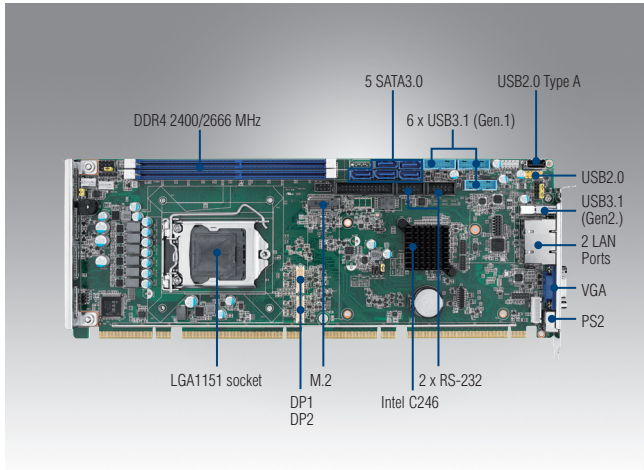


PCE-7131

LGA1151 8th and 9th Generation Intel® Xeon® E/Core™ i7/i5/i3/Pentium® LGA1151 System Host Board with DDR4, SATA 3.0, USB 3.1, M.2, Dual GbE, and Triple Displays



Features

- Intel® Xeon® E Family/Core™ i7/i5/i3 LGA1151 processor with C246 chipset
- Up to 64 GB of dual-channel (non-ECC) DDR4 2400/2666 MHz
- PCIe 3.0, M.2, USB 3.1, SATA 3.0, and SW Raid 0, 1, 5, 10
- Supports VGA and 2 x DVI-D/DP display (with optional cable)
- Supports out-of-band remote management with AMT
- Supports Advantech's LPC modules, SUSIAccess, and embedded software APIs

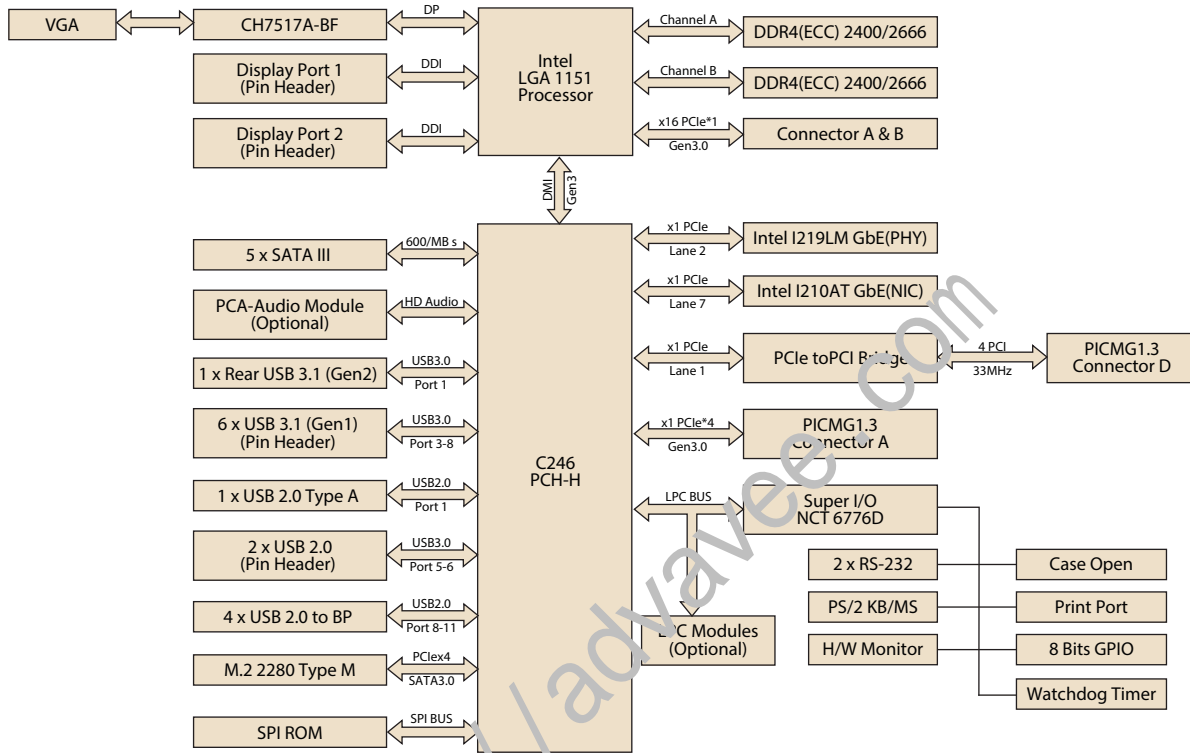
Note: Intel 8th and 9th generation processors only support Windows 10 (64-bit) (RS5 version)

