

# JLA20-10 Series

Intel® Comet Lake-S Q470E, supports LGA1200 CPU (Max 125W), DDR4 up to 128GB

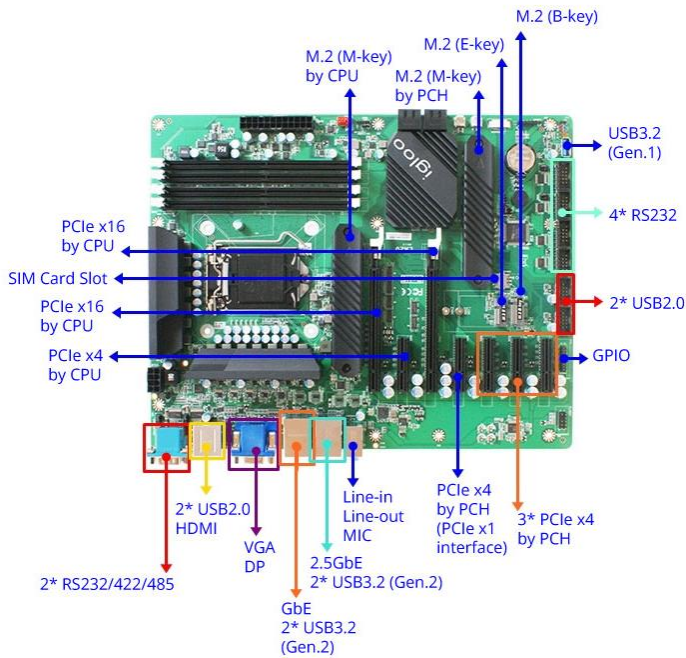
## Features

1. Intel® LGA1200 Socket supports 10/11th Gen. Core Processor (Max 125W)
2. Intel® Comet Lake-S Q470E chipset
3. 4\* DDR4 3200/2933MHz up to 128GB
4. 1\* Intel® i225-V 2.5GbE, 1\* Intel® i219-LM GbE
5. 2\* M.2 M Key (NVMe), 1\* M.2 E Key (CNVi), 1\* M.2 B Key
6. 4\* SATA III (6Gb/s), support Raid 0/1/5/10
7. 1\* VGA, 1\* HDMI, 1\* DP
8. 2\* RS232/422/485, 4\* RS232, 4\* USB3.2 (Gen.2), 1\* USB3.2 (Gen.1), 6\* USB2.0
9. 2\* PCI-E x16, 5\* PCI-E x 4 Slots
10. 2\* CPU FAN, 2\* System FAN
11. JLA20-12 support TPM2.0 (option)
12. 24 + 8 Pin ATX Power Input
13. ATX Form Factor (305x244mm)

