

Preliminary

RAK-0200 Series

1U Rack-mountable Industrial Box PC
with Intel® Skylake / Kaby Lake S-Series Processors



- Intel® Skylake-S / Kaby Lake-S Processors (LGA1151 Socket)
- Intel® Q170 / H110 Chipset
- 2x DDR4 SO-DIMM Socket
- 1x DVI-D, 2x DP for video output
- 2x GbE LAN for Ethernet
- 4x USB3.0, 4x USB2.0, 2x RS-232/422/485 for peripherals
- up to 4x 2.5" SATA HDD/SSD or 1x 3.5" SATA HDD for storage
- RAID support (only for models with Q170 Chipset)
- 2x mPCIe (switchable to mPCIe for Q170 models), 2x PCIe8 slot for expansion
- 1U Rack-mountable design

Product Overview

RAK-0200 Series is an industrial-purpose box PC powered by Intel®'s latest powerful 6th / 7th Generation Skylake / Kaby Lake S-Series Processors. It is compatible with 1U rackmount configurations and allows users to integrate it within a rack cabinet.

Having 4x USB3.0, 4x USB2.0 and 2x RS-232/422/485, it provides a large number of interfaces to peripherals. In addition, up to 4x 2.5" SATA HDD/SSD or 1x 3.5" SATA HDD, 2x mPCIe (shared with mSATA for Q170 models) and 2x PCIe8 slot on rear make it flexible in storage and expansion.

Technical Information

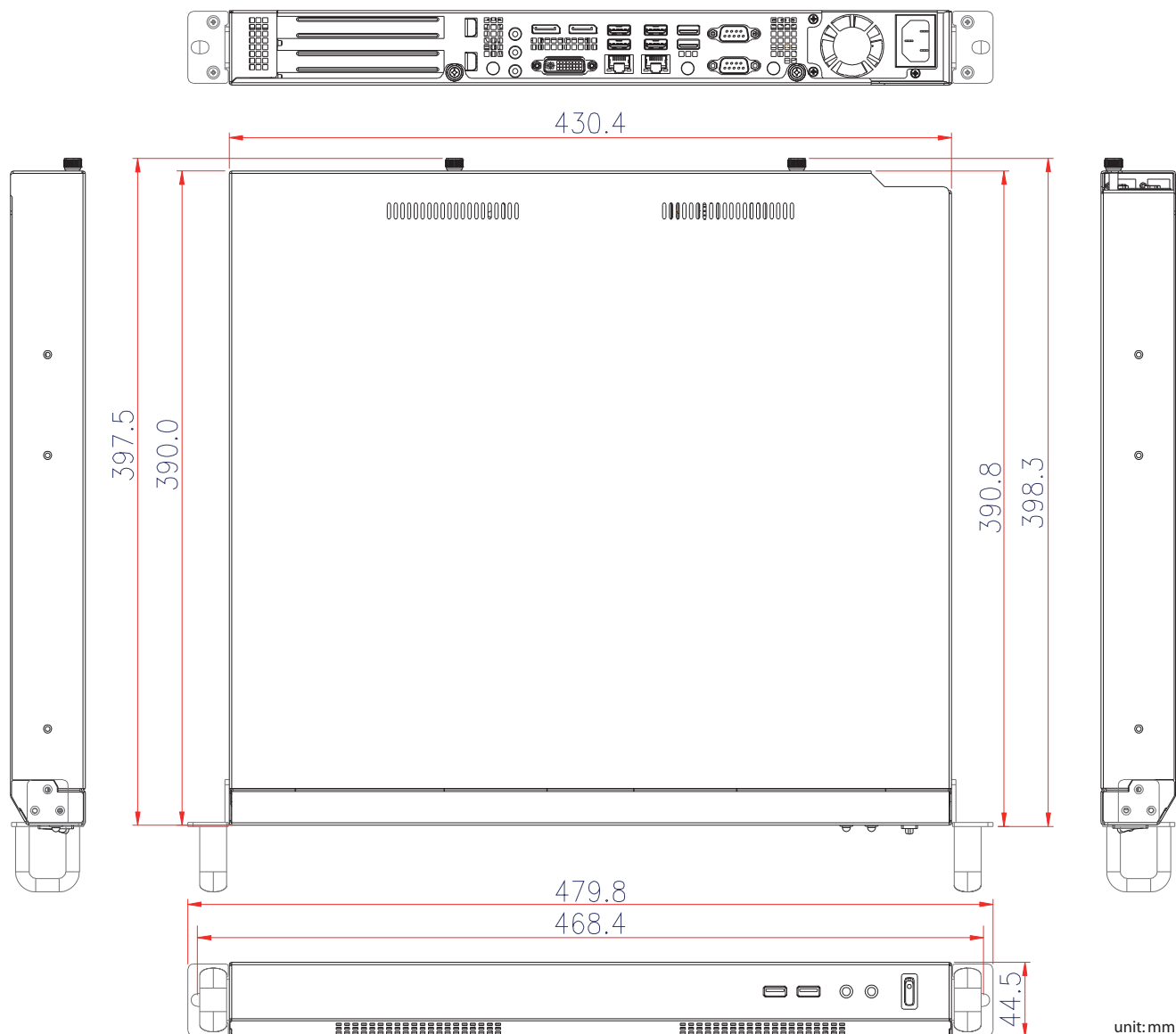
CPU Support	
RAK-0200/0201:	Intel® Skylake-S Processors (FCLGA1151 Socket)
RAK-0202/0203:	Intel® Kaby Lake-S Processors (FCLGA1151 Socket)
Chipset	
	Intel® Q170 (RAK-0200/0202)
	Intel® H110 (RAK-0201/0203)
Memory	
	2x DDR4 1866/2133 SO-DIMM up to 32GB
Graphic Controller	
	up to Intel® HD Graphics 620
Display Interfaces	
	1x DVI-D (on rear, 2560 x 1600 @ 60Hz)
	2x DP (on rear, 4096 x 2304 @ 60Hz)
Multiple Display	
	Triple
Audio Chipset	
	Realtek ALC662
Audio Interfaces	
	1x Line-in (on rear)
	1x Line-out (on rear)
	1x Mic-in (on rear)
Ethernet	
	2x GbE LAN (RJ-45 on rear, 1x Intel® I219-LM, 1x Intel® I210-AT)
USB	
	4x USB3.0 (Type A on rear)
	4x USB2.0 (2x Type A on front, 2x Type A on rear)
Serial Ports	
	2x RS-232/422/485 (DB9 on rear)
Storage & Expansion	
	up to 4x 2.5" SATA HDD/SSD (w/ RAID 0/1/5/10 for Q170) or 1x 3.5" HDD
	2x mSATA/mPCIe (1x full size, 1x half size, models w/ Q170, RAK-0200/2)
	2x mPCIe (1x full size, 1x half size, models w/ H110, RAK-0201/0203)
	2x PCIe8 Slot (on rear)
	1x SIM Card Cage (by cable, optional)

