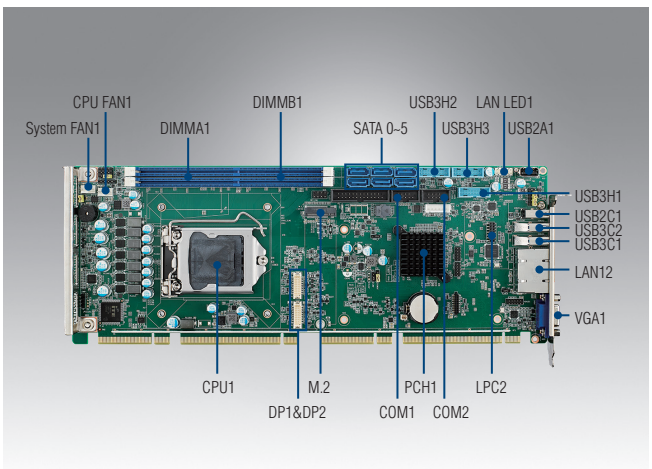
PCE-5132

LGA1200 10th Generation Intel® Core™ i9/i7/i5/i3/Pentium/Celeron System Host Board with DDR4, SATA 3.0, USB 3.2, M.2, Dual GbE, and Triple Displays



Features

- Intel® Core™ i9/7/i5/i3 LGA1200 processor with Q470E chipset
- Up to 64 GB of dual-channel (non-ECC) DDR4 2666/2933 MHz
- PCIe 3.0, M.2, USB 3.2, SATA 3.0, and SW Raid 0, 1, 5, 10
- Supports out-of-band remote management with AMT

  Supports LPC modules, SUSI 4.0, and embedded software APIs

Note: Legacy platform is not supported.

