

GSPI-Q4700-LLVA

Intel® 10th Gen Core™ Comet Lake –S Platform Processor
PICMG 1.3



Features

- Support Intel® Core™ i3/i5/i7/Pentium®/Celeron® processors in LGA 1200 package
- Deliver up to 128GB maximum DDR4-2666 SDRAM on four sockets
- Support multiple displays by DVI-I(DVI-D+VGA) and HDMI
- Dual Gigabit Ethernet based on PCI express x1, high bandwidth I/O interface
- Rich I/O connections such as four serial ports, USB 3.2(Gen2) & SATAIII ports
- Support on board TPM2.0

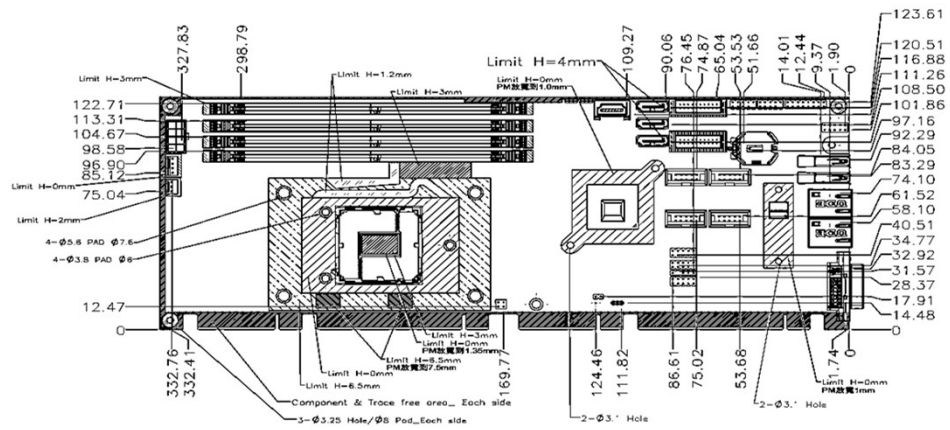
CPU Selection Guide

Non-ECC memory supported			
No.	CPU Type list	SPEC.	Remark
1	Celeron G5900E (3.2GHz)	58W, L3:2 MB Cache	Intel® UHD 610
2	Celeron G5900TE (3.0GHz)	35W, L3:2 MB Cache	Intel® UHD 610
3	Pentium Gold G6400E (3.8GHz)	58W, L3:4 MB Cache	Intel® UHD 610
4	Pentium Gold G6400TE (3.2GHz)	35W, L3:4 MB Cache	Intel® UHD 610
5	Core i3-10100E (3.2GHz ~ 3.8GHz)	65W, L3: 6 MB Cache	Intel® UHD 630
6	Core i3-10100TE (2.3GHz ~ 3.6GHz)	35W, L3: 6 MB Cache	Intel® UHD 630
7	Core i5-10500E (3.1GHz ~ 4.2GHz)	65W, L3: 12 MB Cache	Intel® UHD 630
8	Core i5-10500TE (2.3GHz ~ 3.7GHz)	35W, L3: 12 MB Cache	Intel® UHD 630
9	Core i7-10700E (2.9GHz ~ 4.5GHz)	65W, L3: 16 MB Cache	Intel® UHD 630
10	Core i7-10700TE (2.0GHz ~ 4.4GHz)	35W, L3: 16 MB Cache	Intel® UHD 630
11	Core i9-10900E (2.8GHz ~ 4.7GHz)	65W, L3: 20 MB Cache	Intel® UHD 630
12	Core i9-10900TE (1.8GHz ~ 4.5GHz)	35W, L3: 20 MB Cache	Intel® UHD 630

Packing List

- 1x Motherboard
- 1x Installation CD

Mechanical Dimensions



Specifications

PROCESSOR	Intel® 10 th Gen Core™ Processors CPU in LGA1200 package
CHIPSET	Intel® Q470E Express Chipset
BIOS	AMI UEFI BIOS
MEMORY	Up to 128 GB ECC or non-ECC DDR4 on four Long-DIMM sockets. Supports dual channel DDR4 2666 MHz SDRAM
STORAGE I/F	5x SATAIII ports, On board 3x SATA connector ,dual ports via backplane 1x M.2 Key M socket (PCIe+SATA signal)
WATCHDOG TIMER	By Software Programmable
HARDWARE MONITORING	System monitor(Voltage,Fan Speed and Temperature)
EXPANSION INTERFACE	From CPU: 1x PCI Express x16 or 2x PCI Express x8 or 1x PCI Express x8 + 2x PCI Express x4 by jumper setting (Gen3 up to 8.0 GT/s) From PCH: 1x PCI Express x4 or 4x PCI Express x1 by different bios support (Gen 3 up to 8.0 GT/s)
AUDIO	Mic-In / Line-Out / Line-in (on-board header)
ETHERNET	Supports dual 10/100/1000 Mbps Ethernet port (s) via PCI Express x1 interface by Intel WGI219LM and WGI210AT controller Dual RJ45 connector on bracket
SERIAL PORT	Serial Ports: 2x RS-232 & 2x RS-232/422/485 selectable by BIOS
USB PORT	USB Port: 2x USB 3.2(Gen2) on bracket, 4x USB 3.2(Gen2) on board header
GPIO	1x GPIO (8bit in & 8bit out) by Pin Header
GRAPHIC CONTROLLER	Controller: Intel® Gfx Gen 9, HD graphics 630
DISPLAY INTERFACE	VGA: Resolution up to 1920 x 1200 @ 60Hz DVI-D: Resolution up to 1920 x 1200 @ 60Hz (VGA+DVI-D on bracket by DVI-I port) HDMI: Resolution up to 4096 x 2160 @ 24Hz
TPM	On-board TPM 2.0 support (TPM IC: Infineon SLB9665TT.0)
ENVIRONMENT	Operation Temperature: 0 to 60°C Storage Temperature: -20 to 80°C Relative Humidity: 5% to 95%, non condensing
OS DRIVER SUPPORT	Windows 10 IoT Enterprise 2019 LTSC
CERTIFICATE	CE / FCC , RoHS2.0

Ordering Guide

- GSPI-Q4700-LLVA PICMG 1.3 SBC 10 Gen. Intel Core Processor, Intel Q470E Chipset

Standard Accessory

- DVI-D + VGA Cable
- SATA III Cable
- Dual-head COM port cable with bracket

Option Accessory

- HDMI Cable
- Audio Cable
- USB3.0 Cable
- USB2.0 Cable