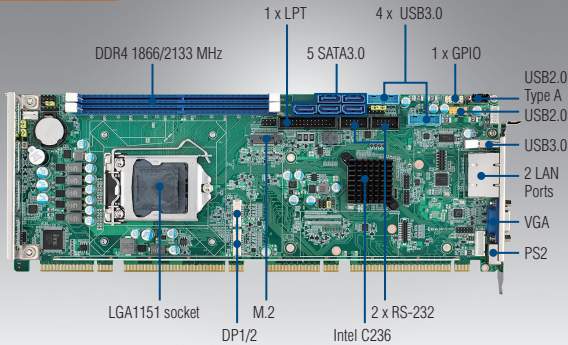


PCE-5129

LGA1151 6th Generation Intel® Core™ i series SHB DDR4/SATA 3.0/USB3.0/M.2/ Dual GbE/3 Displays

Preliminary



Features

- Supports Intel Core™ i7/i5/i3 LGA1151 processors with Q170
- Dual Channel (Non-ECC) DDR4 1866/2133 up to 32 GB
- Supports PCIe 3.0, M.2, USB 3.0, SATA3.0, SW Raid 0, 1, 5, 10
- Supports CRT and 2 x DVI-D/DP (cable optional) display
- Supports out-of-band remote management with AMT10
- Supports Advantech LPC modules
- Supports SUSIAccess and Embedded Software APIs

Software APIs:



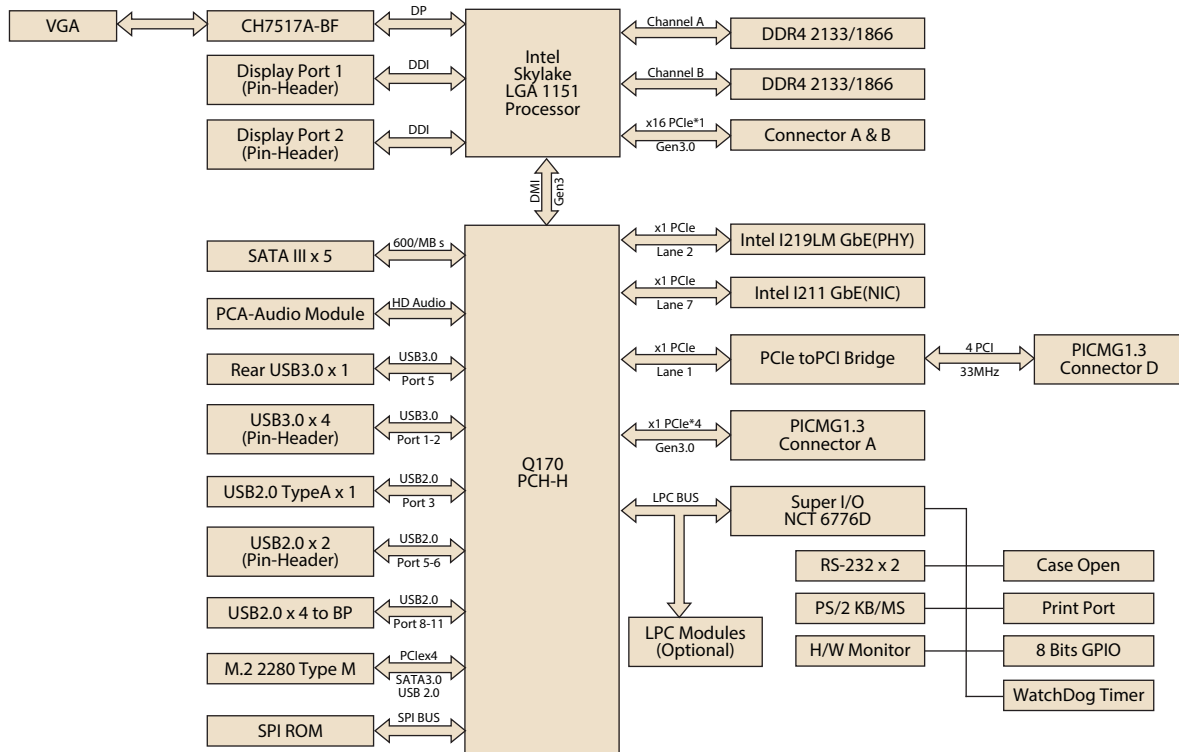
Utilities:



