# rBOX200

Robust Din-rail Fanless Embedded System with AMD LX800 + CS5536AF and 1 Isolated DIO (8-IN/OUT)







Fanless

UL508

LED indicators (power, alarm, ready/active, COM)

1 isolated DIO

(4-IN/OUT)



Front view



**Features** 

- Fanless and cableless design
- Wide temperature operation of  $-40^{\circ}$  C  $\sim +70^{\circ}$  C
- Supports 1 isolated DIO (8-IN/OUT)
- Supports 2 isolated 10/100Mbps Ethernet
- 2 watchdog timer
- LED indicators
- SNMP V1/V2c
- Support one CompactFlash™
- 2 power paths with terminal block and 12-48VDC
- Supports AXView monitoring software package

#### Introduction

rBOX200 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.

Its 8-IN/OUT DIO port provides users with the digital devices connection, and its redundant Ethernet connection provides greater availability and reliability. Two power paths input minimizes the risk of data loss in the event of a single power failure. With its built-in VGA output interface, the rBOX200 is suitable for use with SCADA systems. The robust rBOX200 is specifically designed for remote

control/ monitoring management applications like unmanned control room, industrial machine, automatic parking lot, traffic cabinet and

The ready-to-run rBOX200 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 alun	ninum 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	2 x 10/100Mbps Ethernet	
		Magnetic isolation protection 1.5 KV	
	USB	2 x USB2.0	
		USB power distribution control	
		by software	
	DIO	1 x DIO (8-IN/OUT)	
		DI:	
		Input range: 0~30 VDC	
		Logic level 0 : +/- 3V max.	
		Logic level 1 : +/- 10V min. (COM to DI) DO:	
		Max. 200 mA per channel, current sink type	
		24VDC normal, open collector to 30V	
		Optical isolation protection 3 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	
Watchdog Timer	2 WDT		
	WDT 1: one step is 1 sec, 255 levels		
	WDT 2: one step is 250ms, 255 levels		
EDs	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	12-48VDC	
	Power Protection	DC Version:	
		OVP (over voltage protection)	
		UVP (under voltage protection	
		Reverse protection	
	Power Consumption	With no load on 2 USB ports:	
		0.77A @ 12V, 9.24W	
		0.37A @ 24V, 8.8W	
		0.27A @ 36V, 9.72W	
		0.19A @ 48V, 9.12W	
		With full load on 2 USB ports:	
		1.22A @ 12V, 14.64W	
		0.62A @ 24V, 14.88W	
		0.41A @ 36V, 14.76W	
		0.32A @ 48V, 15.36W	
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)		
F0.5	x 135 mm (5.31") (H)		
EOS Support	XPE, WinCE, Linux		
ISO	Manufactured in an ISO9001 facility UL508		
Safety	UL60950-1		
Compliance	UL60950-1 EN60950-1		
	IEC60950-1		
EMI	FCC part 15, class A		
Compliance	EN61000-6-4		
Compliance	* 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
rBOX200-FL	Robust Din-rail fanless embedded system with AMD LX800 processor and 2 isolated DIO (8-IN/OUT) (-40°C - +70°F)
	Optional
DDR2 SODIMM	512 MB ~ 1 GB (with W.T. memory)
CompactFlash™	1 GB or above (with W.T. CF)
Wall mount kit	

<sup>\*</sup>Specifications and certifications are based on options and may vary.

Overview

Embedded

Embedded Systems for

Embedded Field Controllers

Embedded MicroBoxes

Industrial Barebone Systems

Industrial Chassis

Backplanes

Power Supplies

Accessories

## **Dimensions**



