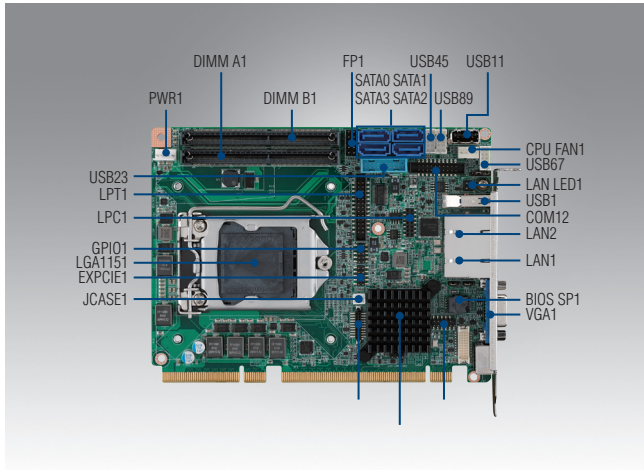


# PCE-4129

## LGA 1151 6th and 7th Gen Intel® Xeon® and Core™ i7/i5/i3 Half-size SHB with PCIe 3.0/Triple Independent Display/ Dual GbE LAN/SATA III/m-SATA/ USB 3.0



CE FCC

### Features

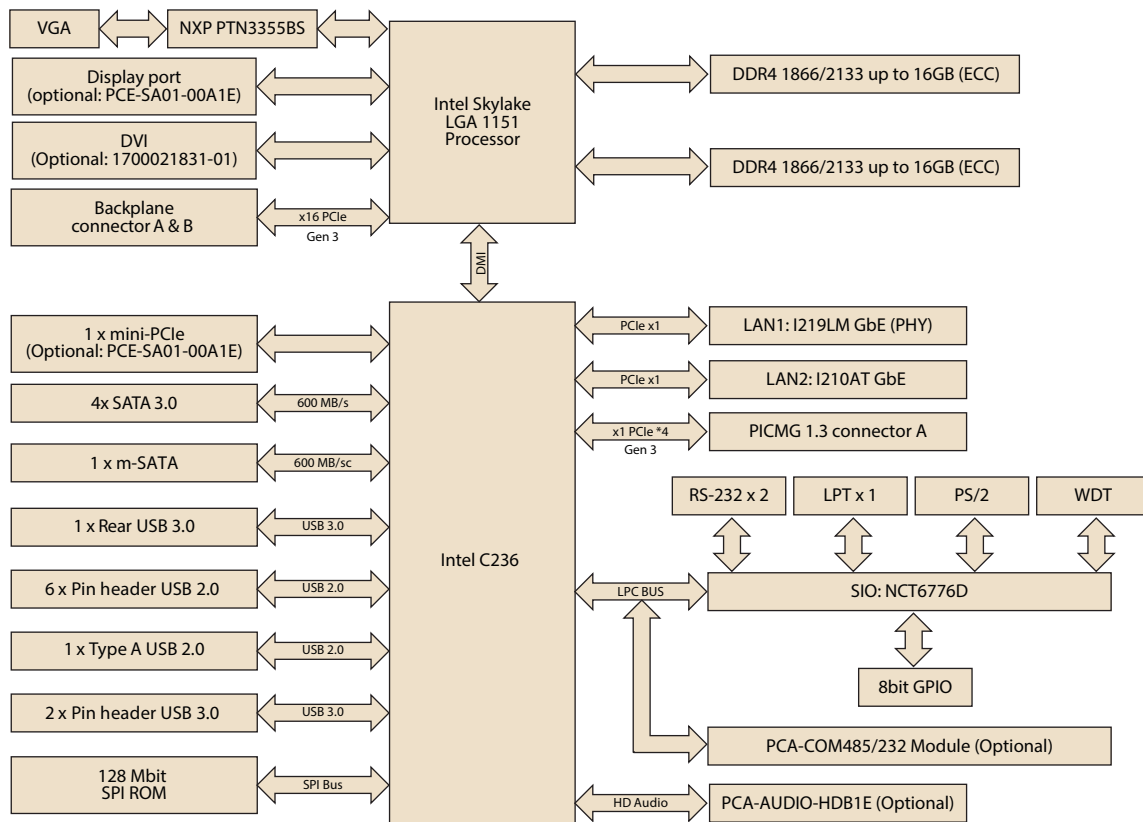
- Complies with PICMG 1.3
- Supports Intel Xeon E3 1200v5 series, Core i7/i5/i3 LGA1151 processors with C236
- Dual Channel DDR4 1866/2133 (ECC) up to 32 GB
- Supports PCIe 3.0, USB 3.0, SATA3.0, SW RAID 0, 1, 5, 10
- Supports triple displays: VGA+DVI-D (optional) + DP (optional)
- Supports out-of-band remote management with AMT9.0
- Supports Advantech TPM module (optional)
- Supports SUSIAccess and embedded software APIs

