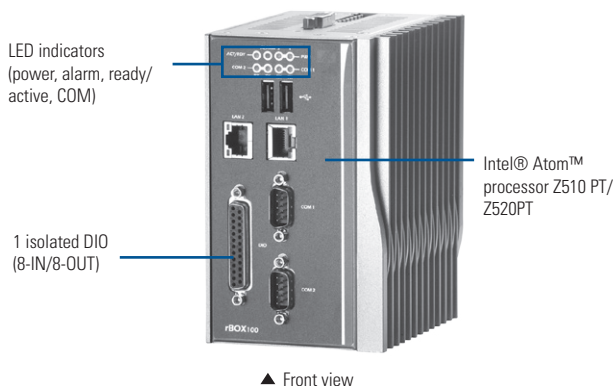


rBOX100

Robust Din-rail Fanless Embedded System with Intel® Atom™ Processor Z510PT/ Z520PT up to 1.33 GHz, Intel® US15WPT and 1 Isolated DIO (8-IN/8-OUT)



▲ Front view



Features

- Fanless and cableless design
- Intel® Atom™ processor Z510PT 1.1 GHz or Z520PT 1.33 GHz
- Wide temperature operation of -40°C ~ +70°C
- 1 isolated DIO (8-IN/8-OUT)
- 2 isolated Ethernet ports
- 2 watchdog timer
- LED indicators
- SNMP V1/V2c
- Supports 1 CompactFlash™, 1 SD card (optional)
- 2 power paths with terminal block and 12-48VDC
- Supports AXView remote monitoring software package



▲ Rear view

Introduction

The rBOX100 din-rail fanless embedded field controller supports extra low power Intel® Atom™ processors Z510PT and Z520PT with extended temperature range of -40°C to 70°C for use in extreme operating environments.

Its 8-IN/8-OUT DIO port provides users with the digital devices connection, and its redundant Ethernet connection provides greater availability and reliability. Two power paths input minimizes the risk of data loss in the event of a single power failure. Besides, rBOX100 is also specifically built for rugged work environments, has met Safety Agency requirements and passed heavy industrial EMI/EMS testing. The robust rBOX100 is specifically built for remote control/ monitoring management applications like unmanned control room, industrial machine, automatic parking lot, traffic cabinet and more.

The ready-to-run rBOX100 equipped with AXView remote monitoring software is a total solution for power plant automation, facility monitoring systems, intelligent transportation systems, and more.

Specifications

| | | |
|-------------------|--|---|
| Standard Color | Sliver-Black | |
| Construction | Extruded aluminum and heavy-duty steel, IP30 | |
| CPU | Intel® Atom™ processor Z510PT 1.1 GHz or Z520PT 1.33 GHz | |
| System Board | RM820 | |
| System Memory | 1 x 200-pin DDR2 SO-DIMM max. up to 2 GB | |
| System I/O Outlet | Serial Port | 2 x RS-232/422/485 (COM 1/2) (isolated COM as option) Interface select by software or BIOS Supports Auto Flow Control in RS-485 mode ESD protection 15 KV Serial port speed up to 115.2kbps |
| | LAN | 1 x 10/100/1000Mbps Ethernet 1 x 10/100Mbps Ethernet Magnetic isolation protection 1.5 KV |
| | USB | 2 x USB 2.0 USB power distribution control by software |

