# rBOX201-6COM

Robust Din-rail Fanless Embedded System with AMD LX800 + CS5536AF, 6 Isolated COM and 1 Isolated DIO (4-IN/OUT)

















Low Power

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

> 1 isolation DIO (4-IN/OUT)

4 isolated COM







- Fanless and cableless design
- Wide temperature operation of  $-40^{\circ}$  C  $\sim +70^{\circ}$  C
- Supports 6 isolated COM ports, 1 isolated DIO (4-IN/OUT)
- Supports 2 isolated Ethernet
- 2 watchdog timer
- LED indicators
- Optional 1 wireless (WiFi or 3G)
- SNMP V1/V2c

**Features** 

- Support one CompactFlash™
- 2 power paths with terminal block and 12-48VDC
- Supports AXView monitoring software package

#### Introduction

rBOX201-6COM 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.

To prevent ESD and over-voltage, this super compact-size rBOX201-6COM is equipped with six isolated RS-232/422/485, two isolated 10/100Mbps Ethernet and one isolated DIO port for offering magnetic isolation protection. Two power paths input minimizes the risk of data loss in the event of a single power failure. IP30 housing, wide operating temperature range and Safety/EMI/EMS compliance,

rBOX201-6COM is ideal for intelligent computing and communication solutions in critical environments such as power utility, transportation and more. Besides, rBOX201-6COM is also specially designed for remote control/ monitoring management applications like unmanned control room, industrial machine, automatic parking lot, traffic cabinet and

The ready-to-run rBOX201-6COM 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		
Construction	Extruded alu	minum 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	6 x 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	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 (4-IN/OUT)	
		DI:	
		Input channels : 4, source type	
		Input voltage: 0 to 30VDC	
		Digital 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 3 KV	
	VGA	1 x DB15 connector	
	Power Input	2 x DC power input with terminal block	
		One relay output with current 0.5A @30VDC	
	Wireless	1 x Mini Card (Supports USB only)	
	(upon request)	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	
LEDs	System	Power, Alarm, Ready/Active, CON (TXD, RXD)	
	Alarm	DC PWR1 or PWR2 is lost (default User define event (option)	
Storage	Supports 1 x CompactFlash™		
Installation	Din-rail, wall mount		
Power Supply	2 power paths		
1	Power Input Range 12 - 48VDC		
	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	5% ~ 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, Linu	ıx	
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	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
rBOX201-6COM-FL	Robust Din-rail fanless embedded system with AMD LX800 processor and 6 isolated COM ports (-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	
Wireless (WiFi or 3	G) upon request

\*Specifications and certifications are based on options and may vary.

Embedded

Embedded Systems for Transportation

Embedded Field Controllers

Embedded MicroBoxes

MICIODOXCS

Barebone Systems

Industrial Chassis

Backplanes

Power Supplies

Accessories

#### **Dimensions**

