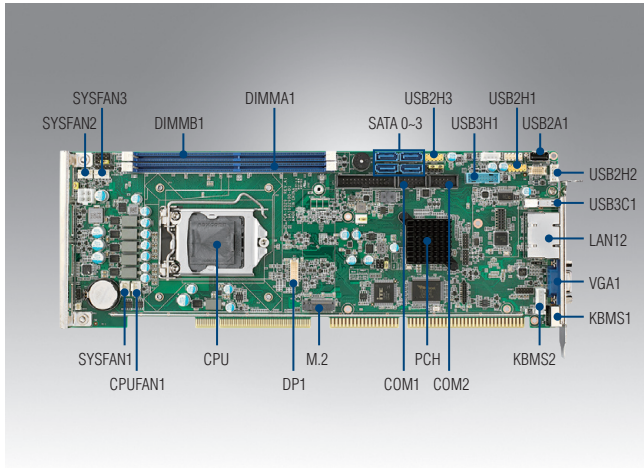


# PCA-6029

## LGA1151 6th and 7th Generation Intel® Core™ i7/i5/i3/Pentium/Celeron System Host Board with VGA/DVI/DP and Dual GbE LAN



### Features

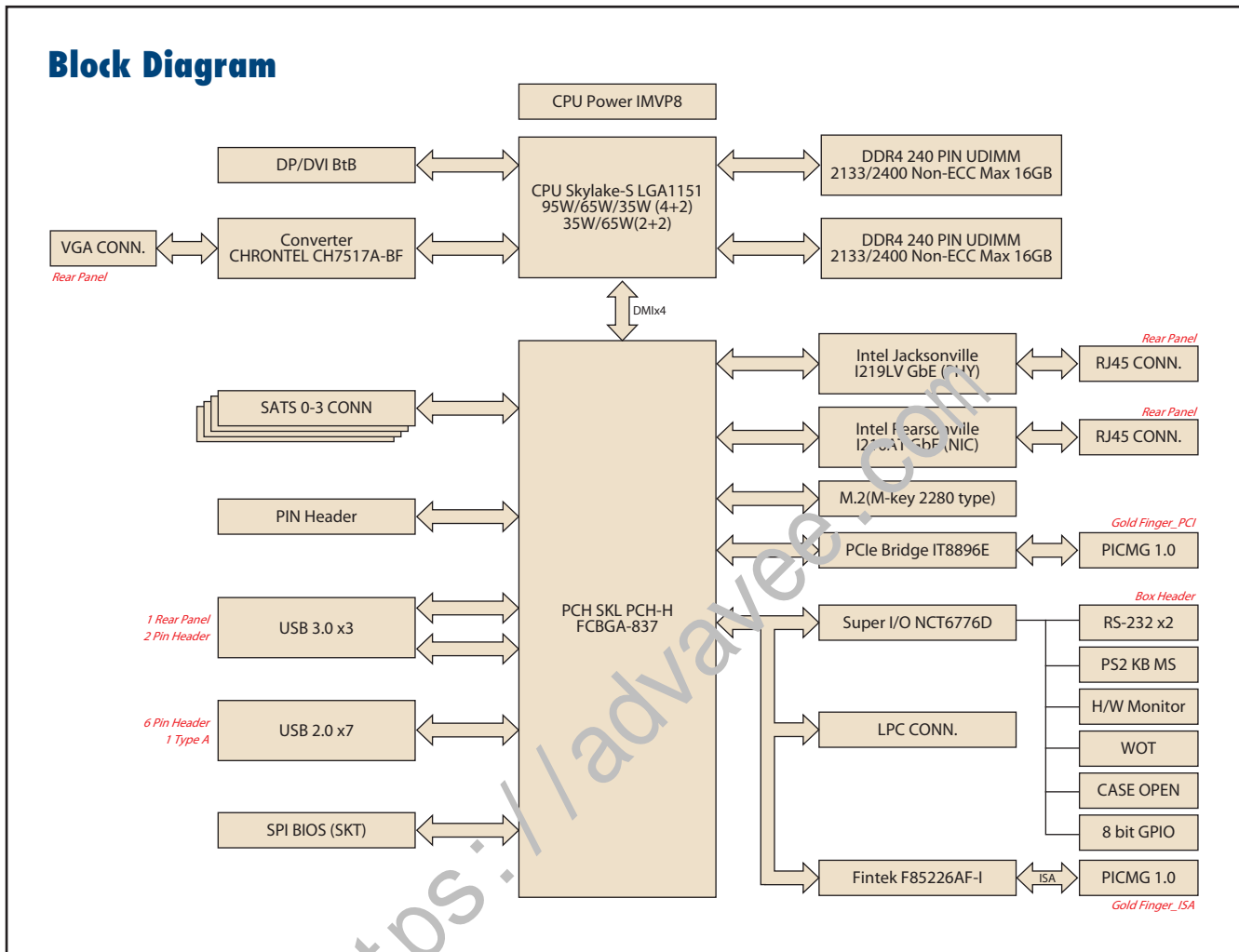
- Supports Intel® Core™ i7/i5/i3 LGA1151 processors with H110 chipset
- Dual Channel (Non-ECC) DDR4 2133/2400 up to 64 GB
- Supports USB 3.0, SATA3.0
- Dual display with VGA and DVI-D/DP (optional)
- Supports Advantech LPC modules
- Supports SUSIAccess and embedded software APIs

