6th Gen Intel® Core™ i5 / i7 processor
based PICMG® 1.3 Single Board Computer

CONTEC

GSPI-Q1700-LLVA

Features

- DDR4 2133/1866 MHz memory, 2x 288-pin DIMM socket, up to 32GB
- Triple independent display by DVI-I(DVI+VGA), HDMI
- Dual Gigabit Ethernet
- PCIe 3.0, USB 3.0, SATA III ports

Specifications

Processor	- Intel® Code™ i5/i7 processors up to 3.4 GHz (35~65W) with (8MB) Cache, LGA-1151 package - DMI x4 Link: 5.0GT/s - Support Intel® Turbo Boost , Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution and SpeedStep Technology (depends on CPU sku)
Chipset	Intel® Q170 PCH
BIOS	AMI UEFI BIOS (SPI ROM)
Memory	- Supports up to 32GB DDR4 2133/1866 SDRAM on two 288-pin DIMM sockets - Supports non-ECC
Storage Devices	- 6x SATA III drives (Dual ports via Backplane) - RAID 0, 1, 5, 10
Watchdog Timer	Programmable via S/W from 0.5 sec to 254.5 sec
Hardware Monitoring	System monitor(Voltage, Fan Speed and Temperature)
Expansion Interface	- From CPU (Core™ i5/i7): 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) - 4x PCI devices at 32bit 33MHz
Super I/O (Embedded Controller)	ITE IT8528E
Audio	- Intel® PCH built-in High Definition Audio up to 192-kHz 32-bit - Realtek ALC886-GR HDA codec, 5.1 channels - one on- board audio pin header
Ethernet	- Intel® WGI219LM + WGI210AT Gigabit Ethernet controller - Dual 10BASE-T / 100BASE-TX / 1000BASE-T Ethernet - PCI Express x1 interface based on Gigabit Ethernet - Dual RJ-45 connector with two LED indicators
Serial Port	- 2x RS-232 ports - 2x RS-232/422/485 selectable - LPC to COM port IC: Fintek F81216DG
USB	- 4x USB 2.0 ports (through backplane) - 480Mb/s bus capable of high-speed/full-speed/low-speed data ranges - 10x USB 3.0 ports on board (eight ports on board, dual ports on bracket) - 5Gbps bus capable of high-speed/ full-speed/low-speed data ranges
Keyboard & Mouse	- 2x USB 3.0 ports on bracket dedicated to keyboard & mouse (on bracket) - 1x 10 pin box header for external PS/2 keyboard / mouse
GPIO	On board programmable 8-bit Digital I/Os
Graphic Controller	- Intel® Core™ i5/i7 processors integrated graphics engine - Provides improved 3D multimedia capabilities including Microsoft DirectX 12, OCL 2.x and OpenGL 4.3/4.4
Display Interface	- Support independent triple display by : - CRT on bracket: up to 1920x1200 @ 60Hz - DVI-D on bracket: up to 1920x1200 @ 60Hz (CRT + DVI-D on bracket by DVI-I port) - HDMI: up to 4096x2160 @ 24Hz
Dimension	- 338.5mm(L) x 126.39mm(W), 13.33"(L) x 4.98" (W)

Power Supply	- Typical: +12V, +5V - Support ATX mode
Environment	- Operating Temperature:0°C~60°C - Storage Temperature:-20°C~80°C - Relative Humidity:5~90%RH,non-condensing

Optional Configuration
● BPME-0624
● BPME-1024-1
● BPME-1429
● BPME-1448
● BPME-1473
● CH140-SBC-4U

Recommended CPU List
Intel® Core™ i7
Intel® Core™ i5

Ordering Guide
● GSPI-Q1700-LLVA   PICMG 1.3, Full size SBC