

# DC-1100

Intel® Atom™ E3845 Quad Core Compact Size Fanless Computer and 2x Mini-PCle Expansion



## Overview

[CONTACT](#)

DC-1100 is a high performance compact size 185mm (W) x 131mm (D) x 54mm (H) system designed with onboard Intel® Atom™ E3845 Quad Core 1.91GHz processor, rich I/O, an unique expansion capability, and supports wide range (9~48V) DC power input. It supports the latest USB 3.0 technology. With features including completely cable-less designed, special heat dissipation, anti-vibration, and industrial components selection, DC-1100 is a ruggedized system that can operate in a harsh environment. A build in voltage protection, reliable DC power input, and reverse power protection make DC-1100 a safety system for industrial applications.

### Key Features

- Onboard Intel® Atom™ E3845 Processor Quad Core, 1.91GHz
- 1x DDR3L SO-DIMM Max. Up to 8 GB
- Dual Independent Display from 1x DVI-I and 1x DisplayPort
- 2x Intel® GbE Port Support Wake-on-LAN and PXE
- 1x USB 3.0 & 3x USB2.0
- 4x RS-232/422/485 Port with 5V/12V Power
- 4x Isolated DI, 4x Isolated DO
- 1x 2.5" SATA SSD/HDD Bay
- 1x CFast Card and 1x SIM Card Socket
- 9~48VDC Power Input Support AT/ATX Mode
- 2x Mini-PCle Slot for Wi-Fi, GSM or I/O Expansion
- Universal I/O Bracket for Mini-PCle Expansion
- E-Mark (E13, No.10R-0514062) Certified