### Quiet Specifications

CE FCC

Processor System	CPU	i7-7700	i7-7700T	i7-6700	i7-6700TE	i5-7500	i5-7500T	i5-6500	i5-6500T	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			
	Cache	8MB	8MB	8MB	8MB	6MB	6MB	6MB	6MB	3MB	3MB	4MB	4MB	3MB	3MB	2MB	2MB			
	Socket	LGA 1151																		
	Chipset	Intel H110																		
Bus	BIOS	AMI 128Mbit SPI Flash																		
	ISA	HISA (ISA High Driver)																		
	PCI	32 bit/ 33 MHz PCI																		
Memory	Technology	Dual-channel (non-ECC) U-DIMM DDR4 2133/2400 (6th Gen. CPU up to 2133, 7th Gen. CPU up to 2400)																		
	MHz Max. Capacity	64 GB (32 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																		
	Resolution	Dual display of VGA+DVI or VGA+DP DVI-D supports resolution of up to 1920 x 1200 pixel @ 60 MHz Display Port supports resolutions of up to 4096 x 2304 @ 60 MHz VGA supports resolutions of up to 2048 x 1152 pixel @ 60 Hz																		
Ethernet	Interface	10/100/1000 Mbps																		
	Controller	LAN 1: Intel® I219-V LAN 2: Intel® I210-AT																		
	Connector with LED	RJ45 x 2																		
SATA	SATA 3.0 x 4 (600 MB/sec)																			
Rear I/O	USB3.0	1																		
	Ethernet	2																		
	VGA	1																		
	PS/2	1 (PS/2 Y cable supports 1 x keyboard and 1 x mouse)																		
Internal Connector	USB	Up to 7 x USB2.0 (6 x Pin header, 1x Type A)																		
	SATA	4																		
	DVI-D/DP	1 (Pin header)																		
	COM	2																		
	IrDA	1																		
	GPIO	8-bit																		
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-HDB1E)																		
Power Requirement	Test Environment	Intel® Core™ i7-6700 CPU@ 3.40GHz 65W, 2x 32G 2Rx8 DDR4 3200U																		
	Voltage	+V12												+V5			+V5_SB		+V12_4P	
	Current	0.13A												0.94A			0.08A		1.33A	
Environment	Operating	Non-operating																		
	Temperature/Humidity	0 - 60 °C (32-140 °F); Depends on CPU frequency and cooler solution										-40 - 85 °C and 60 °C @ 95% RH Non-Condensing								
Physical	Operating humidity	40 °C @ 85% RH Non-Condensing																		
	Dimensions (L x H)	338 x 122 mm (13.3" x 4.8")																		

### Block Diagram



### Ordering Information

Part Number	LAN	VGA	DVI-D/DP	COM	SATA	USB	M.2
PCA-6029G2-00A3	2	Yes	1*	2	4	10 (3 x 3.0+7 x 2.0)	1

\*Note: Output DVI-D signal (Required DVI-D cable: 1700021831-01)  
 \*Note: Output DP signal (Required DP cable: PCE-DP10-00A1E)

### Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x2
1701090401	Single COM port cable	x1
1700060202	Keyboard and mouse Y-cable	x1
1700008461-11	4-port USB cable kit	x1
2190000902	Warranty Card	x1
-	Startup manual	x1

### Optional Accessories

Part Number	Description
1701090401	Single COM cable
1701092300	Dual COM cable
1703100260	2-port USB 2.0 cable w/BKT (26cm) for USB2H2
1700020277-01	2-port USB 3.0 cable w/ BKT (30cm)
1700021831-01	DP to DVI-D cable w/ BKT (digital signal only)
PCE-DP10-00A1E	DP to DP cable w/ BKT
1960050255N001	PCA-6029 optimized CPU cooler (2U)
PCA-AUDIO-HDB1E	Audio card
PCA-COM232-00A1E	4 x RS-232 module
PCA-COM485-00A1E	4 x RS-422/485 module
PCA-TPM-00B1E	Trusted platform module compliant with TCG 2.0
PCE-SA01-00A1E	Extension Stack Board

### I/O View



PCA-6029G2-00A3