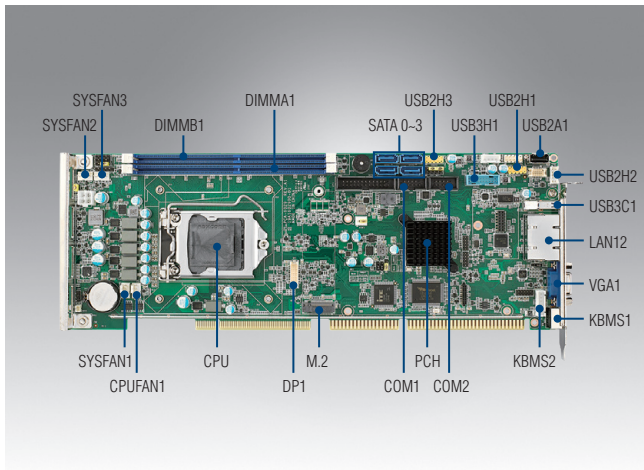


PCA-6029

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



Features

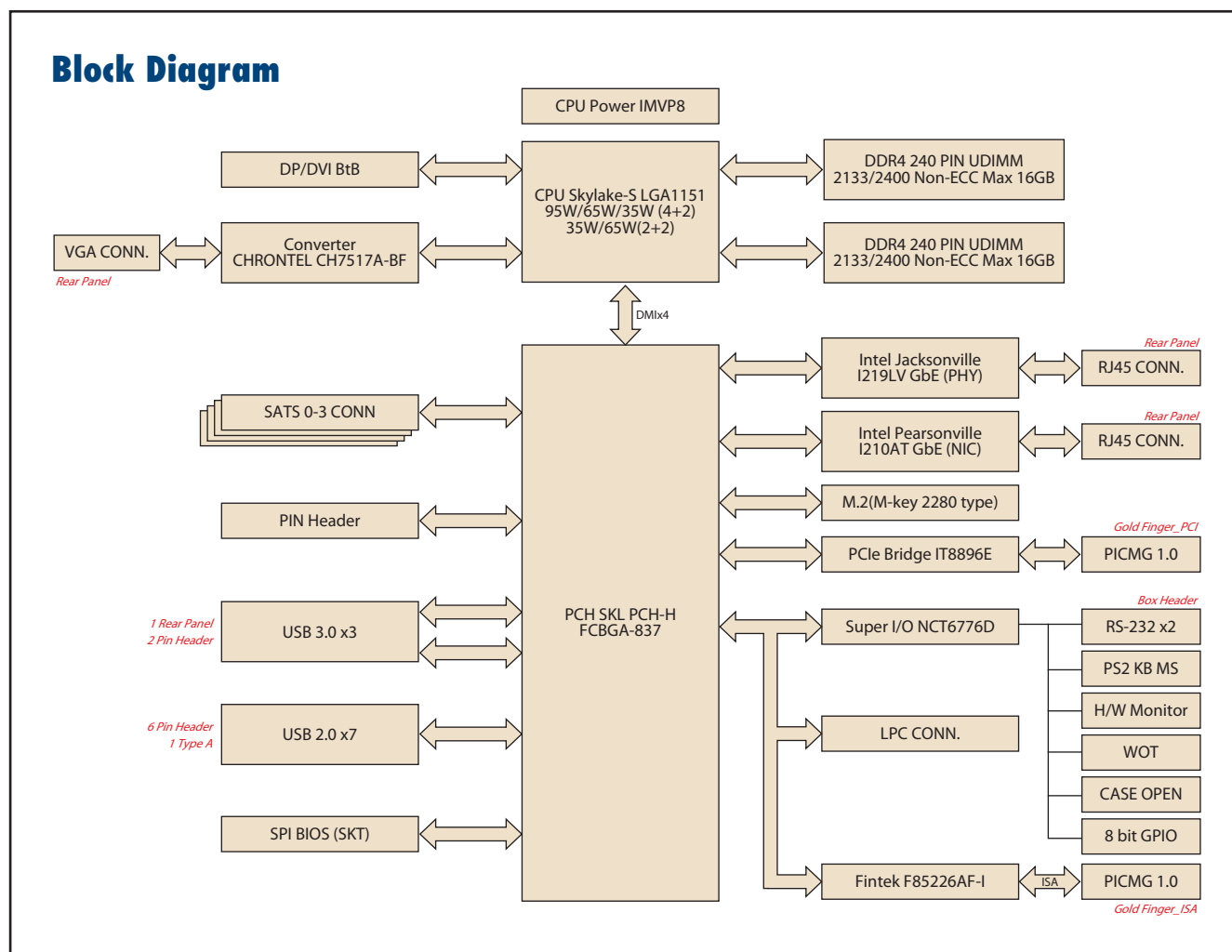
- Supports Intel® Core™ i7/i5/i3 LGA1151 processors with H110 chipset
- Dual Channel (Non-ECC) DDR4 2133/2400 up to 64 GB
- Supports USB 3.0, SATA3.0
- Dual display with VGA and DVI-D/DP (optional)
- Supports Advantech LPC modules
- Supports SUSIAccess and embedded software APIs

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, 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 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	Non-operating
	Temperature/Humidity	0 - 60 °C (32-140 °F); Depends on CPU frequency and cooler solution Operating humidity: 40 °C @ 85% RH Non-Condensing -40 - 85 °C and 60 °C @ 95% RH Non-Condensing
Physical	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