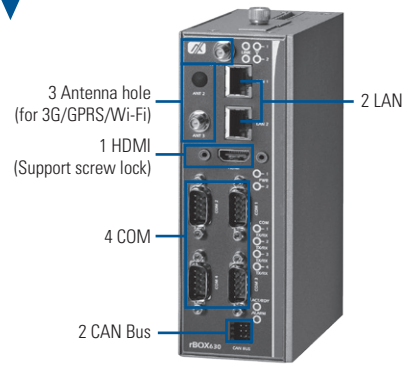
rBOX630

Robust Din-rail Fanless Embedded System with RISC-based (i.MX 6) Processor 4 COM, 2 CAN Bus and DIO

NEW



▲ Front view

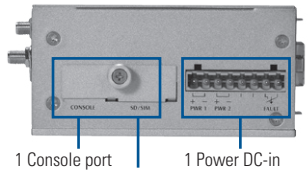
Fanless | Low Power | Freescale i.MX 6 | EN60950 | Isolation | Ext. Temp | IP30

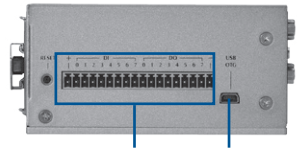
Features

- Fanless design
- RISC-based module (i.MX 6) processor
- 1 GB DDR3 SDRAM onboard
- 4 GB eMMC onboard
- Completed industrial AP development software
- 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

Introduction

The rBOX630 cost-effective din-rail fanless embedded system utilizes the low power RISC-based module (i.MX 6) processor and is designed to withstand temperatures ranging from -40°C to +70°C for using in harsh environment and industrial automation applications.

The rBOX630 features 4 RS-232/422/485 serial ports, dual LANs, 8 digital input channels, 8 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, IP30 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. Because of ARM's low power consumption architecture, rBOX630 generate little heat while being operated. The ready-to-run rBOX630 is specially designed for industrial machine, automatic parking lot, traffic cabinet and more.

Hardware Specifications

Standard Color	Sliver-Black	
Construction	Extruded aluminum and heavy-duty steel, IP30	
CPU	i.MX 6, Cortex-A9 RISC CPU, 800MHz	
System Board	Q7M120	
System Memory	1 GB DDR3 Onboard	
System I/O Outlet	Serial Port	4 x RS-232/422/485 (COM 1 ~ 4) COM 1~4 with TX/RX/RTS/CTS signals RS-232/422/485 interface select by software
	LAN	1 x 10/100/1000Mbps , 1 x 10/100Mbps Ethernet Magnetic isolation protection 1.5KV
System I/O Outlet	HDMI	1 x HDMI (Support screw lock)
	USB	1 x USB 2.0 OTG
	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	1 x DIO (8 IN/ 8 OUT) with Isolation 2KV DI : Wet/Dry DO : Wet DI : Input channels : 8, source type Input voltage : 0 to 30VDCDigital 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 : 8, sink type Output current: Max. 200 mA per channel On-state voltage : 24VDC nominal, open collector to 30V Optical isolation protection 2 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
	Alarm Contact	One relay output with current 0.5A@30VDC

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

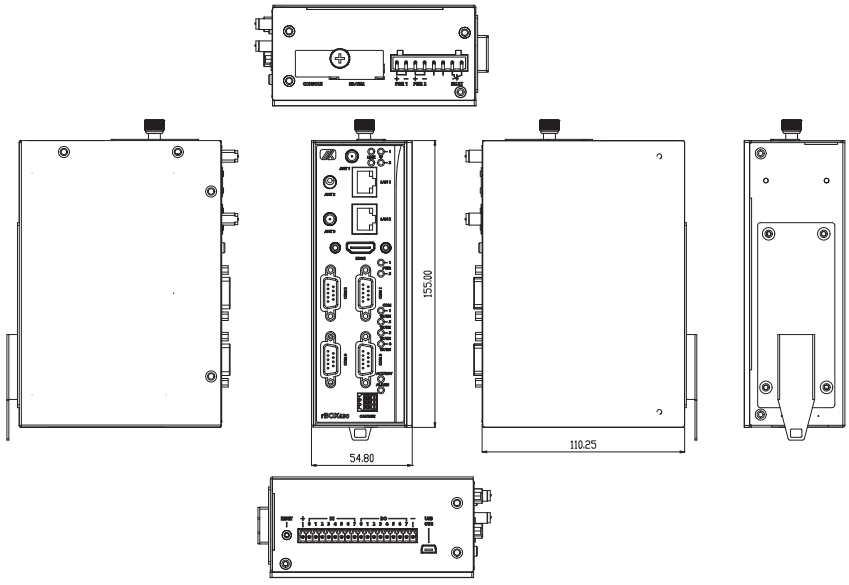
Hardware Specifications

System I/O Outlet	Wireless	1 x Mini card socket (supports USB interface) with 1 x SIM Socket by outside access and is easy plug/pull. 1 x Mini card socket (supports USB&PCIE interface) with 1 x SIM Socket by inside
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
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	Power Input	2 power paths with terminal block
	Power Input Range	12-48VDC
	Power Input Rating	12-48VDC, 0.74-0.23A
	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	10% ~ 95%	
Vibration Endurance	5G @ 10-150Hz, amplitude 0.35ms	
Weight (net/gross)	0.9 kg (2 lb)/1.3kg (2.87 lb)	
Dimensions	55 mm (2.16") (W) x 155 mm (6.10") (D) x 110 mm (4.33") (H)	
EOS Support	Linux Host OS/ Development OS : Ubuntu 12.04 Yocto Dora LTS Toolchain/ Cross compiler : Freescale LTIB Kernel : 3.0.35 (with Freescale and Axiomtek hardware modified patch)	
Certification	FCC Part 18 Heavy Industrial CE	

Ordering Information

Standard	
rBOX630-FL-DC	Robust din-rail fanless embedded system with Q7-RISC module (i.MX 6), 4 COM, 2 CAN and DIO (-40°C ~ +70°C)
Optional	
Wall mount kit Wireless (3G/GPS or Wi-Fi) module	

Dimensions



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