rBOX204

Robust Din-rail Fanless Embedded System with AMD LX800 + CS5536AF and 4-port PoE

















Low Powe





Features

- Fanless and cableless design
- Wide temperature operation of -40° C $\sim +70^{\circ}$ C
- Supports 4-port IEEE802.3af Power over Ethernet (PoE) Power Sourcing Equipment (PSE)
- Supports 1 isolated Ethernet
- 2 watchdog timer
- LED indicators
- SNMP V1/V2c
- Supports one CompactFlash™
- 2 power paths with terminal block and 48VDC
- Supports AXView monitoring software package

Introduction

rBOX204 cost-effective Din-rail fanless embedded system utilizes the low power AMD LX800 processor and is designed to withstand temperatures ranging from -40°C to +70°C for use in extreme operating environments.

The fanless design increases reliability, extends MTTR, and ultimately reduces maintenance efforts. Front accessible I/O cabling is very convenient for wiring and maintenance. The rBOX204 Din-rail computer features a redundant Ethernet LAN connection for greater availability and reliability. Supporting Power-over-Ethernet on ports 1 to 4, the rBOX204 Din-rail computer can power IEEE802.3af compliant devices and transmit data simultaneously, which helps save wiring costs

and makes it ideally suited for outdoor applications such as PoE IP camera, PoE Access Point and intercoms. Two power paths input minimizes the risk of data loss in the event of a single power failure. The rBOX204 Din-rail computer meets Safety Agency requirements and has passed heavy industrial EMI/EMS testing

The ready-to-run rBOX204 equipped with AXView monitoring software is a total solution for intelligent transportation systems, power plant automation, intelligent transportation systems, facility monitoring systems, IP video surveillance, APs, intercoms, and more.

Specifications

Standard Color	Sliver-Black		
Construction	Extruded aluminum and heary-duty steel, IP30		
CPU	AMD LX800 processor		
System Board	RM610		
System Memory	1 x 200-pin DDR400 SO-DIMM max. up to 1 GB		
System I/O Outlet	Serial Port	2 x RS-232/422/485 (COM 1/2) (isolated COM as option) 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	
	LAN	1 x 10/100Mbps Ethernet Magnetic isolation protection 1.5 KV	
	PoE	4 x PoE (IEEE802.3af) Magnetic isolation protection 1.5 KV	
	USB	2 x USB2.0 USB power distribution control by software	
	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	
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 (option)	

Storage	Supports 1 x Compa	ctFlash™	
Installation	Din-rail, wall mount		
Power Supply	2 power paths		
	Power Input Range	48VDC	
	Power Protection	DC Version:	
		OVP (over voltage protection)	
		UVP (under voltage protection	
		Reverse protection	
	Power Consumption	With no load on 2 USB ports:	
	(PoE port link up)	1.66A @ 48V, 79.68W	
		With full load on 2 USB ports:	
		1.76A @ 48V, 84.48W	
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		
ISO	Manufactured in an ISO9001 facility		
Safety	UL508, UL60950-1, EN60950-1, IEC60950-1		
Compliance			
EMI	FCC part 15, class A		
Compliance	EN61000-6-4		
	* EN55022		
	* EN61000-3-2		
	* EN61000-3-3		

EMS	EN61000-6-2
Compliance	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)
Compliance	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
rBOX204-FL	Robust Din-rail fanless embedded system with
	AMD LX800 processor and 4 PoE (-40°C ~ +70°C)
	Optional
DDR2 SODIMM	512 MB ~ 1 GB (with W.T. memory)
CompactFlash™	1 GB or above (with W.T. CF)
Wall mount kit	

^{*}Specifications and certifications are based on options and may vary.

Overviev

Embedded

Embedded Systems for

Embedded Field Controllers

Embedded

Industrial Barebone Systems

ndustrial Thassis

Backplanes

Power Supplies

Accessories

Dimensions



