rBOX120-2COM

Robust Din-rail Fanless Embedded System with Intel® Atom™ Processor Z510PT/ Z520PT up to 1.33 GHz, Intel® US15WPT Chipset, 2 Isolated COM, SATA SSD, LANs and RTC

















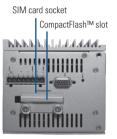




Features

- Fanless and cableless design
- Supports Intel[®] Atom[™] processor Z510PT 1.1 GHz or Z520PT 1.33 GHz onboard
- Wide temperature operation of -40°C ~ +70°C
- 2 isolated COM ports
- 3 isolated 10/100/1000Mbps Ethernet
- 2 watchdog timer
- RTC Battery function
- LED indicators
- 2 wireless (3G/GPRS & Wifi)
- SNMP V1/V2c
- Supports 1 x 2.5" SATA SSD (or HDD)
- Supports 1 CompactFlash™, 1 SD card (optional)
- 2 power paths with terminal block and 12-48VDC
- Supports AXView monitoring software package





▲ Rear view

▲ Easy-to-access interface

Introduction

rBOX120-2COM 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 rBOX120-2COM is equipped with 2 isolated RS-232/422/485, 3 isolated 10/100/1000Mbps Ethernet for offering magnetic isolation protection. Two power paths input minimize the risk of data loss in the event of a single power failure. In addition, the RTC battery (battery onboard & gold-capacity onboard) reduces maintenance efforts and is ideally suited to vibration environment. Powered by IP30 housing, wide operating temperature range and Safety/EMI/EMS compliance, rBOX120-2COM is ideal for intelligent computing and communication solutions in critical environments such as power utility, transportation

The ready-to-run rB0X120-2COM 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	
Construction	Extruded alumi	num and heary-duty steel, IP30
CPU	Intel® Atom™ p	processor Z510 PT 1.1 GHz or Z520 PT 1.33 GHz
System Memory	1 x 200-pin DDI	R2 SO-DIMM max. up to 2 GB
System I/O Outlet	Serial Port	2 x RS-232/422/485 (COM 1~2) Interface select by software or BIOS Supports Auto Flow Control in RS-485 mode ESD protection 15 KV Magnetic isolation protection 2KV COM 1 & COM 2 speed up to 115.2kbps

System I/O Outlet	LAN	3 x 10/100/1000Mbps Ethernet Magnetic isolation protection 1.5 KV	
	USB	2 x USB 2.0 USB power distribution control by software	
	RTC	Battery onboard & Gold capacity onboard (1st backup battery when power shut-down)	
	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	
	Wireless	2 x Mini Card - 3G/GPRS and Wifi - Supports USB interface on 3G/GPRS and supports PCIe interface on WiFi 1 x SIM socket (Easy-to-access)	
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), wireless (3G/GPRS/WiFi)	
	Alarm	DC PWR1 or PWR2 is lost (default) User define event	
Storage	Supports 1 x 2.5" SATA SSD or HDD Supports 1 x CompactFlash™ (Easy-to-access) 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		

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

Specifications

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	5% ~ 95%
Weight (net/gross)	1.5 kg (3.3 lb)/1.88 kg (1.14 lb)
Dimensions	100.6 mm (3.96") (W) x 110 mm (4.33") (D) x 135 mm (5.31") (H)
EOS Support	XPE, WinCE, Linux, Windows® 7 Embedded
ISO	Manufactured in an ISO9001 facility
Safety	Heavy Industrial CE, including: EN60950-1, IEC60950-1
Safety Compliance	UL60950-1, UL508
EMI	FCC Part 18
	Heavy Industrial CE, including: EN61000-6-4, EN61000-3-2, EN61000-3-3
EMS Compliance	EN50121-4 (Railway application)
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 Compliance	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	
rBOX120-2COM-FL1.1G	Robust Din-rail fanless embedded system with Intel® Atom $^{\text{IM}}$ processor Z510PT 1.1 GHz and 2 isolated COM ports (-40°C \sim +70°C)
rB0X120-2C0M-FL1.33G	Robust Din-rail fanless embedded system with Intel® Atom $^{\text{IM}}$ processor Z520PT 1.33 GHz and 2 isolated COM ports (-40°C \sim +70°C)
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™	2 GB or above (with W.T. CF)
2.5" SATA SSD or HDD	
Wall mount kit	
Wireless (3G/GPRS or Wif	ii) module for rBOX series

^{*}Specifications and certifications are based on options and may vary.

Overview

Embedded

Embedded Systems for Transportation

Embedded Field Controllers

Embedded MicroBoxes

Industrial Barebone Systems

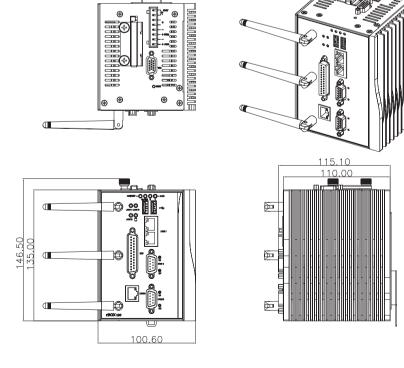
Industrial Chassis

Backplanes

Power Supplies

Peripherals & Accessories

Dimensions



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