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

### Specifications

	CPU	E3-1275v6	E3-1275v5	E3-1225v5	E3-1268Lv5	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	CPU	E3-1275v6	E3-1275v5	E3-1225v5	E3-1268Lv5	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	
	Base Frequency	3.8 GHz	3.6 GHz	3.3 GHz	2.4 GHz	3.6 GHz	2.9 GHz	3.4 GHz	2.4 GHz	3.4 GHz	2.7 GHz	3.2 GHz	2.3 GHz	3.9 GHz	3.4 GHz	3.7 GHz	2.7 GHz	3.3 GHz	2.9 GHz	2.8 GHz	2.6 GHz	
	L3 Cache	8 MB	8 MB	6 MB	8 MB	8 MB	8 MB	8 MB	8 MB	6 MB	6 MB	6 MB	6 MB	3 MB	3 MB	4 MB	4 MB	3 MB	3 MB	2 MB	2 MB	
	SKU/Chipset	Intel C236																				
	BIOS	AMI 128 Mbit SPI Flash																				
Bus	PCI-Express	Two x8 or one x16, plus four x1 to backplane (PCIe Gen 3.0)																				
Memory	Technology	Dual channel DDR4 ECC 1866/2133 MHz (ECC function enable depends on processor support)																				
	Max. Cap.	32 GB (16 GB per DIMM)																				
	Socket	DDR4 260-pin SO-DIMM X2																				
Graphics	Controller	Chipset integrated Intel HD Graphics																				
	VRAM	Shared system memory is subject to OS																				
	CRT	Supports resolution up to 1920 x 1200 pixel at 60MHz																				
	DVI-D	Supports resolution up to 1920 x 1200 pixel at 60MHz																				
	DP	Supports resolution up to 4096 x 2304 @ 60Hz																				
	Triple Display	CRT + DP (Optional: PCE-SA01-00A1E) + DVI-D (Optional: 1700021831-01)																				
Ethernet	Interface	10/100/1000 Mbps																				
	Controller	LAN 1: Intel I219LM LAN 2: Intel I210AT																				
	Connector with LED	RJ45 x 2																				
Rear I/O	USB 3.0	1																				
	Ethernet	2																				
	VGA	1																				
	PS/2	1 (PS/2 Y cable supports 1 x keyboard and 1 x mouse)																				
Internal Connector	USB	7 USB2.0 (Pin headers*6 + USB Type A*1); 2 USB3.0 (Pin header)																				
	SATA 3.0	4 (600 MB/sec, supports S/W RAID 0, 1, 5, 10)																				
	m-SATA	1 (600 MB/sec)																				
	mini-PCIe	1 (Optional: PCE-SA01-00A1E, PCIe Gen 2.0)																				
	COM	2 (RS-232)																				
	Parallel	1 (SPP/EPP)																				
	GPIO	8 bits																				
Watchdog Timer	Output	System reset																				
	Interval	Programmable 1-255 sec																				
Miscellaneous	Audio	Intel High Definition audio interface (requires an audio extension module P/N: PCA-AUDIO-HDB1E)																				
	Test environment	Intel Xeon E3-1225 v5 (3.30GHz), DDR4 2133 8GB *2																				
Power Requirement	Voltage	12V	5V	3.3V		5VSB	-12V			-5V	-5V											
	Current	4.6	0.01	0.32		0.08	0			0	0											
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)	167.64 x 126.39 mm (6.6" x 4.98")																				

## Board Diagram



## Ordering Information

Part Number	PCH	Memory	Backplane	LAN	VGA	DVI-D	DP	COM	SATA III	USB 2.0	USB 3.0	m-SATA	mini-PCIe	S/W RAID	AMT
PCE-4129G2-00A1E	C236	ECC/ Non-ECC	PCE-3BXX PCE-4BXX	2	1	1*	1**	2 RS-232 4 RS-422/485 or 4 RS-232 (optional)***	4	7	3	1	1**	Yes	Yes

\* DVI-D cable (1700021831-01) is optional.

\*\* PCE-SA01-00A1E is required. PCE-SA01-00A1E is compatible with IPC-3026/IPC-6806S/ACP-4D00/ACP-4020, but not compatible with IPC-3012.

\*\*\*PCA-COM485-00A1E is required for additional 4 RS422/485; PCA-COM232-00A1E is required for additional 4 RS232.

## Optional Accessories

Part Number	Description
PCA-COM485-00A1E	4 x RS-422/485 module
PCA-COM232-00A1E	4 x RS-232 module
PCA-AUDIO-HDB1E	Audio module with Realtek ACL892
PCA-TPM-00B1E	TPM 2.0 module
PCE-SA01-00A1E	IO extension module
1700021831-01	DP to DVI-D cable w/ BKT
1960053065N001	CPU cooler for 1U Chassis and 55W TDP
1960053207N001	CPU cooler for 1.5U Chassis and 65W TDP
1960050255N001/1960077101N001	CPU cooler for 2U Chassis and 95W TDP

## Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x1
1700022749-11	Serial ATA HDD power cable	x1
1700008762	2-port COM cable	x1
1700002223	1-port LPT cable	x1
1700060202	Keyboard and mouse Y-cable	x1
1700014398-11	4-port USB cable kit	x1
1700028292-01	2 ports USB3.0 cable W/BKT	x1
2001302910	Startup manual	x1
2061302900	Utility CD	x1

## Bracket View



PCE-4129G2-00A1E