Power Supply	
	Connector: C14 AC Power Connector (on rear)
	Input Voltage: AC 100V ~ 240V
Firmware	
	BIOS: AMI uEFI BIOS w/ 128Mb SPI Flash
	Watchdog: Programmable WDT to generate system reset event
	H/W Monitor: Input & Core Voltages, CPU & System Temperatures
	Real Time Clock: Chipset integrated RTC
	TPM: Yes (Infineon SLB 9665 TPM 2.0)
	iAMT: depending on processor
System Control & Monitoring	
	1x Power Switch (on front)
	1x Power LED (on front)
	1x Storage LED (on front)
Cooling	
	Active
OS Support	
	Windows 10, Linux
Construction	
	1U Rackmount Metal Chassis
Dimensions (W x D x H)	
	430.4 x 390 x 44.5 mm / 16.94" x 15.35" x 1.75" (without handles)
	479.8 x 390.8 x 44.5 mm / 18.89" x 15.39" x 1.75" (with handles)
Weight	
	5800 g / 12.79 lb
Environmental Characteristics	
	Operation Temp.: 0°C ~ 40°C / 32°F ~ 104°F
	Storage Temp.: -20°C ~ 80°C / -4°F ~ 176°F
	Humidity: 0% ~ 90%
Mounting	
	Rackmount
Certification	
	CE, FCC Class A

RAK-0200 Series I/Os



Mechanical Dimensions



Ordering Information

Article	Part No.	Description
RAK-0200		6th Gen. Intel® Skylake-S CPU, Intel® Q170, 1x DVI-D, 2x DP, 2x LAN, 4x USB3.0, 4x USB2.0, 2x RS-232/422/485, 2x mSATA/mPCIe, 2x PCIe, w/ RAID support
RAK-0201		6th Gen. Intel® Skylake-S CPU, Intel® H110, 1x DVI-D, 2x DP, 2x LAN, 4x USB3.0, 2x USB2.0, 3x RS-232/422/485, 3x RS-232, 2x mPCIe, 2x PCIe, w/o RAID support
RAK-0202		7th Gen. Intel® Kaby Lake-S CPU, Intel® Q170, 1x DVI-D, 2x DP, 2x LAN, 4x USB3.0, 2x USB2.0, 3x RS-232/422/485, 3x RS-232, 2x mSATA/mPCIe, 2x PCIe, w/ RAID support
RAK-0203		7th Gen. Intel® Kaby Lake-S CPU, Intel® H110, 1x DVI-D, 2x DP, 2x LAN, 4x USB3.0, 2x USB2.0, 3x RS-232/422/485, 3x RS-232, 2x mPCIe, 2x PCIe, w/o RAID support