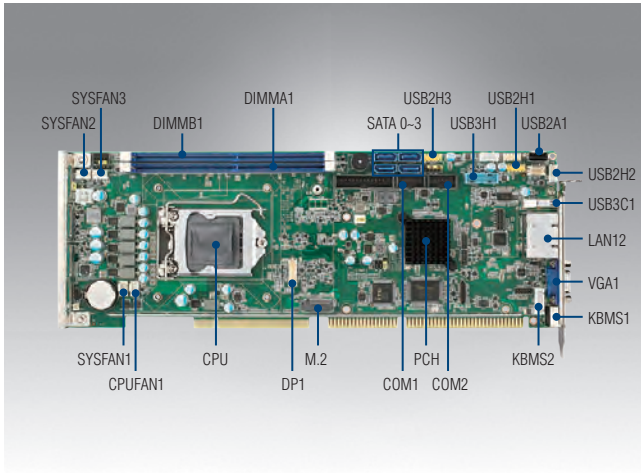


# PCA-6029

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



### Features

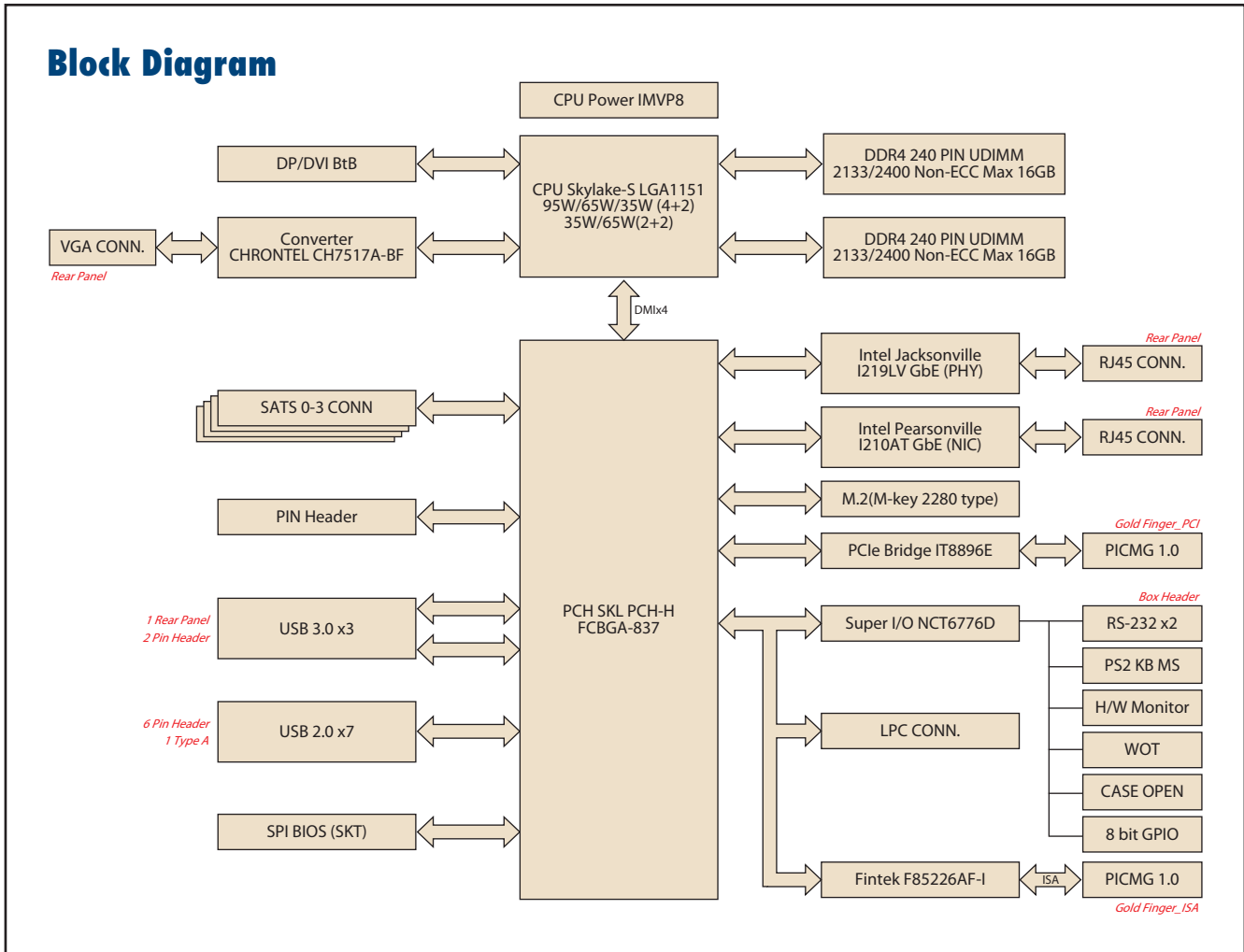
- Supports Intel® Core™ i7/i5/i3 LGA1151 processors with H110 chipset
- Dual Channel (Non-ECC) DDR4 2133/2400 up to 64 GB
- Supports USB 3.0, SATA3.0
- Dual display with VGA and DVI-D/DP (optional)
- Supports Advantech LPC modules
- Supports SUSIAccess and embedded software APIs

### Quiet Specifications

CE FCC

Processor System	CPU	i7-7700	i7-7700T	i7-6700	i7-6700TE	i5-7500	i5-7500T	i5-6500	i5-6500TE	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	
	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	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 resolutions 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																
	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