### Certifications



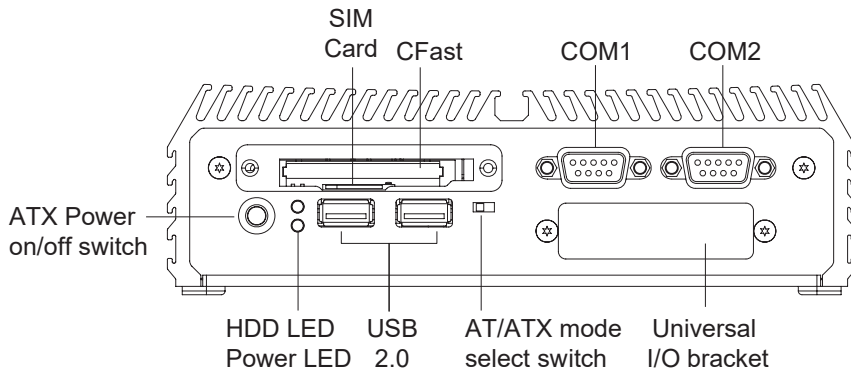
## Specifications

| Model Name                        | DC-1100   |
|-----------------------------------|---|
| <b>System</b>                     |   |
| Processor                         | <ul style="list-style-type: none"> <li>Onboard Intel® Atom™ Processor E3845 Quad Core, 1.91 GHz</li> </ul>  |
| BIOS                              | <ul style="list-style-type: none"> <li>AMI 64Mbit SPI BIOS</li> </ul>   |
| Memory                            | <ul style="list-style-type: none"> <li>1x DDR3L 1066/1333 MHz SO-DIMM Sockets</li> <li>Supports Un-buffered and Non-ECC Type Up to 8 GB</li> </ul>  |
| <b>Display</b>                    |   |
| Dual Display                      | <ul style="list-style-type: none"> <li>1x DVI-I and 1x DisplayPort (2560 x 1600)</li> <li>1x DVI-D and 1x VGA (with optional split cable)</li> <li>1x DisplayPort and 1x VGA (with DVI-I to VGA adapter)</li> </ul>   |
| <b>Expansion</b>                  |   |
| Mini PCIe                         | <ul style="list-style-type: none"> <li>2x Full-size Mini PCIe Socket for Wi-Fi / GSM / Expansion Module</li> </ul>  |
| Universal I/O Bracket             | <ul style="list-style-type: none"> <li>1x Universal I/O Bracket</li> </ul>  |
| <b>Ethernet</b>                   |   |
| Ethernet                          | <ul style="list-style-type: none"> <li>2x Intel® I210 GbE LAN Port, Support Wake-on-LAN and PXE</li> </ul>  |
| <b>Audio</b>                      |   |
| Audio Codec                       | <ul style="list-style-type: none"> <li>Realtek ALC888S</li> </ul>   |
| Mic-in                            | <ul style="list-style-type: none"> <li>1x Mic-in and 1x Speak-out</li> </ul>  |
| <b>Other Function</b>             |   |
| WatchDog Timer                    | <ul style="list-style-type: none"> <li>software Programmable Supports 256 Levels System Reset</li> </ul>  |
| <b>Storage</b>                    |   |
| SSD/HDD                           | <ul style="list-style-type: none"> <li>1x 2.5" SATA SSD/HDD Bay</li> </ul>  |
| CFast Socket                      | <ul style="list-style-type: none"> <li>1x External CFast Socket</li> </ul>  |
| SIM Socket                        | <ul style="list-style-type: none"> <li>1x External SIM Card Socket</li> </ul>   |
| <b>I/O</b>                        |   |
| USB                               | <ul style="list-style-type: none"> <li>1x USB 3.2 Gen1 Port</li> <li>3x USB 2.0 Port</li> </ul>   |
| COM                               | <ul style="list-style-type: none"> <li>4x DB9 for COM1~4, (Support RS-232/422/485 with Auto Flow Control)</li> </ul>  |
| Antenna Hole                      | <ul style="list-style-type: none"> <li>2x Antenna Hole</li> </ul>   |
| Power Switch                      | <ul style="list-style-type: none"> <li>1x Power Switch</li> </ul>   |
| AT/ATX Switch                     | <ul style="list-style-type: none"> <li>1x AT/ATX Switch</li> </ul>  |
| <b>Digital Input &amp; Output</b> |   |
| Digital Input                     | <ul style="list-style-type: none"> <li>4x Digital Input (Source Type)                             <ul style="list-style-type: none"> <li>Input Voltage (Dry Contact):                                     <ul style="list-style-type: none"> <li>Logic 0: Close to GND</li> <li>Logic 1: Open</li> </ul> </li> <li>Input Voltage:                                     <ul style="list-style-type: none"> <li>Logic 0: 3V max.</li> <li>Logic 1: 5V min. (DI to COM-)</li> </ul> </li> </ul> </li> </ul> |
| Digital Output                    | <ul style="list-style-type: none"> <li>4x Digital Output                             <ul style="list-style-type: none"> <li>Supply Voltage: 9~30VDC</li> <li>Sink Current: 200 mA Max. Per Channel</li> </ul> </li> </ul>   |

