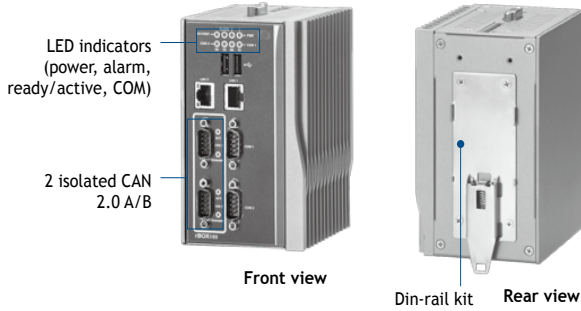


rBOX103

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



Features

- Fanless without internal cabling
- Wide temperature operation of -40° C ~ +70° C
- Supports 2 isolated CAN
- Supports two isolated Ethernet
- 2 watchdog timer
- LED indicators
- Optional 1 wireless (Wifi or 3G)
- SNMP V1/V2c
- Support one CompactFlash™
- Two power paths with terminal block and 12-48VDC
- Supports AXView monitoring software package

Introduction

rBOX103 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 rBOX103 is equipped with two isolated CAN 2.0 A/B, two isolated Ethernet for offering magnetic isolation protection. Two power paths input minimize the risk of data loss in the event of a single power failure. rBOX103 is powered by IP30 housing, wide operating

temperature range and Safety/EMI/EMS compliance. Besides, it is also specially designed for remote control/ monitoring management applications like automatic parking lot, traffic cabinet and more.

rBOX103 features rich expansion for communication such as CAN bus in-vehicle network. The ready-to-run rBOX103 equipped with AXView monitoring software is a total solution for facility monitoring systems, intelligent transportation systems, and more.

Specifications

Standard Color	Sliver-Black	LEDs	System	Power, Alarm, Ready/Active, COM (TXD,RXD), CAN (Act, Termination Indicator)
Construction	Extruded aluminum and heavy-duty steel, IP30		Alarm	DC PWR1 or PWR2 is lost (default) User define event (option)
CPU	Intel® Atom™ processor Z510 PT (1.1 GHz) or Z520 PT (1.33 GHz)	Storage	Supports 1 x CompactFlash™	
System Board	RM820	Installation	Din-rail, wall mount	
System Memory	1 x 200-pin DDR2 SO-DIMM max. up to 2 GB	Power Supply	2 power paths	
System I/O Outlet	Serial Port	Power Input Range	12-48VDC	
	2 x RS-232/422/485 (COM 1/2) Interface select by software or BIOS Supports Auto Flow Control in RS-485 mode ESD protection 15 KV Serial port speed up to 115.2kbps	Power Protection	DC Version: OVP (over voltage protection) UVP (under voltage protection) Reverse protection	
	LAN	Power Consumption (COM port link up)	With no load on 2 USB ports: 0.99A @ 12V, 11.88W 0.5A @ 24V, 12W 0.34A @ 36V, 12.24W 0.26A @ 48V, 12.48W with full load on 2 USB ports: 1.4A @ 12V, 16.88W 0.7A @ 24V, 17W 0.47A @ 36V, 17.24W 0.36A @ 48V, 17.48W	
	USB	Operating Temperature	-40° C ~ +70° C (-40° F ~ +158° F)	
	2 x USB2.0 USB power distribution control by software	Storage Temperature	-45° C ~ +85° C (-49° F ~ +185° F)	
	CAN	Humidity	5% ~ 95%	
	2 CAN 2.0 A/B (DB9 connector) Meets ISO 11898 standard Software control termination resistor 120 ohm Magnetic isolation protection 2.5KV Transmitter baud rate from 5kb/s to 1Mb/s	Weight (net/gross)	1.38 kg (3 lb)/1.72 kg (3.78 lb)	
	VGA	Dimensions	81 mm (3.18") (W) x 110 mm (4.33") (D) x 135 mm (5.31") (H)	
	1 x DB15 connector	EOS Support	XPE, WinCE, Linux, Windows® 7	
	Power Input	ISO	Manufactured in an ISO9001 facility	
	2 x DC power input with terminal block	Safety	UL508	
	Alarm Contact	Compliance	UL60950-1 EN60950-1 IEC60950-1	
	One relay output with current 0.5A @30VDC			
	Wireless (upon request)			
	1 x Mini Card (Supports USB only) 1 x SIM socket onboard			
Watchdog Timer	2 WDT WDT 1: one step is 1 sec, 255 levels WDT 2: one step is 250ms, 255 levels			

EMI Compliance	FCC part 15, class A
	EN61000-6-4
	* EN55022
	* EN61000-3-2
EMS Compliance	* EN61000-3-3
	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	
rBOX103-FL 1.1G	Fanless embedded system with Intel® Atom™ processor Z510PT 1.1 GHz
rBOX103-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)
Wall mount kit	
Wireless (wifi or 3G) upon request	

*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

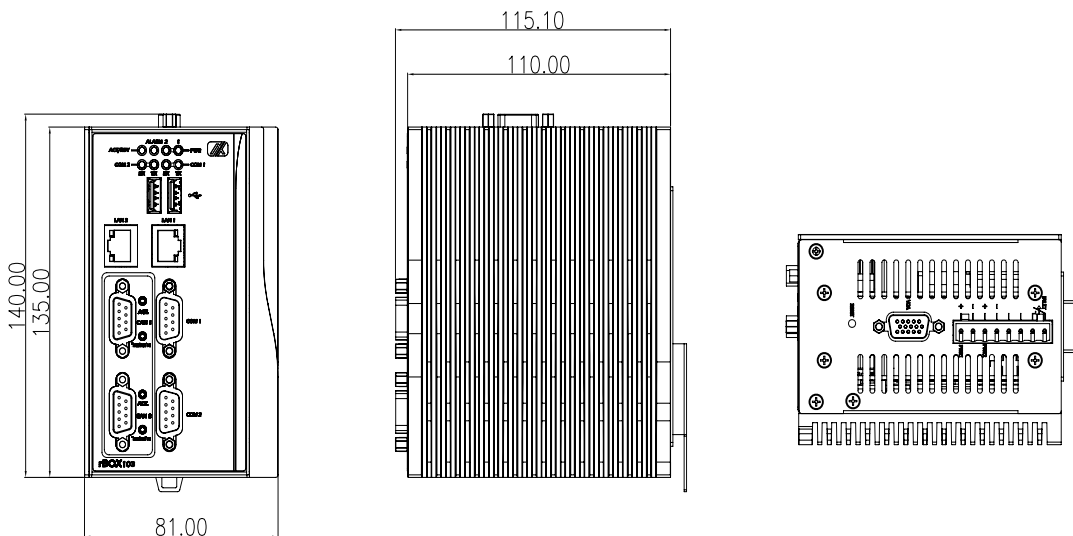
Industrial Chassis

Backplanes

Power Supplies

Peripherals & Accessories

Dimensions



Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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