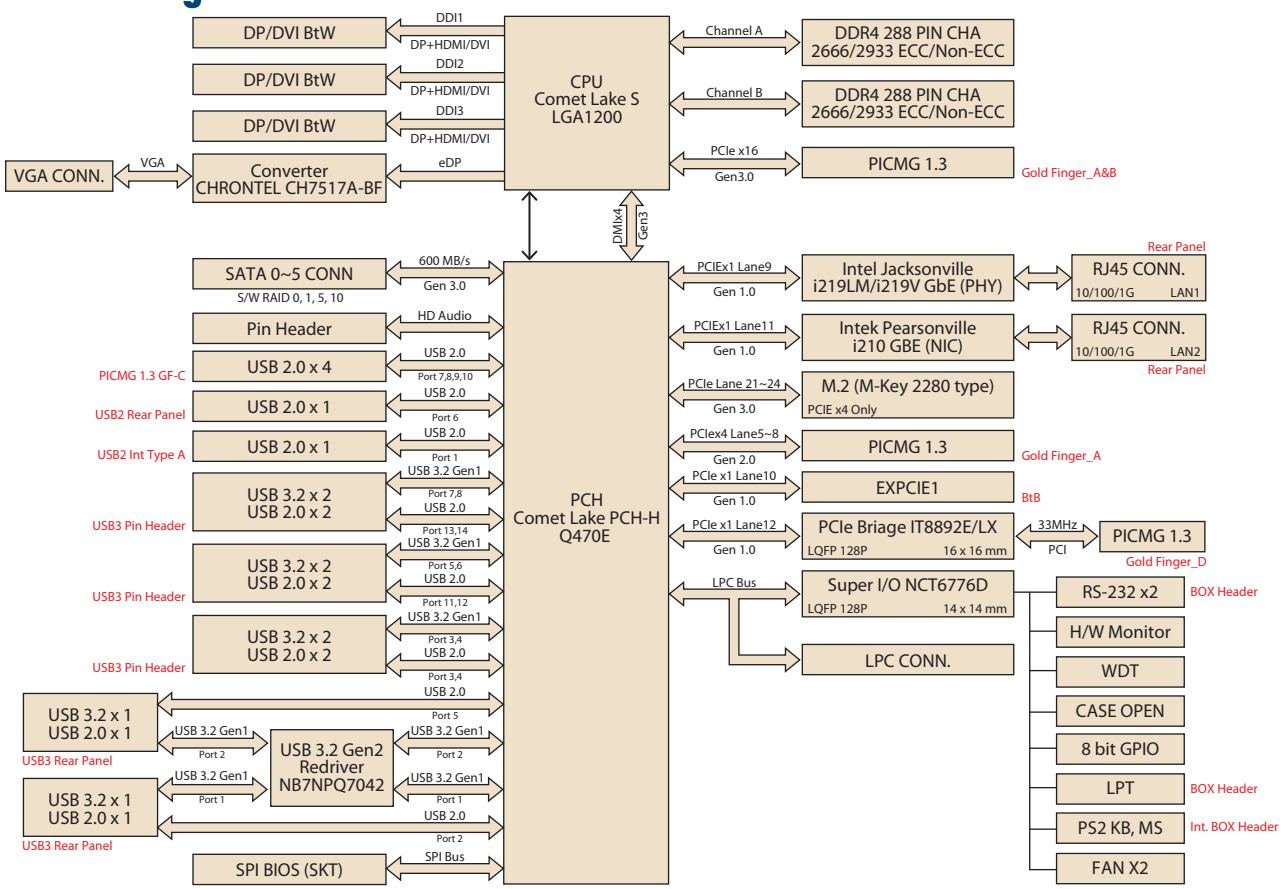
Quiet

CE FCC

Specifications

Processor System	CPU	i9-10900K	I9-10900E	I9-10900TE	I7-10700TE	I7-10700E	I5-10500E	I5-10500E	I5-10500TE	I3-10100E	I3-10100TE	G6400E	G5900E	G5900TE
	Speed	3.7GHz	2.80GHz	1.80GHz	2.00GHz	2.90GHz	3.10GHz	3.10GHz	2.30GHz	3.60 GHz	2.30GHz	3.80GHz	3.20GHz	3.00GHz
	L3 Cache	20MB	20MB	20MB	16MB	16MB	12MB	12MB	12MB	6MB	6MB	4MB	2MB	2MB
	Cores	10	10	10	8	8	6	6	6	4	4	2	2	2
	TDP	125W	65W	35W	35W	65W	65 W	65W	35W	65W	35W	58W	58W	35W
	Socket	LGA1200												
	Chipset	Q470E												
	BIOS	AMI 256 Mbit SPI												
Bus	PCI-Express	1 x PCIe x16 and 1 x PCIe x4 to backplane												
	PCI	4 x PCI master to backplane, 32-bit, 33 MHz												
Memory	Technology	Dual-channel (non-ECC) U-DIMM DDR4 2666/2933 MHz (supports x8 DDR4 1024 M)												
	Max. Capacity	up to 64GB (based on CPU)												
	Socket	2 x DDR4 288-pin DIMM												
Graphics	Controller	Chipset integrated with Intel® HD Graphics												
	VRAM	Shared system memory is subject to OS												
	VGA	Supports resolutions of up to 2048 x 1152 @ 60MHz												
	DVI-D	Supports resolutions of up to 1920 x 1200 @ 60MHz												
	Display Port	Supports resolutions of up to 4096 x 2160 @ 60MHz												
	Triple Display	CRT+DP/DVI-D+DP/DVI-D												
Ethernet	Interface	10/100/1000 Mbps												
	Controller	LAN 1: Intel® I219-LM LAN 2: Intel® I210AT												
	Connector with LED	2 x RJ45												
Rear I/O	USB 3.2 (Gen2)	2												
	USB 2.0	1												
	Ethernet	2												
	VGA	1												
Internal Connector	USB	5 x USB 2.0 (1 USB Type A + 4 on backplane), 6 x USB3.0												
	SATA (SW Raid 0,1,5,10)	6												
	M.2 (2280 Type M)	1 (PCIe x4)												
	DP/DVI-D	2 (Pin header)												
	COM	2												
	IrDA	1												
	GPIO	8bit												
Watchdog Timer	Output	System reset												
	Interval	Programmable 1-255 sec												
Miscellaneous	Audio	Intel® High Definition audio interface (requires audio extension module PCA-AUDIO-HDB1E)												
Power Requirement	Test Environment	Intel W-1290E, Memory 2* DDR4 2666U 32GB												
	Voltage	+3.3V, 5V, 12V												
	Current	1.15A, 1.54A, 1.38A												
Environment		Operating									Non-Operating			
	Temperature	0 ~ 60 °C (dependent on CPU and cooler solution)									-40 ~ 85 °C			
	Humidity	40 °C @ 85% relative humidity (non-condensing)									60 °C @ 95% relative humidity (non-condensing)			
Physical	Dimensions (L x H)	338 x 122 mm (13.3" x 4.8")												

Block Diagram



Ordering Information

Part Number	PCH	Memory	Backplane	LAN	VGA	DP/DVI-D	COM	SATA III	M.2	USB 2.0	USB3.2 (Gen1)	USB3.2 (Gen2)	S/W Raid	AMT
PCE-5132G2-00A3	Q470E	Non-ECC	PCE-5BXX PCE-7BXX	2	Yes	2*	2	6	1	6	6	2	Yes	Yes

Note: DP/DVI-D cable is optional

Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x2
1701090401	1-port COM cable kit	x1
2190000902	Warranty card	x1
2041513200	Startup manual	x1

I/O View

PCE-5132G2-00A3

Optional Accessories

Part Number	Description
1960049408N001	CPU heat sink for 1U Chassis and 35W TDP
1960050255N001	CPU cooler for 2U Chassis and 95W TDP
1960052651N021	CPU cooler for 2U/4U Chassis and 80W TDP
1960067860N001	CPU cooler for 2U/4U Chassis and 125W TDP
1700002204	2-port USB 2.0 cable kit
1700028292-01	2-port USB 3.0 cable w/ BKT (30 cm)
1700031719-01	4-port USB 3.0 cable kit
1701090401	1-port COM cable kit
1701092300	2-port COM cable kit
PCE-DP10-00A1E	DP to DP cable kit
1700021831-01	DP to DVI-D cable kit
PCA-TPM-00B1E	TPM 2.0 module
PCA-AUDIO-HDB1E	Audio module
PCA-COM232-00A2	4-port RS-232 module via LPC interface
PCA-COM485-00A1E	4-port RS-422/485 module via LPC interface
PCE-SA01-00A1E	I/O extension kit (DP, USB, Audio, mini PCIe)
20706WX9HS0097	PCE-5132 win 10 embedded OS (high-end)
20706WX9VS0101	PCE-5132 win 10 embedded OS (value)
20706WX9ES0111	PCE-5132 win 10 embedded OS (entry)

* for PCE-7132/5132/5032, PCE-SA01-00A1E miniPCIe only support PCIex1 signal