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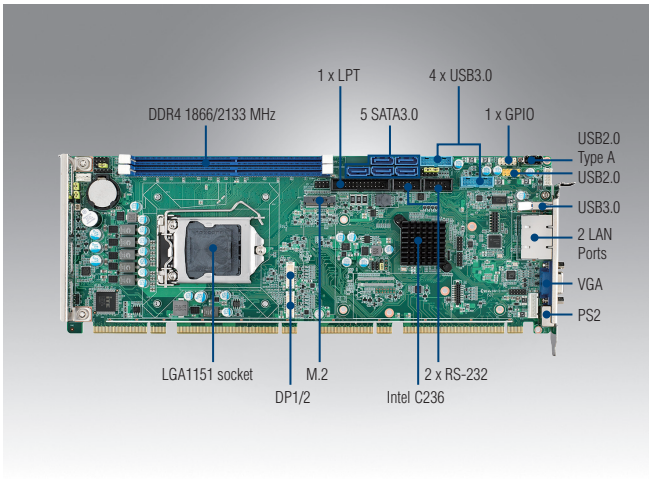
PCE-5129

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

CE FCC

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															
	Triple Display	CRT+DP/DVI-D+DP/DVI-D															
Ethernet	Interface	10/100/1000 Mbps															
	Controller	LAN 1: Intel® I219-LM LAN 2: Intel® I211															
	Connector with LED	2 x RJ45															
Rear I/O	USB 3.0	1															
	Ethernet	2															
	VGA	1															
	PS/2	1 (PS/2 Y cable supports 1 x keyboard and 1 x mouse)															
Internal Connector	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															
	Parallel	1															
	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						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")															

All product specifications are subject to change without notice.

Last updated: 13-Sep-2017

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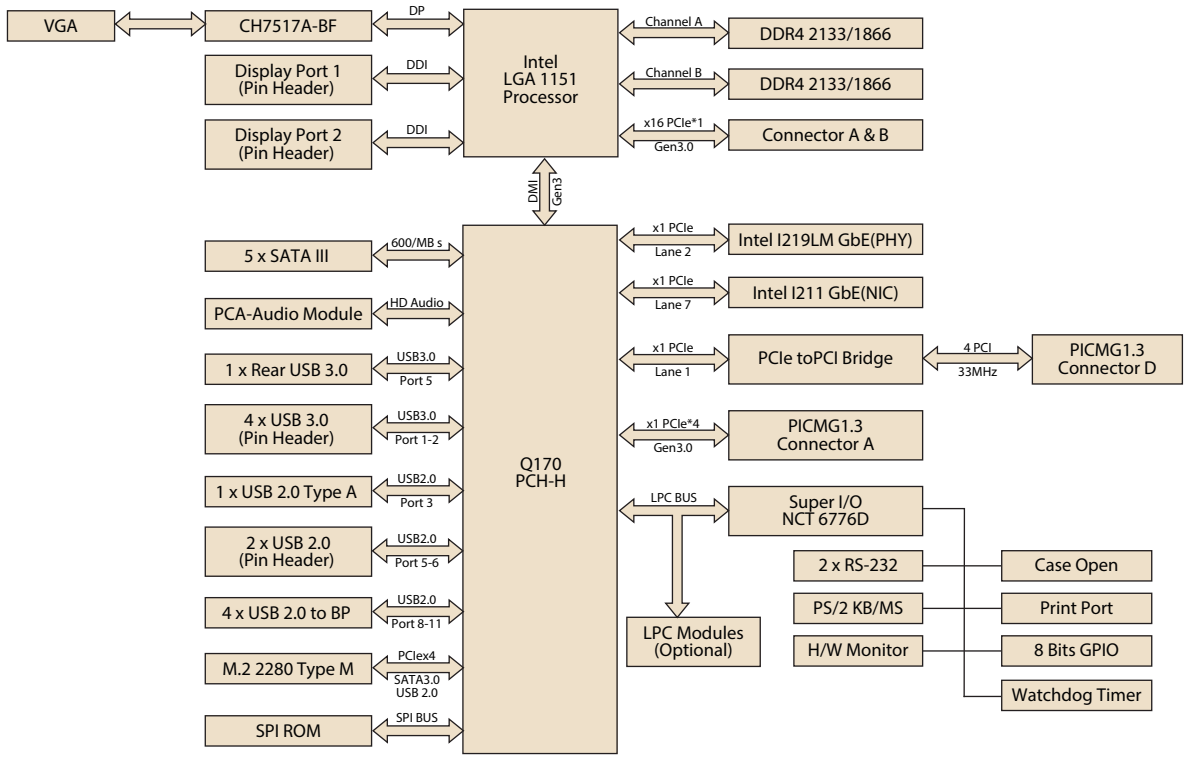
Block Diagram



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

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

Optional Accessories

Part Number	Description
1960052651N021	2U CPU cooler (PWM ran)
1960049408N001	CPU cooler for 1U chassis
PCA-AUDIO-HDB1E	Audio module
PCA-TPM-00A1E	TPM module
PCA-COM232-00A1E	4-port RS-232 LPC module
PCA-COM485-00A1E	4-port RS-422/485 LPC module
1700020277-01	2-port USB 3.0 cable w/ BKT (30 cm)
1700021831-01	DP to DVI-D cable w/ BKT
PCE-DP10-00A1E	DP to DP cable w/ BKT
PCA-TPM-00B1E	TPM 2.0 Module

I/O View

PCE-5129G2-00A1E