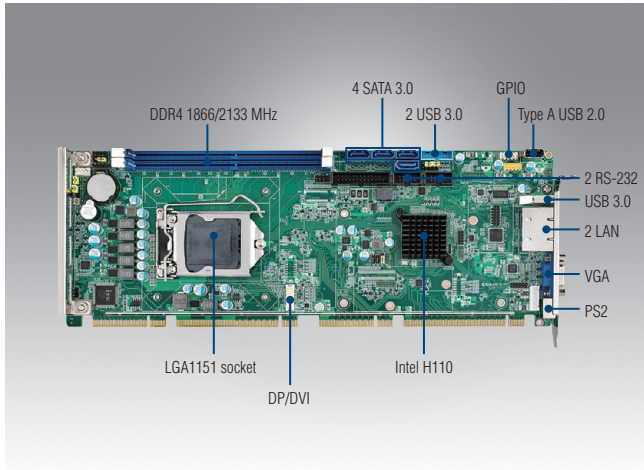


# PCE-5029

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



### Features

- Intel® Core™ i7/i5/i3 LGA1151 processor with H110 chipset
- Up to 32 GB of dual-channel (non-ECC) DDR4 1866/2133 MHz
- PCIe 3.0, USB 3.0, and SATA 3.0 slots
- Supports CRT and DVI-D/DP display (with optional cable)
- Supports Advantech's LPC modules, SUSIAccess, and embedded software APIs

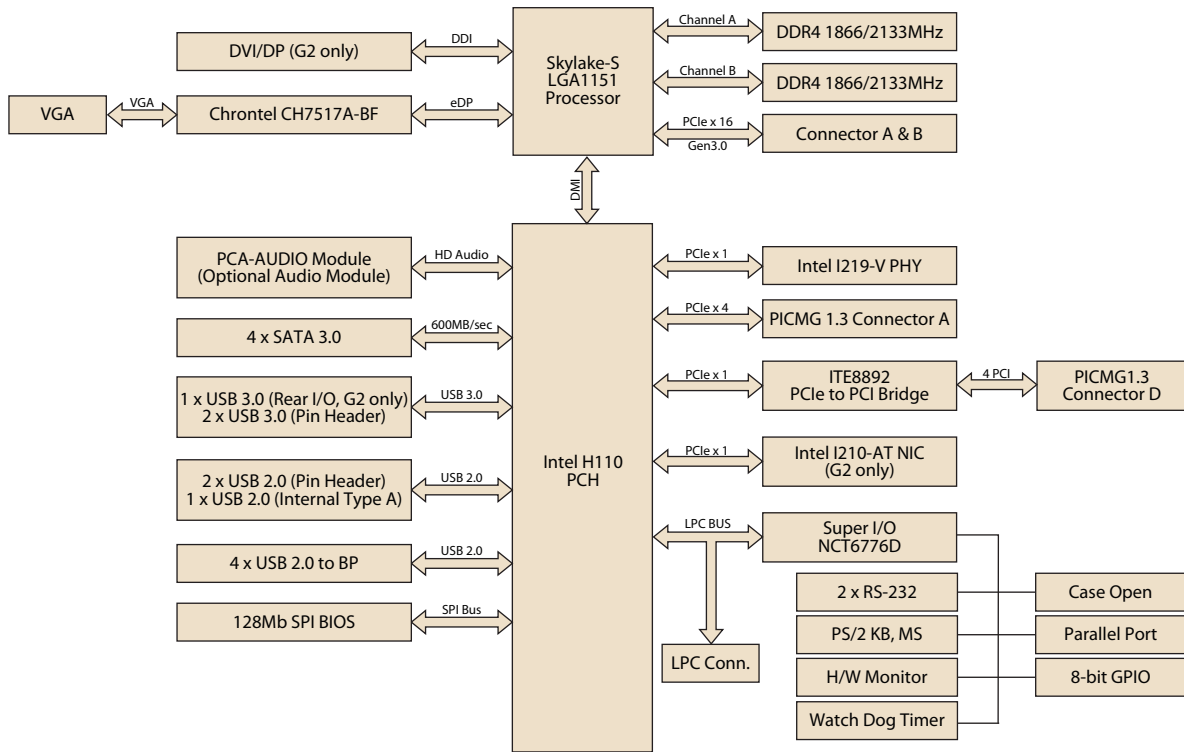
Note 1: Intel 7th generation processors only support Windows 10 (64-bit).

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	3.4 GHz	2.4 GHz	3.4GHz	2.7GHz	3.2 GHz	2.3 GHz	3.9GHz	3.4GHz	3.7 GHz	2.7 GHz	3.3 GHz	2.9 GHz	2.8 GHz	2.6 GHz				
	Cache	8MB	8MB	8 MB	8 MB	6MB	6MB	6 MB	6 MB	3MB	3MB	4 MB	4 MB	3 MB	3 MB	2 MB	2 MB				
	Socket	LGA 1151																			
	Chipset	Intel H110																			
Bus	BIOS	AMI 128Mbit SPI Flash																			
	PCI-Express	1 x PCIe x16 and 1 x PCIe x4 to backplane																			
Memory	PCI	4 x PCI master to backplane, 32-bit, 33 MHz																			
	Technology	Dual-channel (non-ECC) U-DIMM DDR4 1866/2133 MHz																			
	Max. Capacity	32 GB (16 GB per DIMM)																			
Graphics	Socket	2 x DDR4 288-pin DIMM																			
	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	Dual Display	CRT+DP/CRT+DVI																			
	Interface	10/100/1000 Mbps																			
	Controller	LAN 1: Intel® I219-V LAN 2: Intel® I210-AT																			
Rear I/O	Connector with LED	RJ45 x 2																			
	USB 3.0	1 (G2 SKU)																			
	Ethernet	1 (VG SKU); 2 (G2 SKU)																			
	VGA	1																			
	Serial	1 (VG SKU)																			
	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) 2 x USB 3.0 (pin header)																			
	SATA	4																			
	DP/DVI-D	1 (Pin header)																			
	COM	2 (G2 SKU) 1 (VG SKU)																			
	GPIO	8 bits																			
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)																			
	Humidity	40 °C @ 85% relative humidity (non-condensing)																			
Physical	Operating	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	Chipset	Memory	Backplane	Display	USB 3.0	USB 2.0	COM	GbE LAN	AMT	SATA	SW RAID	Intelligent System Module Support
PCE-5029G2-00A4	H110	Non-ECC	PCE-5BXX	VGA + DVI/DP*	3	7	2	2	No	4	No	Yes
PCE-5029VG-00A2E	H110	Non-ECC	PCE-5BXX	VGA	2	7	2	1	No	4	No	No

\*Note: DP cable (P/N: PCE-DP10-00A1E) and DVI-D

## 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
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-5029G2-00A4

PCE-5029VG-00A2E