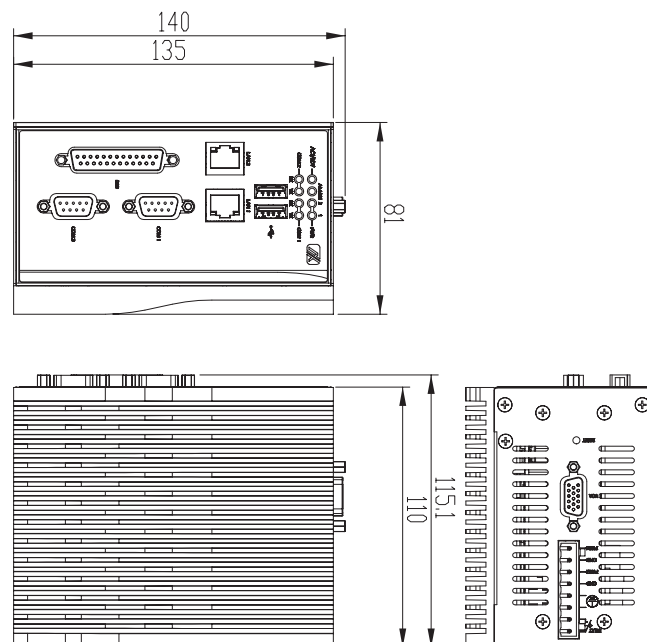
| | | |
|-----------------------|---|---|
| System I/O Outlet | DIO | 1 x DIO (8-IN/8-OUT) DI: Input range : 0-30 VDC Logic level 0 : +/- 3V max. Logic level 1 : +/- 10V min. (COM to DI) DO: Max. 200 mA per channel, current sink type 24VDC normal, open collector to 30V Optical isolation protection 2 KV |
| | VGA | 1 x DB15 connector |
| | Power Input | 2 x DC power input with terminal block |
| | Alarm Contact | One relay output with current 0.5A @30VDC |
| | Watchdog Timer | 2 WDT WDT 1: one step is 1 sec, 255 levels WDT 2: one step is 250ms, 255 levels |
| LEDs | System | Power, Alarm, Ready/Active, COM (TXD,RXD) |
| | Alarm | DC PWR1 or PWR2 is lost (default) User define event |
| Storage | Supports 1 x CompactFlash™ Supports 1 x SD card up to 32 GB (optional) | |
| Installation | Din-rail, wall mount | |
| Power Supply | 2 power paths | |
| | Power Input Range | 12-48VDC |
| | Power Input Rating | 12-48VDC, 1.3-0.3A |
| | Power Protection | DC Version: OVP (over voltage protection) UVP (under voltage protection) Reverse protection |
| Operating Temperature | -40°C ~ +70°C (-40°F ~ +158°F) | |
| Storage Temperature | -45°C ~ +85°C (-49°F ~ +185°F) | |
| Humidity | 10% ~ 95% | |
| Weight (net/gross) | 1.38 kg (3 lb)/1.72 kg (3.78 lb) | |
| Dimensions | 81 mm (3.18") (W) x 110 mm (4.33") (D) x 135 mm (5.31") (H) | |
| EOS Support | XPE, WinCE, Linux support package, Windows® 7 Embedded | |

* All specifications and photos are subject to change without notice.

Specifications

| | |
|--------------------|---|
| ISO | Manufactured in an ISO9001 facility |
| Safety | UL508 Heavy Industrial CE, including: EN60950-1, IEC60950-1 |
| Safety Compliance | UL60950-1 |
| EMI | FCC Part 18 Heavy Industrial CE, including: EN61000-6-4, EN61000-3-2, EN61000-3-3 |
| EMS | Heavy Industrial CE, including: EN61000-6-2 EN61000-4-2 (ESD standards) * Contact: +/- 6 KV; criteria B * Air: +/- 8 KV; criteria B EN61000-4-3 (radiated RFI standards) * 10V/m, 80 to 1000 MHz; 80% AM criteria A EN61000-4-4 (burst standards) * Signal ports: +/- 2 KV; criteria B * DC power ports: +/- 2 KV; criteria B EN61000-4-5 (surge standards) * Signal ports: +/- 1 KV; line-to-line; criteria B * DC power ports: +/- 0.5 KV; line-to-earth; criteria B EN61000-4-6 (induced RFI standards) * Signal ports: 10 Vrms @ 0.15 ~ 80 MHz; 80% AM criteria A * DC power ports: 10 Vrms @ 0.15 ~ 80 MHz; 80% AM criteria A EN61000-4-8 (magnetic field standards) * 30 A/m @ 50, 60 Hz; criteria A |
| Environmental Test | IEC60068-2-6 Fc (vibration resistance) 5 g @ 10 ~ 150 Hz, amplitude 0.35 mm (operation/storage/transport) IEC60068-2-27 Ea (shock) 25 g @ 11 ms (half-sine shock pulse; operation); 50 g @ 11 ms (half-sine shock pulse; storage/transport) IEC60068-2-32 Ed (free fall) 1 M (3.281ft) |

Dimensions



Ordering Information

| Standard | |
|---------------------|---|
| rBOX100-FL 1.1G-DC | Robust din-rail fanless embedded system with Intel® Atom™ processor Z510PT 1.1 GHz and 1 isolated DIO (8-IN/8-OUT) (-40°C ~ +70°C) |
| rBOX100-FL 1.33G-DC | Robust din-rail fanless embedded system with Intel® Atom™ processor Z520PT 1.33 GHz and 1 isolated DIO (8-IN/8-OUT) (-40°C ~ +70°C) |
| Optional | |
| DDR2 SO-DIMM | 1 GB ~ 2 GB (with W.T. memory) 2 GB or above (with W.T. CF) |
| DDR2 SO-DIMM | 1 GB ~ 2 GB (with 0°C ~ +85°C memory; operating temperature: 0°C ~ +70°C) |
| CompactFlash | |
| Wall mount kit | |

*Specifications and certifications are based on options and may vary.

Overview

Embedded Systems

Embedded Systems for Transportation

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Embedded Field Controllers

Industrial Firewall

Digital Signage Solutions

Embedded MicroBoxes

Industrial Barebone Systems

Industrial Chassis

Backplanes

Power Supplies

Peripherals & Accessories

