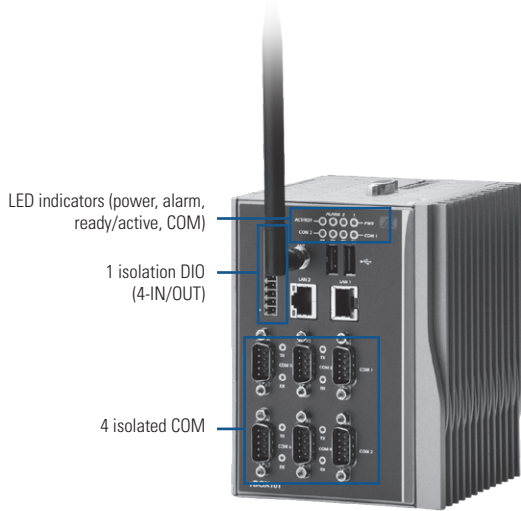# rBOX201-6COM

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

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

1 isolation DIO (4-IN/OUT)

4 isolated COM

▲ Front view

EN60950-1 Isolation Extended Temperature IP30 UL508 Fanless Low Power

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 more.

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 aluminum and heary-duty steel, IP30	
CPU	AMD LX800 processor	
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

Features

- Fanless and cableless design
- Supports AMD LX800 processor
- Wide temperature operation of -40°C ~ +70°C
- 1 isolated DIO (4-IN/4-OUT)
- 6 isolated COM ports
- 2 isolated 10/100Mbps Ethernet
- 2 watchdog timer
- LED indicators
- SNMP V1/V2c
- Supports one CompactFlash™
- 2 power paths with terminal block and 12-48VDC
- Supports AXView monitoring software package

Din-rail kit   ▲ Rear view

System I/O Outlet	DIO	1 x DIO (4-IN/4-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
	Alarm Contact	One relay output with current 0.5A @30VDC
	Wireless	1 x Mini Card (Full size, supports USB only) 1 x SIM card 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™	
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

* All specifications and photos are subject to change without notice.

Specifications

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, Linux
ISO	Manufactured in an ISO9001 facility
Safety Compliance	UL508, UL60950-1 Heavy Industrial CE, including: EN60950-1, IEC60950-1
EMI Compliance	FCC Part 18 Heavy Industrial CE, including: EN61000-6-4, EN61000-3-2, EN61000-3-3
EMS Compliance	EN50121-4 (Railway application) 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 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

rBOX201-6COM-FL	Robust Din-rail fanless embedded system with AMD LX800 processor and 6 isolated COM ports (-40°C ~ +70°C)

Optional

DDR SO-DIMM	512 MB ~ 1 GB (with W.T. memory)
CompactFlash™	2 GB or above (with W.T. CF)
Wall mount kit	
Wireless (3G/GPRS) module for rBOX seriesit	

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

Dimensions