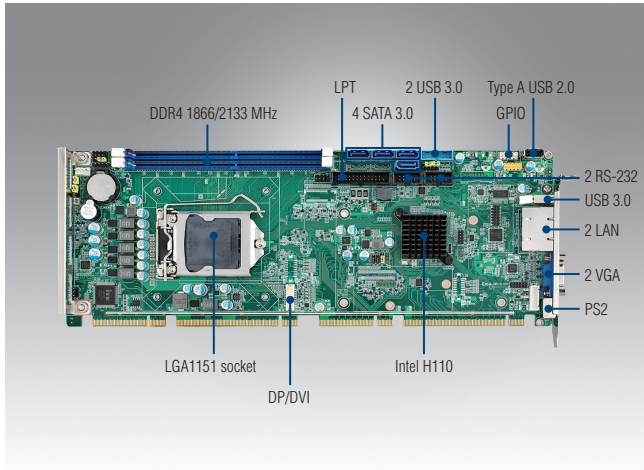


# PCE-5029

## 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



CE FCC

### Features

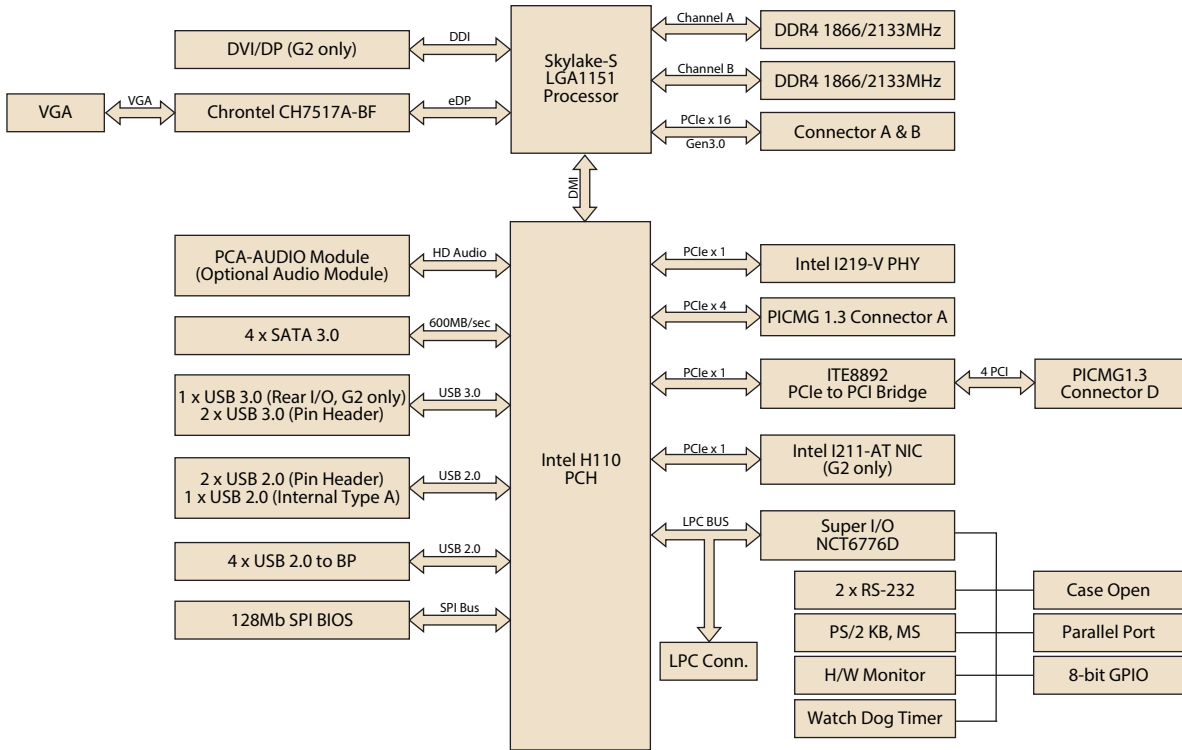
- Intel® Core™ i7/i5/i3 LGA1151 processor with H110 chipset
- Up to 32 GB of dual-channel (non-ECC) DDR4 1866/2133 MHz
- PCIe 3.0, USB 3.0, and SATA 3.0 slots
- Supports CRT and DVI-D/DP display (with optional cable)
- Supports Advantech's LPC modules, SUSIAccess, and embedded software APIs

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

### Specifications

	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	
Processor System	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																
	BIOS	AMI 128Mbit SPI Flash																
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																
	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	Interface	10/100/1000 Mbps																
	Controller	LAN 1: Intel® I219-V LAN 2: Intel® I211-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)															
Watchdog Timer	SATA	4																
	DP/DVI-D	1 (Pin header)																
	COM	2 (G2 SKU) 1 (VG SKU)																
	Parallel	1																
	GPIO	8 bits																
Miscellaneous	Output	System reset																
	Interval	Programmable 1-255 sec																
Power Requirement	Audio	Intel® High Definition audio interface (requires audio extension module PCA-AUDIO-HDB1E)																
	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 -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	Chipset	Memory	Backplane	Display	USB 3.0	USB 2.0	COM	GbE LAN	AMT	SATA	SW RAID	Intelligent System Module Support
PCE-5029G2-00A1E	H110	Non-ECC	PCE-5BXX	VGA + DVI/DP*	3	7	2	2	No	4	No	Yes
PCE-5029VG-00A1E	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
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
2190000902	Warranty card	x1
2001512910	Startup manual	x1
2061512900	Utility CD	x1

## Optional Accessories

Part Number	Description
1700020277-01	2-port USB 3.0 cable w/ BKT (30 cm)
1700002204	2-port USB 2.0 cable w/ BKT (27 cm)
1700021831-01	DP to DVI-D cable w/ BKT for G2 SKU
1701090401	Single COM cable (40 cm)
1701092300	Dual COM cable (28.5 cm)
1960050255N001	CPU cooler for 2U, 4U, and wallmount chassis
1960049408N001	CPU cooler for 1U chassis
PCA-COM485-00A1E	4-port RS-422/485 LPC module
PCA-COM232-00A1E	4-port RS-232 LPC module
PCE-DP10-00A1E	DP redriver board (25 cm) for G2 SKU
PCA-AUDIO-HDB1E	Extension module for HD audio
PCA-TPM-00B1E	TPM 2.0 Module

## I/O View



PCE-5029G2-00A1E



PCE-5029VG-00A1E