premio

INDUSTRIAL COMPUTER

RCO-3000-KBL-U-1

Industrial Computer with 7th Gen Intel® Core™ Mobile-U Processor, 1x Expansion

Features
- Intel® 7th Gen (Kabylake-U) Processor Core™ i5-7300U, Core™ i3-7100U
- 1x DDR4 SODIMM. max up to 16GB
- Triple independent display supported by 1x VGA and 2x DisplayPort
- 2x Intel® GbE supporting Wake-on-LAN and PXE
- 2x 2.5" SATA HDD Bay (1x internal, 1x removable) with RAID 0, 1, 5 support,1x mSATA (shared by 1x Mini PCIe), and 1x CFast (shared by 1x mSATA)
- 2x full-size mini PCIe for communication or expansion modules,2x SIM socket
- 5x RS-232/422/485 (w/ 3x internal), 4x USB 3.0, 2x USB 2.0
- 1x PCIe x4 or PCI expansion
- 8x DI + 8x DO with isolation
- 9 to 50VDC wide range power input supporting AT/ATX mode
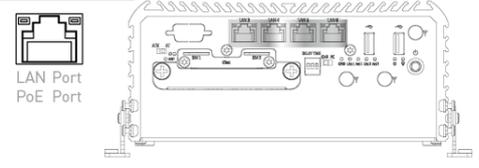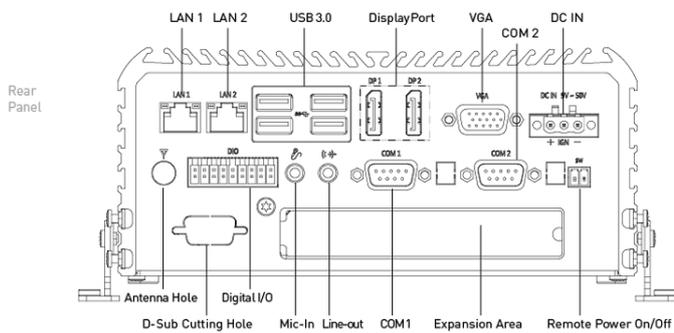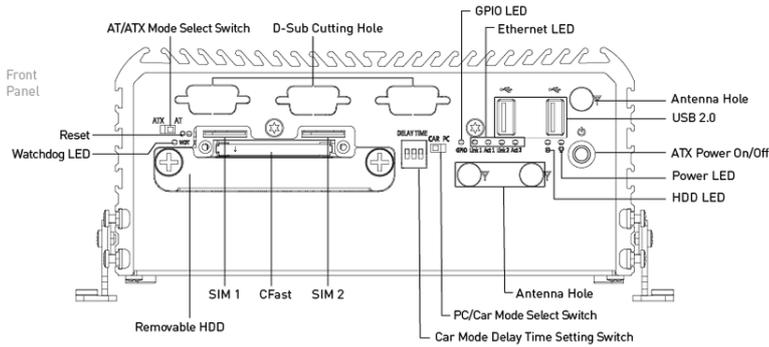- -40°C to 70°C extended operating temperature

Specifications

System

Processor	7th Gen Intel® Core™ i5-7300U Processor, Dual Core, 3MB Cache, up to 3.5 GHz 7th Gen Intel® Core™ i3-7100U Processor, Dual Core, 3MB Cache, 2.4 GHz
System Chipset	SoC integrated
LAN Chipset	GbE1: Intel® I219LM (Support Wake-on-LAN and PXE) GbE2: Intel® I210-AT (Support Wake-on-LAN and PXE)
Audio Codec	Realtek ALC888S
System Memory	1x 260-Pin DDR4 1866/2133MHz SODIMM. Max. up to 16GB
BIOS	AMI 128Mbit SPI BIOS
Watchdog	Software Programmable Supports 1~255 Sec. System Reset

Display

Display Port	2x DP
Multiple Display	Triple Display
VGA	1x VGA

Storage

CFast	1x CFast (shared by 1x mSATA & 1x SATA)
mSATA	1x mSATA (shared by 1x Mini PCIe & 1x SATA)
SIM Socket	2x External SIM socket
SSD/HDD	1x Internal 2.5" SATA HDD Bay 1x Hotswap 2.5" SATA HDD Bay Support RAID 0, 1, 5, 10

Expansion

Mini PCIe	2x Full-size Mini PCIe
PCI	1x PCI (1I-Model)
PCIe	1x PCIe x4(1E-Model)

I/O

Audio	1x Mic-in, 1x Line-out
COM	2x RS-232/422/485 3x RS-232/422/485 (Internal)
DIO	8 in / 8 out (Isolated)
LAN	2x GbE RJ45 (Base Model) 4x GbE RJ45 (Module) 4x GbE M12 (Module)
USB	4x USB 3.0, 2x USB 2.0
Others	4x WiFi Antenna Holes 1x Power Switch, 1x AT/ATX Switch, 1x Remote Power On/Off

Operating System

Windows	Windows 10
Linux	Linux kernel 4.X

Power

Power Adapter	Optional AC/DC 12V/5A, 60W
Power Mode	AT, ATX
Power Ignition Sensing	Power Ignition Management
Power Supply Voltage	9~50VDC
Power Connector	3-pin Terminal Block
Power Protection	OVP (Over Voltage Protection) OCP (Over Current Protection) Reverse Protection

Environment

Operating Temperature	-40°C to 70°C
Storage Temperature	-40°C to 85°C
Relative Humidity	10% to 95% (non-condensing)
Certification	CE, FCC Class A

Vibration	with SSD: 5 Grms, 5 - 500 Hz, 0.5 hr/axis with HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis
Shock	Shock with SSD: 50G, half sine, 11ms

Physical

Dimensions	192 (W) x 197 (D) x 85.1 (H) mm
Construction	Extruded Aluminum with Heavy Duty Metal
Mounting Options	Wall Mounting

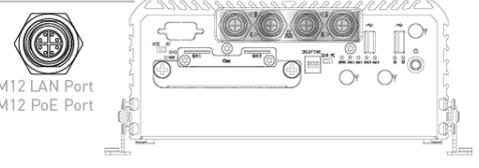* All specifications and photos are subject to change without notice.

