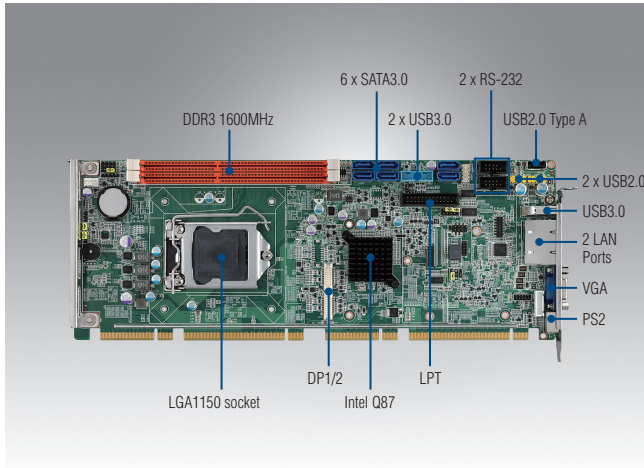


# PCE-5128

## LGA1150 Intel® Core™ i7/i5/i3/Pentium® SHB DDR3/SATA 3.0/USB3.0/Dual GbE/ 3 Displays



### Features

- Supports Intel® Core™ i7/i5/i3 LGA1150 processors with Q87
- Dual Channel (Non-ECC) DDR3 1333/1600 up to 16 GB
- Supports PCIE 3.0, USB 3.0, SATA3.0, SW Raid 0, 1, 5, 10
- Supports CRT and 2 x DP/DVI-D (optional) display
- Supports out-of-band remote management with AMT9.0
- Supports Advantech TPM module (LPC I/O)
- Supports SUSIAccess and Embedded Software APIs

#### Software APIs:



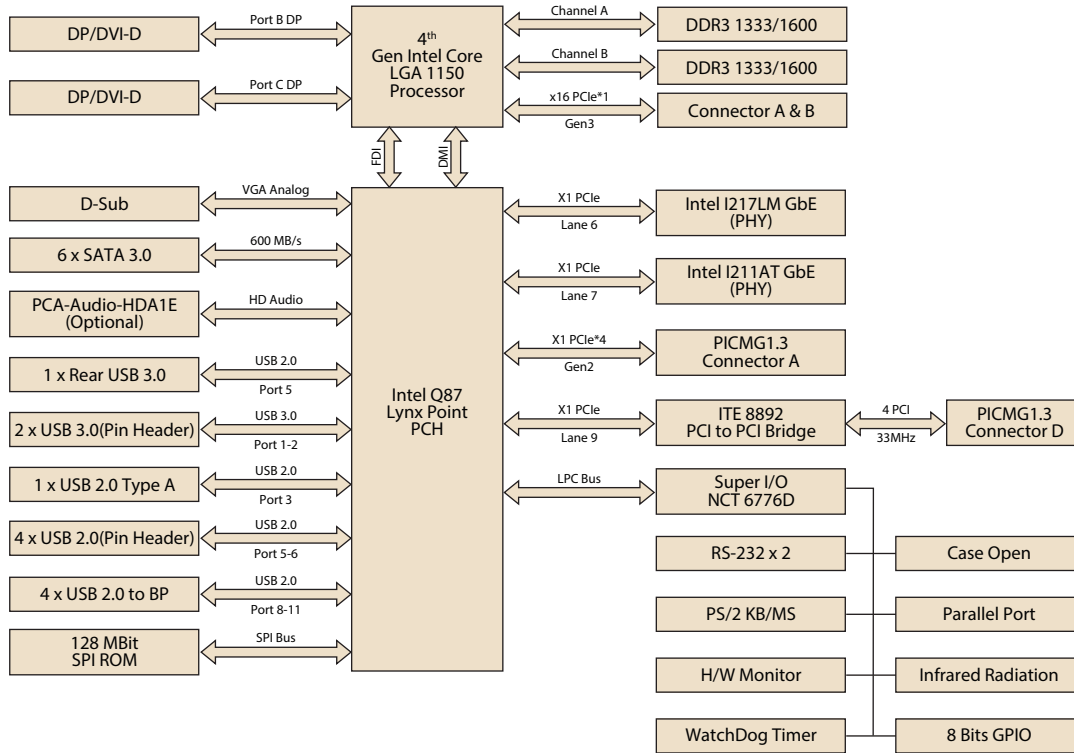
#### Utilities:



