# DRPC-120-BT

#### ■ Fanless DIN-Rail Embedded System

■ Intel® E3845 1.91GHz Solution



## Features

- Intel® Atom™ E3845 1.91GHz
- 1 x 2.5" SATA HDD/SSD drive bay
- DDR3L 1.35V SO-DIMM support
- Programmable OLED display
- 8-bit digital I/O (4-bit inputs/outputs)
- IEI iRIS-2400 solution



# User Friendly Installation -

The DRPC-120 is designed with an easy removable back cover for users to install SATA HDD, PCIe Mini cards, DDR3 memory modules or iRIS-2400 modules conveniently.



Full-size PCIe Mini

Half-size PCIe Mini

## 8-Channel Digital I/O -

The DRPC-120 is outfitted with 8-channel (4-bit input and 4-bit output) digital I/O to provide digital input and output signals for control of industrial devices.



## Fanless -

The DRPC-120 series provides the best components for generating less heat, while maintaining high system performance. With the fanless design, the DRPC-120 reduces system failure caused by fans and extends the lifetime of the device.



## iRIS Solution -



By installing the IEI iRIS-2400 module. the DRPC-120 is capable to complete your IoT application through the advanced remote control features, such as power management and control, remote KVM for IPMI 2.0 Compliant device status monitoring, sending active

alerts and warning messages by e-mail or SMS.

## DIN Rail Standard -

A DIN rail is a metal rail of a standard type widely used for mounting circuit breakers and industrial control equipment inside equipment racks. These products are typically made from cold rolled carbon steel sheet with a zinc-plated and chromated bright surface finish. The term derives from the original specifications having been published by Deutsches Institut für Normung (DIN) in Germany, which have since been adopted as European (EN) and international (ISO) standards.



# **OLED Indicator Function**

- Programmable OLED Display Users can program their own APIs to show any information by the OLED display.
- Programmable Function Keys Users can program the four keys to control OLED display.
- Terminal Screen & Status Display It supports both text format and graphic format.
- Protocol & Demo Source Code Open IEI provides the protocol & demo source code for users to program their own usage.

# Communication Gateway\_

For high surge ESD automation environments, the DRPC series provides isolated digital IO. CAN-bus and serial communication ports.



#### DRPC-120 OLED indicator



# Fully Integrated I/O \_\_\_\_

#### Front View



#### Top Side View



# Specifications

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Model Name		DRPC-120-BT
Chassis	Color	Black
	Dimensions (WxDxH) (mm)	74.08 x 140 x 171.5
	System Fan	Fanless
	Chassis Construction	Extruded aluminum alloys
Motherboard	CPU	Intel® Atom™ E3845 1.91 GHz
	Chipset	SoC
	System Memory	1 x 204-pin DDR3L SO-DIMM 2 GB pre-installed (system max: 8GB)
IPMI	iRIS Solution	1 x iRIS-2400 (optional)
~	Hard Drive	1 x 2.5" SATA 3Gb/s HDD/SSD bay
Storage	CF card	N/A
	USB 3.1 Gen 1 (5Gb/s)	2
	USB 2.0	2
I/O Interfaces	Ethernet	2 x RJ-45 1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I211 controller
	COM Port	2 x RS-232 (DB-9 w/3KV isolation protection*) 2 x RS-422/485 (DB-9 w/3KV isolation protection*)
	Digital I/O	8-bit digital I/O, 4-bit input/4-bit output
	Display	1 x VGA, 1 x HDMI
	Resolution	Up to 1920 x 1200 @ 60Hz
	Wireless	1 x 802.11a/b/g/n/ac (optional)
	Other	1 x Power Button 1 x Reset Button 1 x AT/ATX Switch
Expansions	PCIe Mini	1 x Half-size PCIe Mini slot (w/o USB signal) 1 x Full-size PCIe Mini slot (supports mSATA, colay with SATA)**
Power	Power Input	3-pin terminal block: 9 V ~ 28 V DC
	Power Consumption	12 V@ 2.1 A (Intel® Atom ™ E3845 with 2 GB memory )
Reliability	Mounting	DIN-rail
	Operating Temperature	-20°C ~ 60°C with air flow (mSATA), 5% ~ 95%, non-condensing
	Operating Shock	Half-sine wave shock 5G, 11ms, 3 shocks per axis
	Operating Vibration	MIL-STD-810F 514.5C-2 (with SSD)
	Weight (Net/Gross)	1.4 kg/2.5 kg
	Safety/EMC	CE/FCC
OS	Supported OS	Microsoft® 8, Microsoft® Windows® Embedded Standard 7 E

\* COM port isolation: 3 kV for 1 sec, 2.5 kV for 1 minute \*\* DRPC-120-QGW-E5-LED/4G-R10 has only one Half-size PCIe Mini slot

# **Ordering Information**

Part No.	Description
DRPC-120-BTi-E5-OLED/2G-R10	Fanless embedded system, Intel® Bay-Trail E3845 1.91 GHz, TDP 10W, 2GB DDR3L pre- installed memory, one VGA, one HDMI, 8 CH DIO, iRIS-2400 optional, 9 V~28 V DC, OLED indicators, R10, RoHs
DRPC-120-BTi-E5-LED/2G-R10	Fanless embedded system, Intel® Bay-Trail E3845 1.91 GHz, TDP 10W, 2GB DDR3L pre- installed memory, one VGA, one HDMI, 8 CH DIO, iRIS-2400 optional, 9 V~28 V DC, LED indicators, R10, RoHs
DRPC-120-QGW-E5-LED/4G-R10	Fanless embedded system with Intel® Bay-Trail E3845 1.91 GHz, TDP 10W,4 GB DDR3L pre- installed memory, with QTS-Gateway, 1 x VGA, 1 x HDMI, 8 CH DIO, iRIS-2400 optional,9 V~28 V DC, LED indicators, RoHs

# Dimensions (Unit: mm)



# **Options**

Item	Part No.	Description
OS: Windows Embedded 7	DRPC-120- WES7E-R10 (CD-ROM)	OS Image with Windows® Embedded Standard 7 E for DRPC-120 Series, CD- ROM, RoHS
Wireless kit	EMB-WIFI- KIT01-R20	1T1R wifi module kit for embedded system, IEEE802.11a/b/g/n/ac WiFi with Bluetooth 4.0/3.0+HS, 1 x wifi module, 2 x 250mm RF cable, 2 x Antenna, RoHS
Adapter	63040-010036-210- RS	Adapter Power;FSP;FSP036-RHBN3;9NA 0362707;;Vin:90~264VAC;36W;Dim:37.8*8 9.8*27.0mm;Plug=7.5mm;Cable=1500mm; Erp(NO LOAD 0.075W);Vout:12VDC;Ф2.5/ Ф5.5/lock;CCL;RoHS
Power Cable	32102-026500-100- RS	Power cable 200mm, (A) DC jack to (B) 3-pin terminal block P=3.5
Power Cord	32702-000400-200- RS	European power cord
DIN-Rail mounting kit	DK-DRPC-R10	Rugged DIN-Rail mounting kit only for DRPC series

# Packing List

1 x Screw kit

1 x Mounting bracket

1 x SATA cable & SATA power cable