rBOX111-4COM

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

4 Isolated COM, SATA SSD, Audio and RTC



Rear view

Features



UL508







Fanless and cableless design

- Supports Intel[®] Atom[™] processor Z510 PT 1.1 GHz or Z520 PT 1.33 GHz
- Wide temperature operation of -40 $^{\circ}$ C $^{\sim}$ +70 $^{\circ}$ C
- 4 isolated COM ports
- 2 isolated 10/100/1000Mbps Ethernet
- 2 watchdog timer
- RTC Battery function
- LED indicators
- 1 wireless (3G or GPRS or Wifi)
- SNMP V1/V2c
- Supports 1 x 2.5" SATA SSD (or HDD)
- Support one CompactFlash™, one SD card (optional)
- 2 power paths with terminal block and 12-48VDC
- Supports AXView monitoring software package

Introduction

rBOX111-4COM 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 rBOX111-4COM is equipped with 4 isolated RS-232/422/485, 2 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. Powered by IP30 housing,

wide operating temperature range and Safety/EMI/EMS compliance, rBOX111-4COM is ideal for intelligent computing and communication solutions in critical environments such as power utility, transportation and more.

The ready-to-run rBOX111-4COM 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	Sliver-Black	
Construction	Extruded aluminum and heary-duty steel, IP30		
CPU	Intel® Atom™ processor Z510 PT 1.1 GHz or Z520 PT 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	4 x RS-232/422/485 (COM 1-4) 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 COM 3 - COM 4 serial port speed up to 921.6kbps	
	LAN	2 x 10/100/1000Mbps Ethernet Magnetic isolation protection 1.5 KV	
	USB	2 x USB2.0 USB power distribution control by software	
	Audio	1 x Audio (Line-in/Line-out)	
	RTC	Battery onboard Gold capacity onboard -100% maintenance free battery	
	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	1 x Mini Card - Supports USB or PCIe - 3G or GPRS or Wifi 1 x SIM socket onboard	

Watchdog Timer	2 WDT	4 255 -	
	WDT 1: one step is	*	
	WDT 2: one step is	·,····································	
LEDs	System	Power, Alarm, Ready/Active,	
		COM (TXD,RXD)	
	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™		
	Supports 1 x SD card up to 32 GB (optional)		
Installation	Din-rail, wall moun	t	
Power Supply	2 power paths		
	Power Input Range	12-48VDC	
	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)	TBD		
Dimensions	TBD		
EOS Support	XPE, WinCE, Linux,	Windows® 7	
ISO	Manufactured in an	ISO9001 facility	
Safety	UL508		
Compliance	UL60950-1		
	EN60950-1		
	IEC60950-1		
ISO Safety	Manufactured in an UL508 UL60950-1 EN60950-1		

EMI	FCC part 15, class A
Compliance	EN61000-6-4
	* EN55022
	* EN61000-3-2
	* EN61000-3-3
EMS	EN61000-6-2
Compliance	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
	* 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)
Compliance	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
rBOX111-4COM-FL 1.1G	Robust Din-rail fanless embedded system with Intel® Atom $^{\text{M}}$ processor Z510PT 1.1 GHz and 4 isolated COM ports (-40°C $^{\circ}$ C $^{\circ}$ +70°C)
rBOX111-4COM-FL 1.33G	Robust Din-rail fanless embedded system with Intel® Atom™ processor Z520PT 1.33 GHz and 4 isolated COM ports (-40°C ~ +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)
Wall mount kit	
Wireless (3G or GPI	RS or Wifi) module for rBOX series

Uverview

Embedded

Embedded Systems for

Embedded Field Controllers

Embedded

MicroBoxes

Industrial Barebone Systems

ndustrial

Backplanes

Power

Peripherals & Accessories

Dimensions