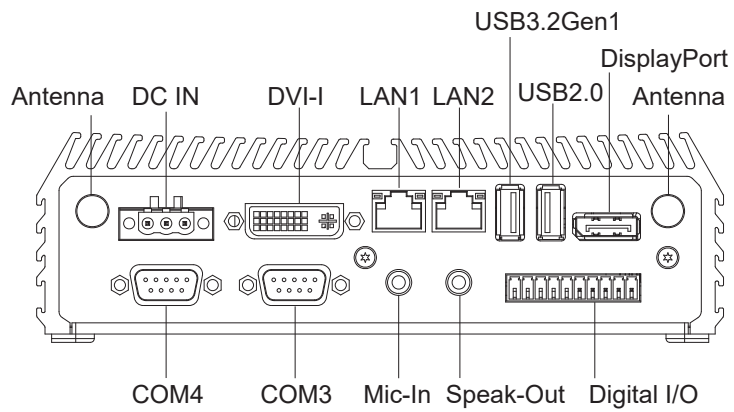
|                         |   |
|-------------------------|---|
| <b>Power</b>            |   |
| AT/ ATX Mode            | <ul style="list-style-type: none"> <li>• Yes</li> </ul>   |
| Power Input             | <ul style="list-style-type: none"> <li>• 1x 3-pin Terminal Block Connector with Power Input 9~48VDC</li> </ul>  |
| Power Adapter           | <ul style="list-style-type: none"> <li>• 1x Optional AC/DC 12V/5A, 60W Power Adapter</li> </ul>   |
| <b>Environment</b>      |   |
| Operating Temperature   | <ul style="list-style-type: none"> <li>• -25°C to 70°C (With extended temperature peripherals; Ambient with Air Flow by IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)</li> </ul>   |
| Storage Temperature     | <ul style="list-style-type: none"> <li>• -30°C to 85°C</li> </ul>   |
| Relative Humidity       | <ul style="list-style-type: none"> <li>• 10%~95% (Non-Condensing)</li> </ul>  |
| Shock                   | <ul style="list-style-type: none"> <li>• 50 Grms (With SSD According to IEC 60068-2-27, Half Sine, 11ms Duration)</li> </ul>  |
| Vibration               | <ul style="list-style-type: none"> <li>• Random: 5 Grms (With SSD According to IEC 60068-2-64, 5~500Hz, 1 hr/axis)</li> </ul>   |
| <b>Physical</b>         |   |
| Dimension ( W x D x H ) | <ul style="list-style-type: none"> <li>• 185 x 131 x 56.5 mm</li> </ul>   |
| Weight                  | <ul style="list-style-type: none"> <li>• 1.58 kg</li> </ul>   |
| Construction            | <ul style="list-style-type: none"> <li>• Extruded Aluminum with Heavy Duty Metal</li> </ul>   |
| Mounting                | <ul style="list-style-type: none"> <li>• Wall, Optional Side / VESA / DIN-Rail Mounting</li> </ul>  |
| <b>Operating System</b> |   |
| Windows®                | <ul style="list-style-type: none"> <li>• Windows® 10</li> <li>• Windows® 8.1</li> <li>• Windows® 7</li> </ul>   |
| Linux                   | <ul style="list-style-type: none"> <li>• Supports by Project</li> </ul>   |
| <b>Environment</b>      |   |
| EMC                     | <ul style="list-style-type: none"> <li>• CE, UKCA, FCC, ICES-003 Class A</li> <li>• E-mark</li> </ul>   |
| EMI                     | <ul style="list-style-type: none"> <li>• CISPR 32 Conducted &amp; Radiated: Class A</li> <li>• EN/BS EN 55032 Conducted &amp; Radiated: Class A</li> <li>• EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A</li> <li>• EN/BS EN61000-3-3 Voltage fluctuations &amp; flicker</li> <li>• FCC 47 CFR Part 15B, ICES-003 Conducted &amp; Radiated: Class A</li> </ul>   |
| EMS                     | <ul style="list-style-type: none"> <li>• EN/IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV</li> <li>• EN/IEC 61000-4-3 RS: 80 MHz to 1000 MHz: 3 V/m</li> <li>• EN/IEC 61000-4-4 EFT: AC Power: 1 kV; DC Power: 0.5 kV; Signal: 0.5 kV</li> <li>• EN/IEC 61000-4-5 Surges: AC Power: 2 kV; Signal: 1 kV</li> <li>• EN/IEC 61000-4-6 CS: 3V</li> <li>• EN/IEC 61000-4-8 PFMF: 50 Hz, 1A/m</li> <li>• EN/IEC 61000-4-11 Voltage Dips &amp; Voltage Interruptions: 0.5 cycles at 50 Hz</li> </ul> |

