

rBOX101-6COM

Robust Din-rail Fanless Embedded System with Intel® Atom™ Processor Z510PT/ Z520PT up to 1.33 GHz, Intel® US15WPT Chipset and 6 Isolated COM



Features

- Fanless operation
- Wide temperature operation of -40°C ~ $+70^{\circ}\text{C}$
- Supports 6 isolated COM ports, 2 USB ports, 1 isolation DIO (4-IN/OUT), 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

rBOX101-6COM 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 rBOX101-6COM is equipped with six isolated RS-232/422/485, one isolated 10/100/1000Mbps Ethernet & one isolated 10/100Mbps Ethernet and one isolated DIO port 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, rBOX101-6COM is ideal for intelligent computing and communication solutions in critical environments such as power utility, transportation and more.

The ready-to-run rBOX101-6COM 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)
Construction	Extruded aluminum and heavy-duty steel, IP30			1.05A @ 12V, 12.6W
CPU	Intel® Atom™ processor Z510 PT (1.1 GHz) or Z520 PT (1.33 GHz)			0.53A @ 24V, 12.72W
System Board	RM820			0.36A @ 36V, 12.96W
System Memory	1 x 200-pin DDR2 SO-DIMM max. up to 2 GB			0.28A @ 48V, 13.44W
System I/O Outlet	6 x isolated RS-232/422/485 (COM 1-6) 1 x isolated 10/100/1000Mbps Ethernet 1 x isolated 10/100Mbps Ethernet 2 x USB 2.0 1 x isolated DIO (4 in/out) 1 x VGA 1 x DC power input with terminal block			With full load on 2 USB ports: 1.48A @ 12V, 17.76W 0.74A @ 24V, 17.76W 0.50A @ 36V, 18W
Watchdog Timer	255 levels, 0 ~ 255 sec.			0.38A @ 48V, 18.24W
Storage	Supports 1 x CompactFlash™		Operating Temperature	-40°C ~ $+70^{\circ}\text{C}$ (-40°F ~ $+158^{\circ}\text{F}$)
Installation	Din-rail		Storage Temperature	-45°C ~ $+85^{\circ}\text{C}$ (-49°F ~ $+185^{\circ}\text{F}$)
Power Supply	2 power paths	12-48VDC	Humidity	5% ~ 95%
	Power Input Range	DC Version: OVP (over voltage protection) UVP (under voltage protection) Reverse protection	Weight (net/gross)	1.9 kg (4.18 lb)/ 2.24 kg (4.93 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
			ISO	Manufactured in an ISO9001 facility
			Safety	UL508
			Compliance	UL60950-1 EN60950-1 IEC60950-1
			EMI	FCC part 15, class A
			Compliance	EN61000-6-4 * EN55022 * EN61000-3-2 * EN61000-3-3

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	
rBOX101-6COM-FL 1.1G	Fanless embedded system with Intel® Atom™ processor Z510PT 1.1 GHz
rBOX101-6COM-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