Quiet Specifications

CE FCC

		i7-9700E	i7-9700TE	i7-8700	i7-8700T	i5-9500E	i5-9500TE	i5-8500	i5-8500T	i3-9100E	i3-9100TE	i3-8100	i3-8100T	G5500	G5400T	G4900	G4900T	Xeon E-2278GE	Xeon E-2278GEL	Xeon E-2226GE	Xeon E-2176G	Xeon E-2124G			
Processor System	CPU	i7-9700E	i7-9700TE	i7-8700	i7-8700T	i5-9500E	i5-9500TE	i5-8500	i5-8500T	i3-9100E	i3-9100TE	i3-8100	i3-8100T	G5500	G5400T	G4900	G4900T	Xeon E-2278GE	Xeon E-2278GEL	Xeon E-2226GE	Xeon E-2176G	Xeon E-2124G			
	Speed	2.6GHz	1.8 GHz	3.2 GHz	2.4 GHz	3.0 GHz	2.2 GHz	3.0 GHz	2.1 GHz	3.1 GHz	2.2 GHz	3.6 GHz	3.1 GHz	3.7 GHz	3.1 GHz	3.1 GHz	2.9 GHz	3.3 GHz	3.3 GHz	2.0 GHz	3.4 GHz	3.7 GHz	3.4 GHz		
	L3 Cache	12 MB	12 MB	12 MB	12 MB	9 MB	9 MB	9 MB	9 MB	6 MB	6 MB	6 MB	6 MB	4 MB	4 MB	2 MB	2 MB	16M	16M	12M	12M	8M	8M		
	Cores	8	8	6	6	6	6	6	6	4	4	4	4	2	2	2	2	8	8	6	6	4	4		
	TDP	65 W	35 W	65 W	35 W	65 W	35 W	65 W	35 W	65 W	35 W	65 W	35 W	58 W	35 W	54 W	35 W	80W	35W	80W	80W	80W	71W	71W	
	SKU/Chipset	Intel® C246																							
	BIOS	AMI® SPI Flash 256 Mbit																							
Bus	PCI-Express	1 x PCIe x16/2 x PCIe x8 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 2400/2666 MHz (supports x8/x16) (Note: Intel ECC-supported processor must be selected to enable ECC function)																							
	Max. Capacity	up to 64GB (based on CPU)																							
	Socket	2 x DDR4 288-pin DIMM																							
Graphics	Controller	Chipset integrated with Intel® HD Graphics																							
	VRAM	Shared system memory is subject to OS																							
	VGA	Supports resolutions of up to 1920 x 1200 pixels @ 60 MHz																							
	DVI-D	Supports resolutions of up to 1920 x 1200 pixels @ 60 MHz																							
	Display Port	Supports resolutions of up to 1920 x 1080 pixels @ 60 Hz																							
	Triple Display	VGA+DP/DVI-D+DP/DVI-D																							
Ethernet	Interface	10/100/1000 Mbps																							
	Controller	LAN 1: Intel® I219-LM, LAN 2: Intel® I210-AT																							
	Connector with LED	2 x RJ45																							
Rear I/O	USB 3.1 Gen2	1																							
	Ethernet	2																							
	VGA	1																							
	PS/2	1 (PS/2 Y cable supports 1 x keyboard and 1 x mouse)																							
			7 x USB 2.0 (pin header*2 + USB Type A*1 + 4 on backplane) 4 x USB 3.0 (pin header)																						
Internal Connector	SATA (SW Raid 0,1,5,10)	5																							
	M.2 (2280 Type M)	1 (support SATA3.0 and PCIe interface)																							
	DP/DVI-D	2 (Pin header)																							
	COM	2																							
	IrDA	1																							
	GPIO	8bit																							
			System reset																						
Watchdog Timer	Interval	Programmable 1-255 sec																							
Miscellaneous	Audio	Intel® High Definition audio interface (requires audio extension module PCA-AUDIO-HDB1E)																							
Power Requirement	Test Environment	i7-8700, 3.2 GHz, with 2 x 8-GB DDR4 2400																							
	Voltage	+12V								+5V								+3.3V							
	Current	4.30A								2.15A								0.69A							
Environment	Operating	Non-Operating																							
	Temperature	0 ~ 60 °C (dependent on CPU and cooler solution)											-40 ~ 85 °C												
	Humidity	40 °C @ 85% relative humidity (non-condensing)											60 °C @ 95% relative humidity (non-condensing)												
Physical	Dimensions (L x H)	338 x 122 mm (13.3" x 4.8")																							

Block Diagram



Ordering Information

Part Number	PCH	Memory	Backplane	LAN	VGA	DP/DVI-D	COM	SATA III	M.2	USB 2.0	USB 3.1 (Gen1)	USB3.1 (Gen2)	S/W Raid	AMT
PCE-7131G2-00A2	C246	ECC/Non-ECC	PCE-5BXX PCE-7BXX	2	Yes	2*	2	5	1	7	6	1	Yes	Yes

Note: DP/DVI-D cable is optional

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
2001512910	Startup manual	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
1700028292-01	2-port USB 3.0 cable w/ BKT (30 cm)
1700031719-01	4-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-7131G2-00A2