ASSURED SYSTEMS

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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

Supports Intel® Atom inside | EN60950 | Isolation | Extended Temperature

IP30 | UL508 | Fanless | Low Power

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

Front view

Rear view

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	
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	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	
Watchdog Timer	255 levels, 0 ~ 255 sec.	
Storage	Supports 1 x CompactFlash™	
Installation	Din-rail	
Power Supply	2 power paths	
	Power Input Range	12-48VDC
	Power Protection	DC Version:
		OVP (over voltage protection)
		UVP (under voltage protection)
		Reverse protection

Power Consumption (COM port link up)	With no load on 2 USB ports:
	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
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)	1.38 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, Windows® 7
ISO	Manufactured in an ISO9001 facility
Safety Compliance	UL508
	UL60950-1
	EN60950-1
	IEC60950-1
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
	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	
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.

Dimensions

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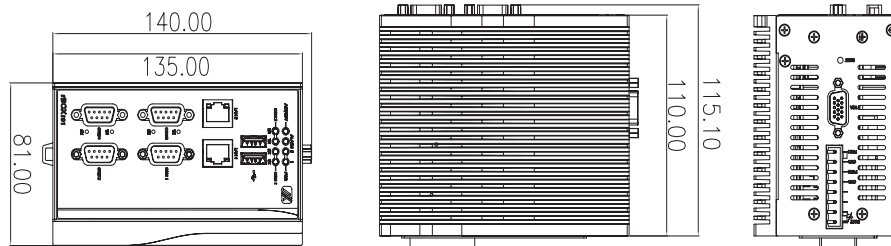
Assured Systems

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