### Specifications

		Haswell refresh CPUs are supported from BIOS V2.xx							
Processor System	CPU	i7-4790S	i5-4590S	i5-4590T	i3-4360	i3-4350T	i3-4340TE		
	Base Frequency	3.2GHz	3.0GHz	2.0GHz	3.7GHz	3.1GHz	2.6GHz		
	L3 Cache	8MB	6MB	6MB	4MB	4MB	4MB		
	Hawell CPUs are supported by both BIOS V1.xx and V2.xx								
	CPU	i7-4770S	i7-4770TE	i5-4570S	i5-4570TE	i3-4330	i3-4330TE	G4320	G4320TE
	Base Frequency	3.1GHz	2.3GHz	2.9GHz	2.7GHz	3.5GHz	2.4GHz	3.2GHz	2.3GHz
L3 Cache	8MB	8M	6MB	4MB	3MB	3MB	3MB	3MB	
	SKU/Chipset	Intel Q87							
	BIOS	AMI 128Mbit SPI Flash							
Bus	PCI-Express	One x16 plus four x1 to backplane							
	PCI	Four 32-bit 33 MHz PCI Masters to backplane							
Memory	Technology	Dual channel (Non-ECC) DDR3 1333/1600							
	Max. Cap.	16 GB (8 GB per DIMM)							
	Socket	DDR3 240-pin DIMM x 2							
Graphics	Controller	Chipset integrated Intel HD Graphics							
	VRAM	Shared system memory is subject to OS							
	CRT	Supports resolution up to 2048 x 1536 pixel at 60MHz							
	DVI-D	Supports resolution up to 1920 x 1200 pixel at 60MHz							
	Triple Display	CRT+DP/DVI-D+DP/DVI-D							
Ethernet	Interface	10/100/1000 Mbps							
	Controller	LAN 1: Intel I217LM LAN 2: Intel I211							
	Connector with LED	RJ-45 x 2							
SATA	S/W Raid 0, 1, 5, 10	SATA 3.0 x 6 (600 MB/sec)							
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)							
			Night USB2.0 (Pin-header*4+USB Type A*1+ 4 on backplane); Two USB3.0 (Pin header)						
Internal Connector	SATA	6							
	DP/DVI-D	2 (Pin header)							
	COM	2							
	Parallel	1							
	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-HDA1E)							
Power Requirement	Test Environment	Core i7-4770S DDR3 1600 8GB x 2							
	Voltage	+12V	+5V	+3.3V	+5Vsb	-12V	-5V		
	Current	4.02A	1.36A	0.81A	0.09A	0A	0A		
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	338 mm (L) x 122 mm (W) (13.3" x 4.8")							

## Block Diagram



## Ordering Information

Part Number	PCH	Memory	Backplane	LAN	VGA	DP/DVI-D	COM	SATA III	USB 2.0	USB 3.0	S/W Raid	AMT
PCE-5128G2-00A1E	Q87	Non-ECC	PCE-5BXX	2	Yes	2*	2	6	10	3	Yes	Yes

Note: Both DP and DVI-D cable are optional.

## Optional Accessories

Part Number	Description
1960047831N001	PCE-5128 optimized CPU Cooler (2U)
PCA-AUDIO-HDA1E	Audio module
PCA-TPM-00A1E	TPM module(Trust Platform management)
PCA-COM232-00A1E	4 Ports RS-232 Module by LPC
PCA-COM485-00A1E	4 Ports RS-485/422 Module by LPC
1700020277-01	2 ports USB 3.0 cable W/ BKT(30cm)
1700021831-01	DP to DVI-D cable w/ BKT
PCE-DP10-00A1E	DP to DP cable w/ BKT

## Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x2
1700022749-11	Serial ATA HDD power cable	x1
1701260305	COM + printer ports cable kit	x1
1700060202	Keyboard and mouse Y-cable	x1
1700008461	4-port USB cable kit	x1
9689000068	Jumper package	x1
2190000902	Warranty Card	x1
2006512800	Startup manual	x1
2066512800	Utility CD	x1

## Bracket View



PCE-5128G2-00A1E