External I/O Mechanical Layout

EXTERNAL I/O MECHANICAL LAYOUT

Front Panel

- AT/ATX Mode Select Switch
- D-Sub Cutting Hole
- GPIO LED
- Ethernet LED
- Antenna Hole
- USB 2.0
- Reset
- Watchdog LED
- ATX Power On/Off
- Power LED
- HDD LED
- SIM 1
- CFast
- SIM 2
- Antenna Hole
- PC/Car Mode Select Switch
- Car Mode Delay Time Setting Switch
- Removable HDD

LAN Port
PoE Port

RCO-3411E-4L
Additional 4x Intel® GbE
2x RS-232/422/485 (w/ 1x internal)

RCO-3411E-4P
Additional 4x Intel® GbE with PoE function
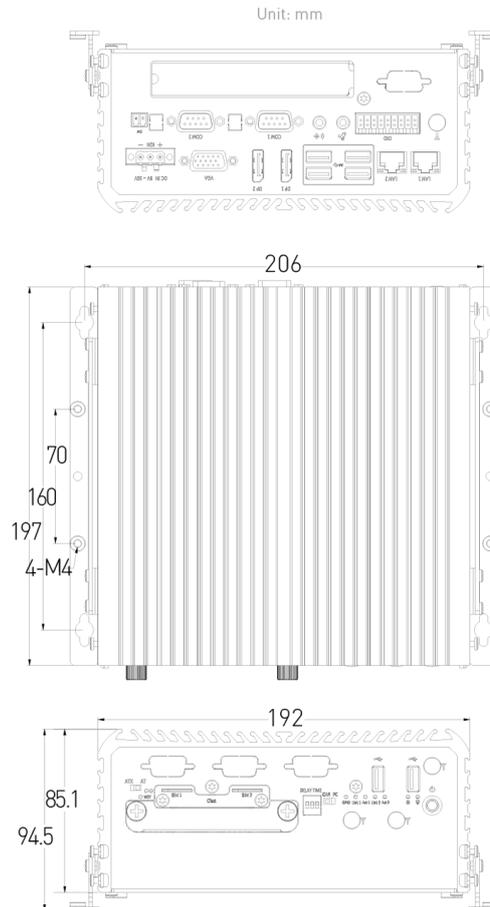2x RS-232/422/485 (w/ 1x internal)

Rear Panel

- LAN 1
- LAN 2
- USB 3.0
- DisplayPort
- VGA
- COM 2
- DC IN
- DP 1
- DP 2
- VGA
- DC IN 9V~36V
- COM 1
- COM 2
- IGN
- DIO
- Antenna Hole
- Digital I/O
- D-Sub Cutting Hole
- Mic-In
- Line-out
- COM1
- Expansion Area
- Remote Power On/Off

M12 LAN Port
M12 PoE Port

RCO-3411E-4L-M12
Additional 4x Intel® GbE with M12 connector
2x RS-232/422/485 (w/ 1x internal)
Optional AC/DC 24V/9.2A, 220W

RCO-3411E-4P-M12
Additional 4x Intel® GbE with M12 PoE function
2x RS-232/422/485 (w/ 1x internal)
Optional AC/DC 24V/9.2A, 220W

Dimension

Unit: mm

Unit: mm

206

70
160
197
4-M4

192

85.1
94.5

Available Models

Model No.	Description
RCO-3000-KBL-7100U-1-P	Industrial Computer with 7th Gen Intel® Core™ i3-7100U Mobile-U Processor, 1x PCIe Expansion
RCO-3000-KBL-7300U-1-P	Industrial Computer with 7th Gen Intel® Core™ i5-7300U Mobile-U Processor, 1x PCIe Expansion

Optional Accessories

Model No.	Description
1-E09A22102	Adapter AC/DC 24V 9.2A 220W with 3pin Terminal Block Plug 5.0mm Pitch
1-E09A06008	Adapter AC/DC 12V 5A 60W with 3pin Terminal Block Plug 5.0mm Pitch
999930	Power Cord, 3-pin US Type, 180cm
1-TPCD00002	Power Cord, European Type, 180cm
1-TPCD00001	Power Cord, 3-pin UK Type, 180cm

Packing List
• 1x RCO-3000-KBL-U-1
• 1x Utility DVD Driver
• 1x Wall Mount Kit
• 1x Accessory Kit
• 1x DVI to VGA Adapter

Compliances and Standards

Shock	Shock with SSD: 50G, half sine, 11ms IEC60068-2-27:2008 Designed to comply with MIL-STD-810G Method 516.7 Procedure I
Vibration	with SSD: 5 Grms, 5 - 500 Hz, 0.5 hr/axis with HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis IEC60068-2-64:2008 Designed to comply with MIL-STD-810G Method 514.7 Procedure I
Operating Temperature	-40°C to 70°C IEC60068-2-1:2007 (Cold test procedure) IEC60068-2-2:2007 (Dry heat test procedure) IEC60068-2-3:2007 (Damp heat, steady state, test procedure) IEC60068-2-14:2009 (Wide temperature range thermal shock)
EMI	• FCC Class A (47 CFR part 15.109 and part 15.107) • CE • ICES-003 • UKCA

Exports And Tariff Codes

ECCN	5A992.c
HTS	8471.50.0150
ScheduleB	84.71