**External Layout**

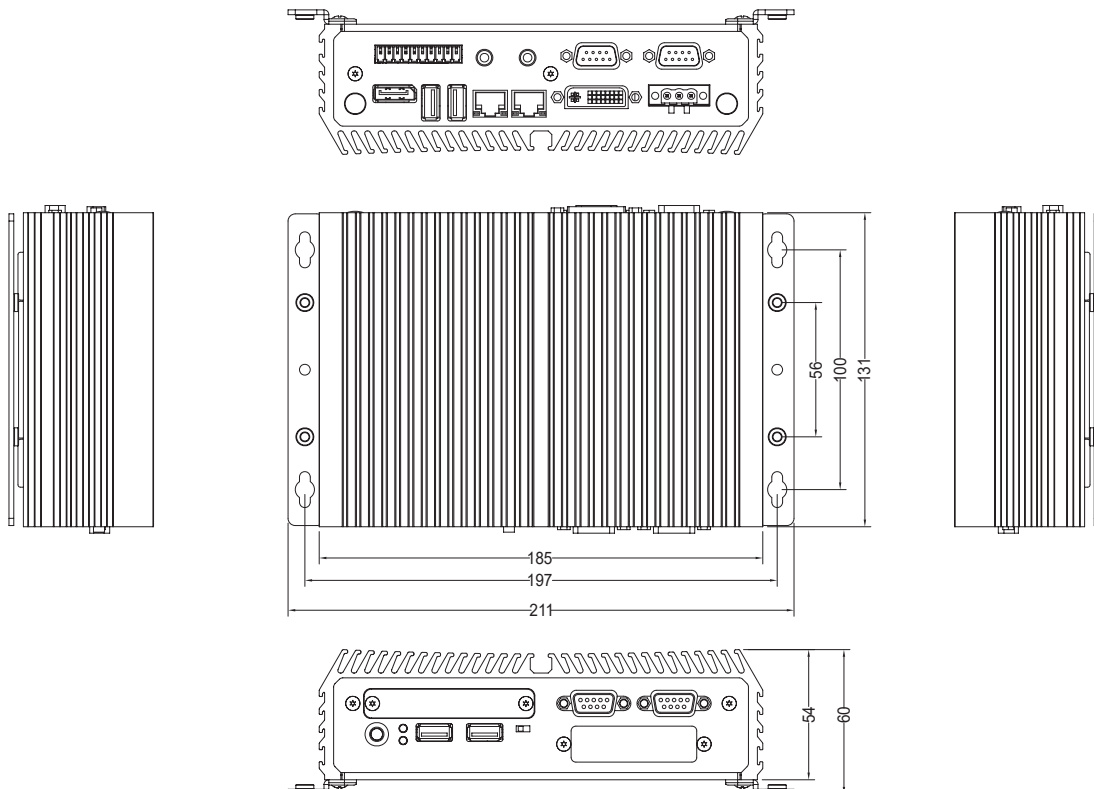
Front I/O



Rear I/O



**Dimensions**



Unit: mm

## Ordering Information

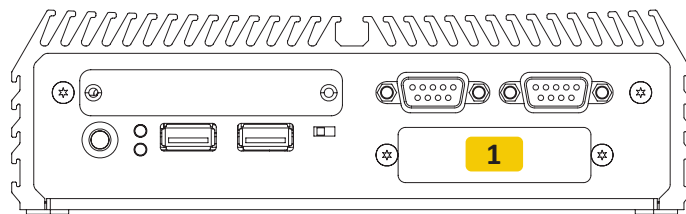
### Available Models

| Model No.   | Description  |
|-------------|--|
| DC-1100-R10 | Intel® Atom™ E3845 Quad Core™ Compact Size Fanless Computer and 2x Mini-PCIe Expansion |

### Package Checklist

|                                      |                            |
|--------------------------------------|----------------------------|
| • DC-1100 Embedded System x 1        | • DVI-I to VGA Adapter x 1 |
| • DIO Terminal Block Connector x 1   | • Screw Pack x 1           |
| • Power Terminal Block Connector x 1 | • Wall Mount Kit x 1       |

### Optional I/O Modules



| Model No.                | Description  | 1 |
|--------------------------|--|---|
| MEC-LAN-M102-15 / UB0111 | Mini-PCIe Module with 2x LAN Ports, 2x 15cm cable, 1x Universal Bracket with 2x RJ45 Cutout for DC-1100<br>* Only can be compatible with CFast when MEC-LAN Module is installed. | V |

### Optional Accessories

| Model No.     | Description  |
|---------------|--|
| GST60A12-CIN1 | Adapter AC/DC 12V 5A 60W with 3pin Terminal Block Plug 5.0mm Pitch, Level VI |
| SL2-SL3       | US 2 heads power cord, US B type to IEC C13, SVT 18AWG/3C Black 1.8M         |
| SL6-SL3       | EU 2 heads power cord, EU G type to IEC C13, H05VV-F 0.75mm2/3G Black 1.8M   |
| QP026-SL3     | UK 2 heads power cord, UK I type to IEC C13, H05VV-F 0.75mm2/3G Black 1.8M   |
| VESA-DC       | DC series VESA Mount Kit   |
| SIDE-DC       | DC series SIDE Mount Kit   |
| DINRAIL-R10   | Diamond series DIN-RAIL Mount Kit  |