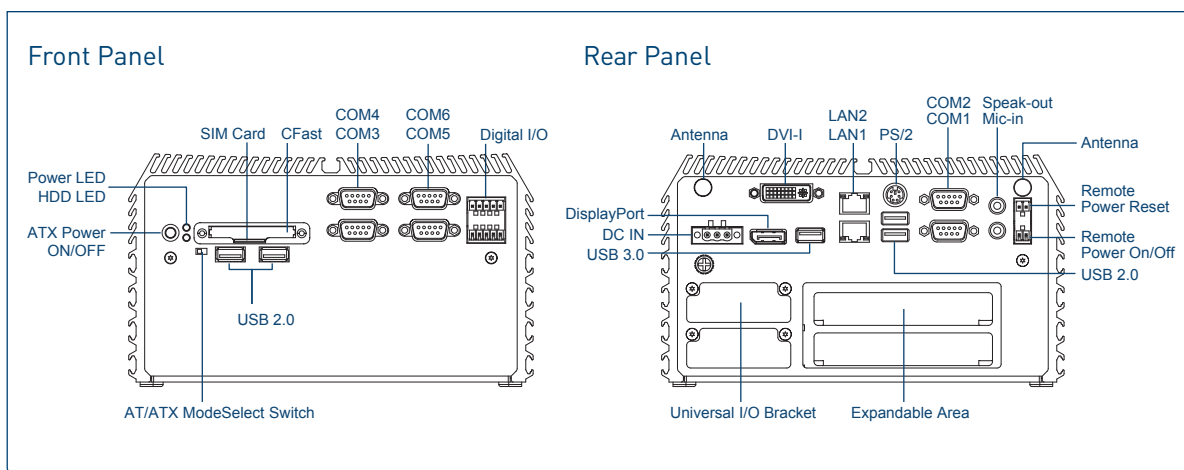
Operating System

- Windows® 8
- Windows® Embedded 8 Standard
- Windows® 7
- Windows® Embedded Standard 7

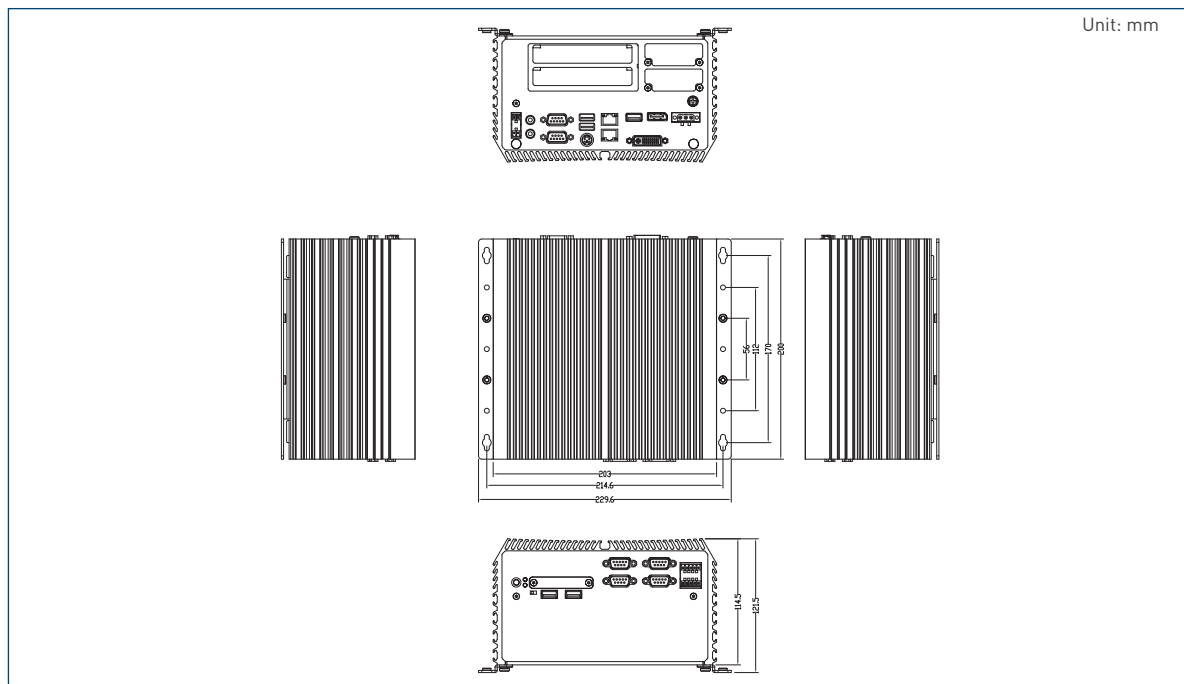
Certification

- CE
- EN 50155
- FCC Class A
- EN 50121-3-2

»» External I/O Mechanical Layout



»» Dimensions



»» Ordering Information

Available Models

Model No.	Product Description
DE-1002-EE	Intel® Atom™ E3845 Quad Core Power Efficient Fanless Computer, 2x PCIe x1 Expansion
DE-1002-PP	Intel® Atom™ E3845 Quad Core Power Efficient Fanless Computer, 2x PCI Expansion

Package Checklist

- DE-1002 Embedded System x 1
- Utility DVD Driver x 1
- DIO Terminal Block Connector (Female) x 2
- Power Terminal Block Connector (Female) x 1
- Remote Power Terminal Block Connector (Female) x 2
- DVI-I to VGA Adapter x 1
- Screw Pack x 1
- Wall Mount Kit x 1

Optional Accessories

Model No.	Description
GSM60A12-CIN	Adapter AC/DC 12V 5A 60W with 3pin Terminal Block Plug 5.0mm Pitch, GSM60A12-P1J
SL2-SL3	US 2 heads power cord, US B type to IEC C13, SVT 18AWG/3C Black 1.8M SL-2+SL-3
SL6-SL3	EU 2 heads power cord, EU G type to IEC C13, H05VV-F 0.75mm2/3G Black 1.8M SL-6+SL-3
QP026-SL3	UK 2 heads power cord, UK I type to IEC C13, H05VV-F 0.75mm2/3G Black 1.8M QP026+SL-3
59381560000E	MINI-DIN(M) (PS/2 KB+MS) TO MINI-DIN(F) (PS/2 KB)+MINI-DIN(F) (PS/2 MS) L:10CM, 59381560000E
N0307-140507-01	DVI-I(M) TO DVI-D(F) + VGA(F) Cable, L=200mm, N0307-140507-01