Specifications

Processor System	CPU	i7-6700	i7-6700TE	i5-6500	i5-6500TE	i3-6100	i3-6100TE	G4400	G4400TE	G3900	G3900TE
	Base Frequency	3.4GHz	2.4GHz	3.2GHz	2.3GHz	TBD	2.7GHz	3.3GHz	2.9GHz	2.8GHz	2.6GHz
	L3 Cache	8MB	8MB	6MB	6MB	4MB	4MB	3MB	3MB	2MB	2MB
	SKU/Chipset	Intel Q170									
Bus	BIOS	AMI 128Mbit SPI Flash									
	PCI-Express	One x16 and one x4 to backplane									
Memory	PCI	Four 32-bit 33 MHz PCI Masters to backplane									
	Technology	Dual channel (Non-ECC) U-DIMM DDR4 1866/2133 MHz (Note: support DDR4 1024M x 8 memory technology)									
	Max. Cap.	32 GB (16 GB per DIMM)									
Graphics	Socket	DDR4 288 pins DIMM x 2									
	Controller	Chipset integrated Intel Iris Pro or HD Graphics									
	VRAM	Shared system memory is subject to OS									
	CRT	Supports resolution up to 1920 x 1200 pixel @ 60MHz									
	DVI-D	Supports resolution up to 1920 x 1200 pixel @ 60MHz									
	Display Port	Supports resolution up to 4096x2304 @ 60Hz, 24bpp (Supporting 4K display required two DDR channels of same size)									
Ethernet	Triple Display	CRT+DP/DVI-D+DP/DVI-D									
	Interface	10/100/1000 Mbps									
	Controller	LAN 1: Intel I219LM LAN 2: Intel I211									
Rear I/O	Connector with LED	RJ45 x 2									
	USB 3.0	1									
	Ethernet	2									
	VGA	1									
Internal Connector	PS/2	1 (PS/2 Y cable supports 1 x keyboard and 1 x mouse)									
	USB	7 USB2.0 (Pin-header*2+USB Type A*1+ 4 on backplane); 4 USB3.0 (Pin header)									
	SATA (SW Raid 0,1,5,10)	5									
	M.2 (2280 Type M)	1 (Support SATA3.0 or PCIe4 device)									
	DP/DVI-D	2 (Pin header)									
	COM	2									
	Parallel	1									
	IrDA	1									
	GPIO	8bit									
Watchdog Timer	Output	System reset									
	Interval	Programmable 1-255 sec									
Miscellaneous	Audio	Intel High Definition audio interface (required an audio extension module P/N: PCA-AUDIO-HDA1E)									
Power Requirement	Test environment	SKL 2.2G 65W DDR4 2133 8GB x 2									
	Voltage	+12V	+5V	+3.3V	+5Vsb	-12V	-5V				
	Current	2.64A	1.23A	0.19A	0.09A	0.06A	0V				
Environment	Operating					Non-operating					
	Temperature/Humidity	0 ~ 60° C(32~140° F); Depends on CPU and cooler solution					-40 ~ 85° C and 60° C @ 95% RH Non-Condensing				
Physical	Operating humidity: 40° C @ 85% RH Non-Condensing										
	Dimensions	338 mm (L) x 122 mm (W) (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	USB 3.0	S/W Raid	AMT
PCE-5129G2-00A1E	Q170	Non-ECC	PCE-5BXX	2	Yes	2*	2	5	1	7	5	Yes	Yes

Note: DP/DVI-D cable is optional

Optional Accessories

Part Number	Description
1960052651N021	2U CPU cooler (PWM Fan)
PCA-AUDIO-HDA1E	Audio module
PCA-TPM-00A1E	TPM module(Trust Platform management)
IPMI-1000-00A1E	IPMI2.0 module(Remote control management)
PCA-COM232-00A1E	4 Ports RS-232 Module by LPC
PCA-COM485-00A1E	4 Ports RS-485/422 Module by LPC
1700020277-01	2 ports USB 3.0 cable w/ BKT(30cm)
1700021831-01	DP to DVI-D cable w/ BKT
PCE-DP10-00A1E	DP to DP cable w/ BKT

Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x2
1700022749-11	Serial ATA HDD power cable	x1
1701260305	COM + printer ports cable kit	x1
1700060202	Keyboard and mouse Y-cable	x1
1700002204	2-port USB cable kit	x1
9689000068	Jumper package	x1
2190000902	Warranty Card	x1
2001512910	Startup manual	x1
2061512900	Utility CD	x1

Bracket View



PCE-5129G2-00A1E