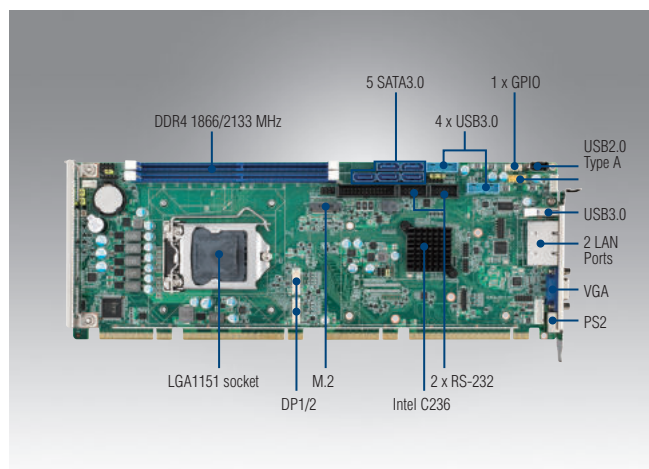


# PCE-5129

## LGA1151 6th and 7th Generation Intel® Core™ i7/i5/i3/Pentium/Celeron System Host Board with DDR4, SATA 3.0, USB 3.0, M.2, Dual GbE, and Triple Displays



### Features

- Intel® Core™ i7/i5/i3 LGA1151 processor with Q170 chipset
- Up to 32 GB of dual-channel (non-ECC) DDR4 1866/2133 MHz
- PCIe 3.0, M.2, USB 3.0, SATA 3.0, and SW Raid 0, 1, 5, 10
- Supports out-of-band remote management with AMT 11.0
- Supports Advantech's LPC modules, SUSIAccess, and embedded software APIs

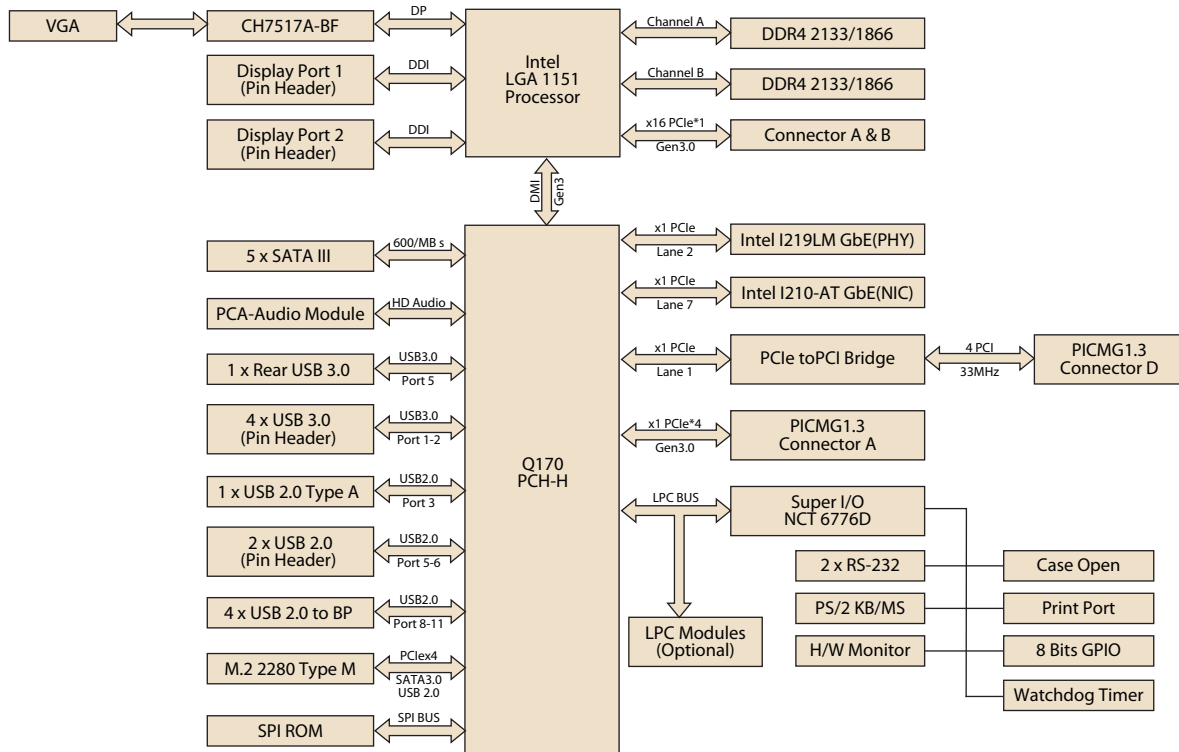
Note 1: Intel 7th generation processors only support Windows 10 (64-bit).

