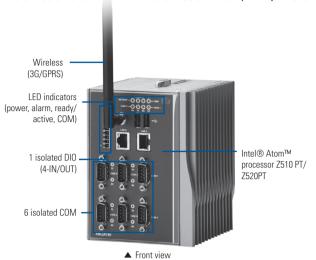
rBOX101-6COM

Robust Din-rail Fanless Embedded System with Intel® Atom™ Processor Z510PT/ Z520PT up to 1.33 GHz, Intel® US15WPT, 6 Isolated COM and 1 Isolated DIO (4-IN/4-OUT)

















Introduction

The 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 rB0X101-6C0M 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, the rB0X101-6C0M 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 remote 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™ proce	essor Z510PT 1.1 GHz or Z520PT 1.33 GHz
System Memory	1 x 200-pin DDR2 S	O-DIMM max. up to 2 GB
System I/O Outlet	Serial Port	6 x Isolated RS-232/422/485 (COM 1~6) 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 6 serial port speed up to 921.6kbps
	LAN	1 x 10/100/1000Mbps Ethernet 1 x 10/100Mbps Ethernet Magnetic isolation protection 1.5 KV
	USB	2 x USB 2.0 USB power distribution control by software

Features

- Fanless and cableless design
- Supports Intel® Atom™ processor Z510PT 1.1 GHz or Z520PT 1.33 GHz
- Wide temperature operation of -40°C ~ +70°C
- 6 isolated COM ports, 1 isolation DIO (4-IN/4-OUT)
- 2 isolated Ethernet ports
- 2 watchdog timer
- LED indicators
- 1 wireless (3G/GPRS)
- SNMP V1/V2c
- Supports one CompactFlash™, one SD card (optional)
- 2 power paths with terminal block and 12-48VDC
- Supports AXView remote monitoring software package



System I/O Outlet	DIO	1 x DIO (4-IN/4-OUT) DI: Input channels: 4, source type Input voltage: 0 to 30VDCDigital input levels for dry contacts: -Logic level 0: close to GND
		-Logic level 1: open
		Digital input levels for wet contacts : -Logic level 0: +10V to +24V (DI to COM-)
		-Logic level 1: +3V max. DO:
		Output channels : 4, sink type Output current: Max. 200 mA per channel
		On-state voltage : 24VDC nominal, open collector to 30V
		Optical isolation protection 2 KV
	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 (Full size, supports USB only)
		1 x SIM socket onboard Supports 3G/GPRS
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 CompactFlash TM Supports 1 x SD card up to 32 GB (optional)	
	Din-rail, wall mo	

Specifications

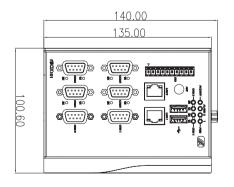
Power Supply	2 power paths		
	Power Input Range 12-48VDC		
	Power Input Rating 12-48VDC, 1.5-0.4A		
	Power Protection DC Version:		
	OVP (over voltage protection)		
	UVP (under voltage protection)		
	Reverse protection		
Operating Temperature	-40°C ~ +70°C (-40°F ~ +158°F)		
Storage Temperature	-45°C ~ +85°C (-49°F ~ +185°F)		
Humidity	10% ~ 95%		
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 support package, Windows® 7 Embedded		
ISO	Manufactured in an ISO9001 facility		
Safety	UL508, UL60950-1		
Compliance	Heavy Industrial CE, including:		
	EN60950-1, IEC60950-1		
EMI	FCC Part 18		
Compliance	Heavy Industrial CE, including: EN61000-6-4, EN61000-3-2, EN61000-3-3		
FMS	EN50121-4 (Railway application)		
Compliance	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		

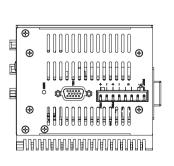
Environmental Test	IEC60068-2-6 Fc (vibration resistance)
	5 g @ 10 ~ 150 Hz, amplitude 0.35 mm (operation/storage/
	transport)
	IEC60068-2-27 Ea (shock) 25 g @ 11 ms (half-sine shock
	pulse; operation); 50 g @ 11 ms (half-sine shock pulse;
	storage/transport)
	IEC60068-2-32 Ed (free fall) 1 M (3.281ft)

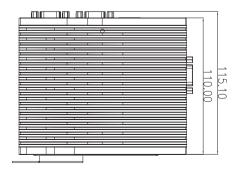
Ordering Information

Standard	
rBOX101-6COM- FL1.1G-DC	Robust din-rail fanless embedded system with Intel® Atom $^{\text{M}}$ processor Z510PT 1.1 GHz and 6 isolated COM ports (-40°C \sim +70°C)
rBOX101-6COM- FL1.33G-DC	Robust din-rail fanless embedded system with Intel® Atom™ processor Z520PT 1.33 GHz and 6 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/GPRS) m	nodule for rBOX series
*Specifications and ce	ertifications are based on options and may vary.

Dimensions







Overview

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Embedded Systems



Embedded Systems for Transportation



Embedded Field Controllers



Industrial Firewall



Digital Signage Solutions



Embedded MicroBoxes



Barebone Systems

Industrial Chassis



Backplanes



Power Supplies



Peripherals & Accessories