IFB112

Robust RISC-based DIN-rail Fanless Embedded System with i.MX 6UL Processor, COM, CANbus, 2 LANs and DIO (2-in/1-out)

Features

- RISC-based (i.MX 6UltraLite) processor 528 MHz
- 256MB DDR3 SDRAM onboard
- 4GB eMMC flash onboard
- 1 PCI Express Mini Card slot (Wi-Fi or 3G/4G)
- 1 CAN Bus
- 2 digital inputs and 1 digital output
- 9 to 48 VDC wide range power input with terminal block
- Embedded Linux operating system (Yocto)
- Fanless and compact design
- Wide operating temperature range from -40°C to +70°C

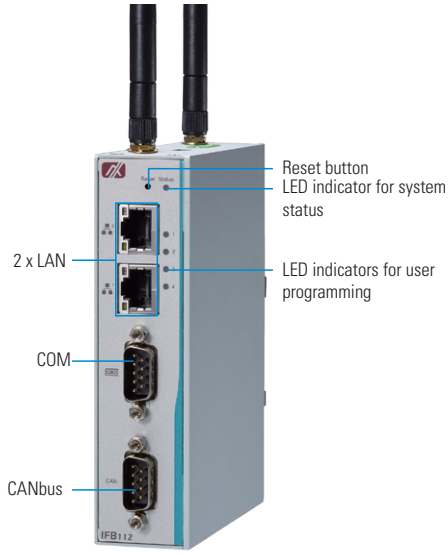
Introduction

The IFB112 cost-effective DIN-rail fanless embedded system utilizes the low power RISC-based (i.MX 6UL) processor and is designed to withstand temperatures ranging from -40°C to +70°C for using in extreme operating environment and industrial automation applications.

The IFB112 features one RS-232/422/485 serial port, dual LAN, one CANbus, two digital input channels, one digital output channel, LED for user programming and one eMMC onboard 4 GB. Its vertical DIN-rail form factor makes it easy to install the system in a small cabinet. The ready-to-run IFB112 is specially designed for remote control/ monitoring management applications like unmanned control room, industrial machine, automatic parking lot, traffic cabinet and more.

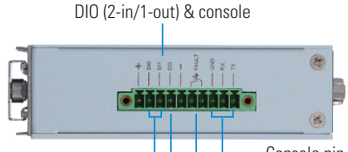
Specifications

Construction	Extruded aluminum and heavy-duty steel, IP40	
CPU	NXP i.MX 6UL processor, ARM® Cortex®-A7, 528 MHz	
System Memory	1 x DDR3-1600 onboard, 256 MB	
System I/O Outlet	Serial Port	1 x RS-232/422/485 (RS-232/422/485 interface select by software)
	CAN Bus	1 x CAN 2.0 B (DB9 connector) Meets ISO 11898 standard Software control termination resistor 120 ohm can high speed up to 1Mbit/s for transmit/receive
	LAN	2 x 10/100 Mbps Ethernet Magnetic isolation protection 1.5 KV
	Relay	1 x Relay
	USB	1 x USB 2.0
	DIO	1 x DIO (2-in/1-out) DI: wet/dry DO: wet DI: Input channels: 2 source type Input voltage: 0 to 24 VDC 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: Close to GND -Logic level 1: +0.7 to +24 V max. DO: Output channels: 1, sink type Output current: max. 200 mA per channel On-state voltage: 24 VDC nominal, open
	Console Port	Yes For user setting with debug
	EEPROM	1 x EEPPROM (2 Kb)
	Wireless	1 x PCI Express Mini Card slot (USB signal only) 1 x SIM card socket

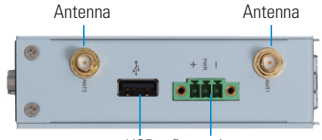


▲ Front view

▲ Rear view



▲ Bottom



▲ Top view

Watchdog Timer	WDT 1: 0.5 to 128 sec. with a time resolution of 0.5 sec.
LEDs	1 x LED for power status 1 x LED for reset status 4 x LED (programing by client)
Storage	1 x eMMC 4GB flash onboard
Power Supply	9 to 48VDC power input range
Operating Temperature	-40°C to +70°C (-40°F to +158°F)
Storage Temperature	-45°C to +85°C (-49°F to +185°F)
Humidity	10% to 95%
Vibration Endurance	3 Gms @ (10 to 150Hz sine wave; operation)
Dimensions	31 mm (1.22") (W) x 100 mm (3.94") (D) x 125 mm (4.92") (H)
Weight (net/gross)	0.3 kg (0.66 lb)/0.44 kg (0.97 lb)
Installation	DIN-rail, wall mount
OS Linux	OS : Yocto 1.8.1 (Fido) Kernel: 3.14.52
Certifications	FCC part 15, Heavy Industrial CE

Ordering Information

Standard	
IFB112-FL-DC (P/N: E26V112100)	Robust DIN-rail fanless embedded system with i.MX 6UL processor, COM, CANbus, 2 LANs and DIO (2-in/1-out) (-40°C to +70°C)

Optional
Wall mount kit
Wireless (3G/GPS or Wi-Fi) module

Packing list

1 x CD
4 x Screws
1 x Din-rail kit
1 x Console cable
1 x 3-pin terminal block for power port
1 x 10-pin terminal block for DIO port

* Specifications and certifications may vary based on different requirements.

Dimensions