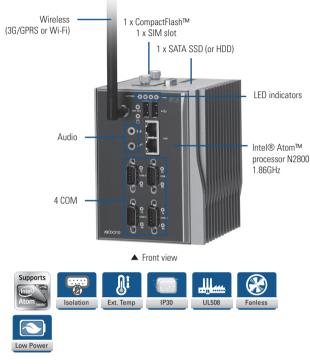
rBOX310-4COM

Robust Din-rail Fanless Embedded System with Intel® Atom™ Processor N2800 1.86GHz, Intel® NM10, 4 COM, SATA SSD, Audio and RTC



Introduction

rBOX310-4COM din-rail fanless embedded field controller supports extra low power Intel® Atom™ processors N2800 1.86GHz 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 rBOX310-4COM is equipped with 4 RS-232/422/485, 2 isolated 10/100/1000Mbps Ethernet for rugged work environment. 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, rBOX310-4COM is ideal for intelligent computing and communication solutions in critical environments such as power utility, transportation and more.

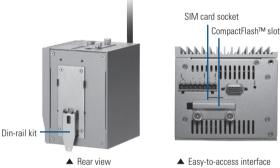
The ready-to-run rBOX310-4COM equipped with AXView monitoring software is a total solution for power plant automation, facility monitoring systems, intelligent transportation systems, and more.

Specifications

Standard Color	Sliver-Black	
Construction	Extruded aluminum and heary-duty steel, IP30	
CPU		
System Memory		
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 COM 1 & COM 2 speed up to 115.2kbps COM 3 ~ COM 4 serial port speed up to 921.6kbps

Features

- Fanless and cableless design
- Supports Intel® Atom™ processor N2800 1.86GHz Dual Core
- Wide temperature operation of -40°C ~ +70°C
- 4 COM ports
- 2 isolated 10/100/1000Mbps Ethernet ports
- 2 watchdog timer
- RTC Battery function
- LED indicators
- 1 wireless (3G/GPRS or Wi-Fi)
- SNMP V1/V2c
- Supports one 2.5" SATA SSD (or HDD)
- Supports 1 CompactFlash™
- 2 power paths with terminal block and 12-48VDC
- Supports AXView monitoring software package



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System I/O Outlet	LAN	2 x 10/100/1000Mbps Ethernet Magnetic isolation protection 1.5 KV	
	USB	2 x USB 2.0 USB power distribution control by software	
	Audio	1 x Audio (Line-in/Line-out)	
	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	1 x Mini Card - 3G/GPRS or Wi-Fi - Supports USB interface on 3G/GPRS or supports PCIe interface on Wi-Fi 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)	
	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)		
Installation	Din-rail, wall mount		
Power Supply	2 power paths		
	Power Input Rang	ge 12-48VDC	
	Power Input Rati	ng 12-48VDC, 1.88-0.47A	

Specifications

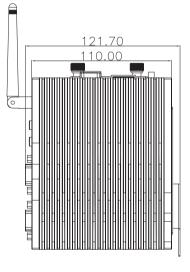
Power Protection	DC Version:
	OVP (over voltage protection)
	UVP (under voltage protection) Reverse protection
Operating Temperature	-40°C ~ +70°C (-40°F ~ +158°F)
Storage Temperature	-45°C ~ +85°C (-49°F ~ +185°F)
Humidity	5% ~ 95%
Weight (net/gross)	1.5 kg (3.3 lb)/1.88 kg (1.14 lb)
Dimensions	100.6 mm (3.96") (W) x 110 mm (4.33") (D) x 135 mm (5.31") (H)
EOS Support	XPE, Linux support package, Windows® 7 Embedded
ISO	Manufactured in an ISO9001 facility
Safety	Heavy Industrial CE, including:
	EN60950-1, IEC60950-1
Safety	UL60950-1, UL508
Compliance	
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

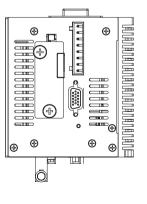
	EN61000-4-6 (induced RFI standards)	
	 * Signal ports: 10 Vrms @ 0.15 ~ 80 MHz; 80% AM criteria A 	
	* DC power ports: 10 Vrms @ 0.15 ~ 80 MHz; 80% AM criteria A	
	EN61000-4-8 (magnetic field standards)	
	* 30 A/m @ 50, 60 Hz; criteria A	
Environmental Test	IEC60068-2-6 Fc (vibration resistance) 5 g @ 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; storaqe/transport)	
	IEC60068-2-32 Ed (free fall) 1 M (3.281ft)	

Ordering Information

Standard	
rBOX310-4COM-FL1.86G	Robust Din-rail fanless embedded system with Intel® Atom [™] processor N2800 1.86GHz Dual Core and 4 COM ports (-40°C ~ +70°C)
Optional	
DDR3 SODIMM	1 GB ~ 4 GB (with W.T. memory)
DDR3 SODIMM	1 GB ~ 4 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 Wi-	Fi) module for rBOX series
*Specifications and certifi	cations are based on options and may vary.

Dimensions





Systems C Embedded Systems for Transportation

Overview

C Embedded

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Industrial Firewall

Embedded MicroBoxes



Industrial Barebone Systems

O Industrial Chassis

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Power

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Peripherals & Accessories