

rBOX101-4COM

Robust Din-rail Fanless Embedded System with Intel® Atom™ Processor
Z510PT/ Z520PT up to 1.33 GHz, Intel® US15WPT Chipset
and 4 Isolated COM



Front view



Rear view



Features

- Fanless operation
- Wide temperature operation of -40°C ~ +70°C
- Supports 4 isolated COM ports, 2 USB ports, VGA port
- Supports one isolated 10/100/1000Mbps & one isolated 10/100Mbps Ethernet
- SNMP V1/V2c
- Support one CompactFlash™
- Two power paths with terminal block and 12-48VDC
- Supports AXView monitoring software package

Introduction

rBOX101-4COM 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.

To prevent ESD and over-voltage, this super compact-size rBOX101-4COM is equipped with four isolated RS-232/422/485, one isolated 10/100/1000Mbps Ethernet & one isolated 10/100Mbps Ethernet for offering magnetic isolation protection. Two power paths input minimize the risk of data loss in the event of a

single power failure. Powered by IP30 housing, wide operating temperature range and Safety/EMI/EMS compliance, rBOX101-4COM is ideal for intelligent computing and communication solutions in critical environments such as power utility, transportation and more.

The ready-to-run rBOX101-4COM equipped with AXView monitoring software is a total solution for power plant automation, facility monitoring systems, intelligent transportation systems, and more.

Specifications

| | | | |
|-------------------|--|-----------------------|--|
| Standard Color | Sliver-Black | Power Consumption | With no load on 2 USB ports: (COM port link up) 1.05A @ 12V, 12.6W 0.53A @ 24V, 12.72W 0.36A @ 36V, 12.96W 0.28A @ 48V, 13.44W With full load on 2 USB ports: 1.48A @ 12V, 17.76W 0.74A @ 24V, 17.76W 0.50A @ 36V, 18W 0.38A @ 48V, 18.24W |
| Construction | Extruded aluminum and heavy-duty steel, IP30 | Operating Temperature | -40°C ~ +70°C (-40°F ~ +158°F) |
| CPU | Intel® Atom™ processor Z510 PT (1.1 GHz) or Z520 PT (1.33 GHz) | Storage Temperature | -45°C ~ +85°C (-49°F ~ +185°F) |
| System Board | RM820 | Humidity | 5% ~ 95% |
| System Memory | 1 x 200-pin DDR2 SO-DIMM max. up to 2 GB | Weight (net/gross) | 1.38 kg (3 lb)/1.72 kg (3.78 lb) |
| System I/O Outlet | 4 x isolated RS-232/422/485 (COM 1 ~ 4) 1 x isolated 10/100/1000Mbps Ethernet 1 x isolated 10/100Mbps Ethernet 2 x USB 2.0 1 x VGA 1 x DC power input with terminal block | Dimensions | 81 mm (3.18") (W) x 110 mm (4.33") (D) x 135 mm (5.31") (H) |
| Watchdog Timer | 255 levels, 0 ~ 255 sec. | EOS Support | XPE, WinCE, Linux, Windows® 7 |
| Storage | Supports 1 x CompactFlash™ | ISO | Manufactured in an ISO9001 facility |
| Installation | Din-rail | Safety | UL508 |
| Power Supply | 2 power paths Power Input Range Power Protection | Compliance | UL60950-1 EN60950-1 IEC60950-1 |
| | 12-48VDC DC Version: OVP (over voltage protection) UVP (under voltage protection) Reverse protection | EMI Compliance | FCC part 15, class A EN61000-6-4 * EN55022 * EN61000-3-2 * EN61000-3-3 |

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|-------------------------------|--|
| EMS Compliance | EN61000-6-2 |
| | EN61000-4-2 (ESD standards) * Contact: +/- 6 KV; criteria B * Air: +/- 8 KV; criteria B |
| Environmental Test Compliance | 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 |
| | 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) |

Ordering Information

| Standard | |
|-----------------------|---|
| rBOX101-4COM-FL 1.1G | Fanless embedded system with Intel® Atom™ processor Z510PT 1.1 GHz |
| rBOX101-4COM-FL 1.33G | Fanless embedded system with Intel® Atom™ processor Z520PT 1.33 GHz |
| Optional | |
| DDR2 SODIMM | 1 GB - 2 GB (with W.T. memory) |
| DDR2 SODIMM | 1 GB - 2 GB (with 0°C - +85°C memory; operating temperature: 0°C - +70°C) |
| CompactFlash™ | 1 GB or above (with W.T. CF) |

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

Overview

Embedded Systems

Embedded Systems for Transportation

Embedded Field Controllers

Embedded MicroBoxes

Industrial Barebone Systems

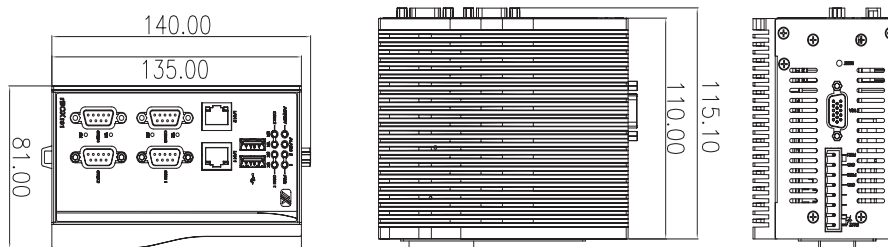
Industrial Chassis

Backplanes

Power Supplies

Peripherals & Accessories

Dimensions



Assured Systems

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