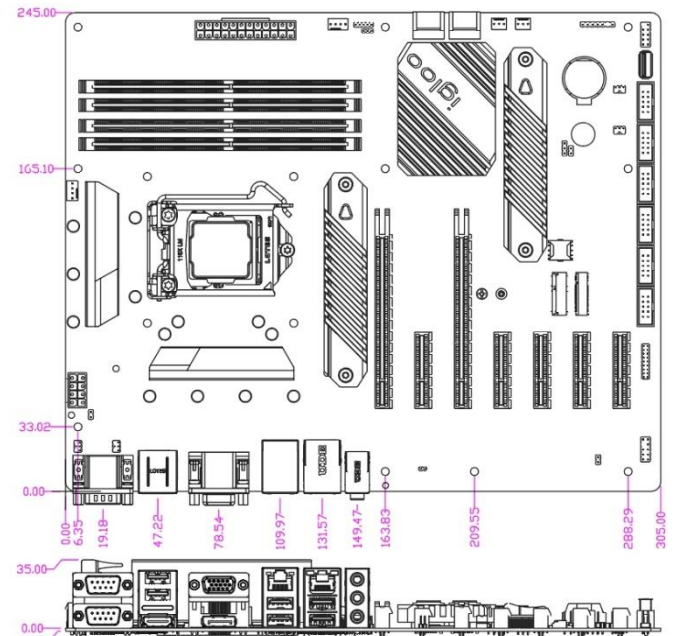


intel. FC CE RoHS COMPLIANT

## I/O Diagram



## Mechanical Drawings (Unit=mm)



## Specifications

<b>Model</b> <ul style="list-style-type: none"><li>JLA20-10</li><li>JLA20-12 (TPM2.0)</li></ul>	<b>Form Factor</b> <p>ATX (305 x 244mm)</p>
<b>Processor System</b> <ul style="list-style-type: none"><li>Intel® LGA1200 Socket supports 10th/11<sup>th</sup> Gen Core Processor Max 125W</li><li>Intel® Q470E chipset</li><li>AMI 256M Flash ROM</li></ul>	<b>Memory</b> <p>4* DDR4 3200/2933 MHz Long DIMM up to 128GB</p>
<b>Storage</b> <ul style="list-style-type: none"><li>4* SATAIII (6.0Gb/s, Support Raid 0/1/5/10)</li><li>2* M.2 M-key (2242/2280, support NVMe, M2M1 Only 11th CPU)</li></ul>	<b>Expansion</b> <ul style="list-style-type: none"><li>1* M.2 B-key (3042/3052, USB3.2+PCI-Ex1 interface, Support 4G/5G Module)</li><li>1* M.2 E-key (2230, CNVi+USB2.0 interface, Support WIFI/BT Module)</li><li>2* PCIe x16 slots (by CPU)</li><li>5* PCIe x4 slots (PCIe2 by CPU, PCIe4 is PCIe x1 interface)</li></ul>
<b>Ethernet</b> <ul style="list-style-type: none"><li>1* Intel® i219-LM GbE</li><li>1* Intel® i225-V 2.5GbE</li></ul>	<b>Graphics</b> <ul style="list-style-type: none"><li>Intel® HD Graphics, shared memory</li><li>1* VGA (Max Resolution: 1920x1080@60Hz)</li><li>1* DP1.2 (Max Resolution: 4096x2304@60Hz)</li><li>1* HDMI 1.4 (Max Resolution: 4096x2160@30Hz)</li></ul>
<b>Audio</b> <p>Line-in, Line-out, MIC</p>	<b>Watchdog Timer</b> <ul style="list-style-type: none"><li>From Super I/O to drag RESETCON#</li><li>256 segments (10sec ~ 255min)</li></ul>
<b>Internal I/O</b> <ul style="list-style-type: none"><li>4* USB2.0</li><li>1* USB3.2 (Gen1, TYPE A)</li><li>4* RS232 (COM3/4 support 5/12V TTL)</li><li>4* M.2 (2* M-key, 1* B-key, 1* E-key)</li><li>2* PCIe x16 slots (by CPU)</li><li>5* PCIe x4 slots (PCIe2 by CPU, PCIe4 is PCIe x1 interface)</li><li>1* GPIO (16 bit, 5V)</li><li>1* PS/2</li><li>1* SIM card slot</li><li>2* CPU FAN (Support Smart FAN)</li><li>2* System FAN</li><li>1* Chassis intrusion</li><li>1* SMBUS/ I2C</li><li>1* AT mode</li></ul>	<b>External I/O</b> <ul style="list-style-type: none"><li>2* RS232/422/485 (Support 5V/12V TTL)</li><li>4* USB3.2 (Gen.2)</li><li>2* USB2.0</li><li>1* VGA</li><li>1* HDMI</li><li>1* DP</li><li>2* RJ45</li><li>Line-in, Line-out, MIC</li></ul>
<b>Power</b> <p>ATX Power (8 + 24 pin)</p> <p>- AT: Directly PWR on as Power input ready</p> <p>- ATX: Press Button to PWR on after Power input ready</p>	<b>Compliance</b> <p>CE, FCC, RoHS, REACH</p>
<b>Temperature</b> <ul style="list-style-type: none"><li>Operating Temperature: 0 ~ 60° C</li><li>Storage Temperature: -20 ~ 85° C</li><li>Humidity: 10% ~ 90% RH @40°C (non-condensing)</li></ul>	<b>OS Support</b> <p>Windows 10, 11, Linux</p>
<b>Warranty</b> <p>2 Years limited warranty</p>	

\* Specifications subject to change without notice, not responsible for typographical errors. Does not include HDD or OS.

## Standard Accessories

Part Number	Description
	JLA20-10 / JLA20-12 M/B
F04-MB-088-F	LA20 I/O Shield
G01-COM9X2-30A-1F	2* COM Cable
G01-SATA3-BL-1F	2* SATA Cable