### Quiet Specifications



Processor System	CPU	i7-7700	i7-7700T	i7-6700	i7-6700TE	i5-7500	i5-7500T	i5-6500	i5-6500TE	i3-7101E	i3-7101TE	i3-6100	i3-6100TE	G4400	G4400TE	G3900	G3900TE	
	Speed	3.6GHz	2.9GHz	3.4GHz	2.4GHz	3.4GHz	2.7GHz	3.2GHz	2.3GHz	3.9GHz	3.4GHz	3.7GHz	2.7GHz	3.3GHz	2.9GHz	2.8GHz	2.6GHz	
	L3 Cache	8MB	8MB	8MB	8MB	6MB	6MB	6MB	6MB	3MB	3MB	4MB	4MB	3MB	3MB	2MB	2MB	
	Socket	LGA1151																
	Chipset	Q170																
	BIOS	AMI 128 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 1866/2133 MHz (supports x8 DDR4 1024 M)																
	Max. Capacity	32 GB (16 GB per DIMM)																
	Socket	2 x DDR4 288-pin DIMM																
Graphics	Controller	Chipset integrated with Intel® HD Graphics																
	VRAM	Shared system memory is subject to OS																
	CRT	Supports resolutions of up to 1920 x 1200 pixel @ 60 MHz																
	DVI-D	Supports resolutions of up to 1920 x 1200 pixel @ 60 MHz																
	Display Port	Supports resolutions of up to 1920 x 1080 pixel @ 60 Hz																
Ethernet	Triple Display	CRT+DP/DVI-D+DP/DVI-D																
	Interface	10/100/1000 Mbps																
Rear I/O	Controller	LAN 1: Intel® I219-LM LAN 2: Intel® I210-AT																
	Connector with LED	2 x RJ45																
	USB 3.0	1																
Internal Connector	Ethernet	2																
	VGA	1																
	PS/2	1 (PS/2 Y cable supports 1 x keyboard and 1 x mouse)																
	USB	7 x USB 2.0 (pin header*2 + USB Type A*1 + 4 on backplane) 4 x USB 3.0 (pin header)																
	SATA (SW Raid 0,1,5,10)	5																
	M.2 (2280 Type M)	1 (supports SATA 3.0 or 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	i7-6700, 3.4 GHz, 65 W, with 2 x 8-GB DDR4 2133																
	Voltage	+12V					+5V					+3.3V					+5Vsb	
	Current	2.64A					1.23A					0.19A					0.09A	
Environment	Operating																	
	Temperature	0 - 60 °C (dependent on CPU and cooler solution)										Non-Operating						
	Humidity	40 °C @ 85% relative humidity (non-condensing)										-40 - 85 °C						
Physical	Humidity	40 °C @ 85% relative humidity (non-condensing)										60 °C @ 95% relative humidity (non-condensing)						
	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	USB 3.0	S/W Raid	AMT
PCE-5129G2-00A3	Q170	Non-ECC	PCE-5BXX PCE-7BXX	2	Yes	2*	2	5	1	7	5	Yes	Yes

Note: DP/DVI-D cable is optional

## Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x2
1700060202	Keyboard and mouse Y-cable	x1
1701090401	1-port COM cable kit	x1
1700002204	2-port USB 2.0 cable kit	x1
2190000902	Warranty card	x1
2001512912	Startup manual	x1
2061512900	Utility CD	x1

## 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
1700002204	2-port USB 2.0 cable kit
1700020277-01	2-port USB 3.0 cable kit
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-COM232-00A1E	4-port RS-232 module via LPC interface
PCA-COM485-00A1E	4-port RS-422/485 module via LPC interface

## I/O View



PCE-5129G2-00A3