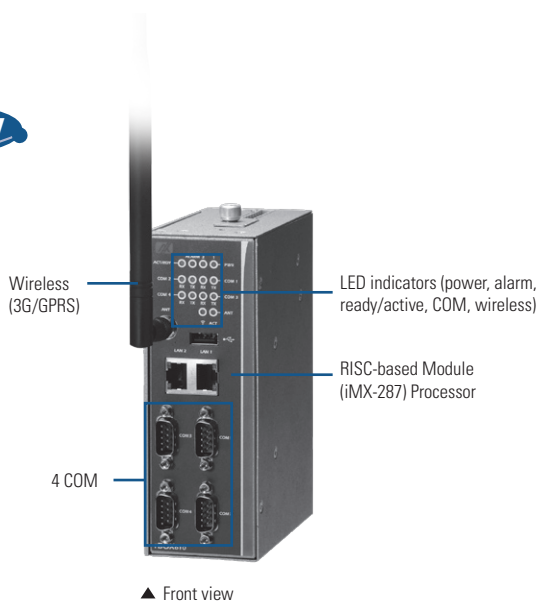


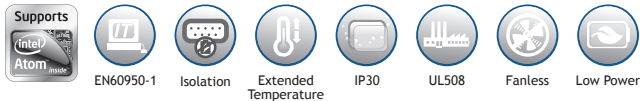
rBOX610

Robust Din-rail Fanless Embedded System with RISC-based (iMX-287) Processor 4 COM, 2 CAN Bus and DIO

NEW



▲ Front view



Introduction

rBOX610 cost-effective din-rail fanless embedded system utilizes the low power RISC-based module (iMX-287) processor and is designed to withstand temperatures ranging from -40°C to +70°C for using in extreme operating environment and industrial automation applications.

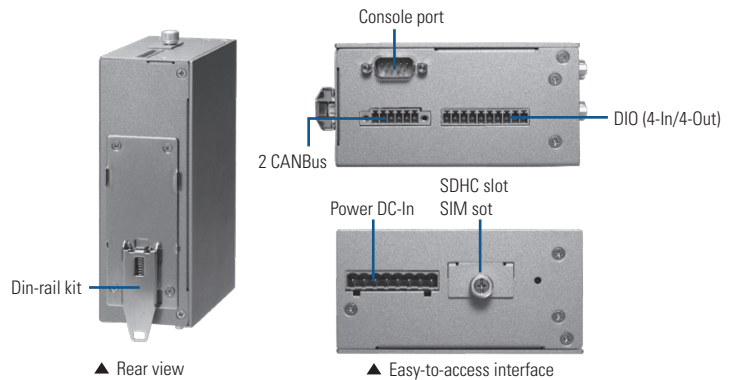
rBOX610 features 4 RS-232/422/485 serial ports, dual LANs, 4 digital input channels, 4 digital output channels, 2 CAN bus and 1 eMMC onboard 4 GB & 1 x SDHC socket for storage expansion (easy to access) in a compact, IP40 protected, industrial-strength robust case. Two power paths input minimize the risk of data loss in the event of a single power failure. Its vertical din-rail form factor makes it easy to install the system in a small cabinet. Due to the RISC-based architecture, rBOX610 will not generate a lot of heat while being operated. The ready-to-run rBOX610 is specially designed for remote control/monitoring management applications like unmanned control room, industrial machine, automatic parking lot, traffic cabinet and more.

Specifications

Standard Color	Sliver-Black
Construction	Extruded aluminum and heavy-duty steel, IP40
CPU	iMX-287, ARM9 16-bit RISC CPU, 454 MHz
System Board	Q7M100
System Memory	1 x DDR2 128 MB SDRAM onboard
System I/O Outlet	Serial Port 4 x RS-232/422/485 (COM 1 ~ 4) COM 1~3 with TX/RX/RTS/CTS/DTR/DSR signals (DTR and DSR by GPIO emulate) COM 4 with TX/RX only. RS-232/422/485 interface select by software
	Speed RS-232: up to 1Mbps RS-422/485: up to 3.25Mbps
	LAN 2 x 10/100Mbps Ethernet Magnetic isolation protection 1.5KV

Features

- Fanless design
- RISC-based module (iMX-287) processor
- 128MB DDR2 SDRAM onboard
- 1 eMMC 4 GB onboard
- 1 SDHC socket for storage expansion (easy to access)
- 4 COM ports
- 2 CAN bus
- RTC battery function
- LED indicators
- SNMP V1/V2c
- Wide range DC power input (12 - 48V) with terminal block
- Ready-to-run embedded Linux operating system
- Wide temperature operation of -40°C ~ +70°C



▲ Rear view

▲ Easy-to-access interface

System I/O Outlet	USB	1 x USB 2.0 USB power distribution control by software
	CAN	2 CAN 2.0 B (Phoenix connector, non-isolation) Meets ISO 11898 standard Software control termination resistor 120 ohm can high speed up to 1Mbit/s for transmit/receive
DIO	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
	Console Port	DB9 connector For user setting with debug
RTC	Battery onboard Provides power for the internal real time clock & calendar Ideal for vibration environment & reduces maintenance efforts	
Power Input	2 power paths with terminal block	
Alarm Contact	One relay output with current 0.5A@30VDC	

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

Specifications

System I/O Outlet	Wireless	1 x Mini Card (supports USB interface on 3G/GPRS) 1 x SIM socket by outside access and is easy plug/pull
Watchdog Timer	WDT 1: one step is 1 sec, 255 levels	
LEDs	System	Power, Alarm, Ready/Active, COM (TX, RX), Wireless
	Alarm	DC PWR1 or PWR2 is lost (default) User define event
Storage	1 x eMMC 4 GB onboard (for boot disk) Supports 1 x SDHC Card (easy-to-access, for store only.)	
Installation	Din-rail	
	Wall mount	
Power Supply	2 power paths	
	Power Input Range	12-8VDC
	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%	
Vibration Endurance	5G @ 10-150Hz, amplitude 0.35ms	
Weight (net/gross)	TBD	
Dimensions	55 mm (2.16") (W) x 155 mm (6.10") (D) x 110 mm (4.33") (H)	
EOS Support	Linux (Pre-installed)	
Certification	FCC Part 18	
	Heavy Industrial CE	

Ordering Information

Standard		
rBOX610-FL	Robust Din-rail fanless embedded system with Q7-RISC Module (iMX-287), 4 COM, 2 CAN & DIO (-40°C ~ +70°C)	
Optional		
Wall mount kit		
Wireless (3G/GPS or Wifi) module for rBOX series		

Overview

Embedded Systems

Embedded Systems for Transportation

Embedded Field Controllers

Embedded MicroBoxes

Industrial Barebone Systems

Industrial Chassis

Backplanes

Power Supplies

Peripherals & Accessories

Dimensions

