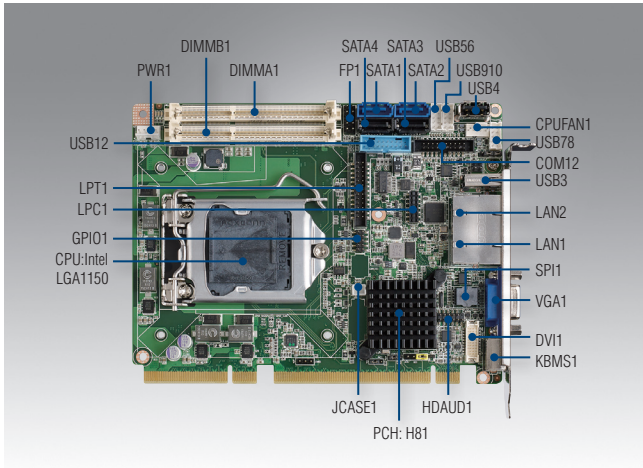


# PCE-3028

## LGA 1150 4th Generation Intel® Core™ i7/i5/i3 Half-size SHB with PCIe/VGA/DVI/Dual GbE LAN



### Features

- Complies with PICMG 1.3
- Supports Intel Core i7/i5/i3 LGA1150 processors with H81
- Dual Channel (Non-ECC) DDR3 1066/1333/1600 up to 16 GB
- Supports USB 3.0, SATA3.0
- Supports CRT and DVI-D (optional) display
- Support dual 10/100/1000 Mbps Ethernet
- Supports Advantech TPM module (LPC I/O)
- Supports SUSIAccess and Embedded Software APIs

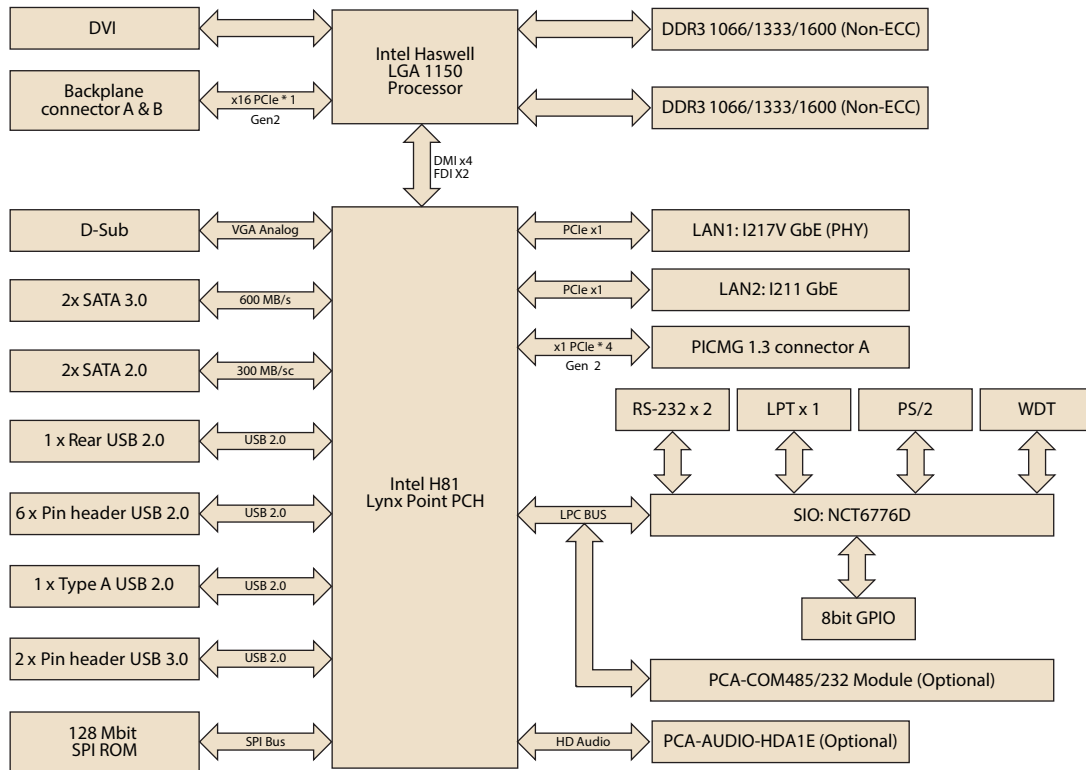
Quiet

CE FCC

### Specifications

Processor System	CPU	i7-4790S	i7-4790T	i7-4770S	i7-4770TE	i5-4590S	i5-4590T	i5-4570S	i5-4570TE	i3-4360	i3-4350T	i3-4330	i3-4330TE	G3420	G3320TE	G1820	G1820TE
Base Frequency		3.2GHz	2.7GHz	3.1GHz	2.3GHz	3.0GHz	2.0GHz	2.9GHz	2.7GHz	3.7GHz	3.1GHz	3.5GHz	2.4GHz	3.2 GHz	2.3 GHz	2.7 GHz	2.2 GHz
L3 Cache		8MB	8MB	8MB	8MB	6MB	6MB	6MB	4MB	4MB	4MB	4MB	4MB	3MB	3MB	2MB	2MB
SKU/Chipset		Intel H81															
BIOS		AMI 128Mbit SPI Flash															
Bus	PCI-Express	One x16 plus four x1 to backplane															
Memory	Technology	Dual channel (Non-ECC) DDR3 1066/1333/1600															
	Max. Cap.	16 GB (8 GB per DIMM)															
	Socket	DDR3 204-pin SO-DIMM x2															
Graphics	Controller	Chipset integrated Intel GT2 4600 or GT1 HD graphics (Depends on CPU support)															
	VRAM	Shared system memory is subject to OS															
	CRT	Supports resolution up to 1920 x 1200 pixel at 60Hz															
	DVI-D	Supports resolution up to 1920 x 1200 pixel at 60Hz															
	Dual Independent Display	VGA+DVI-D															
Ethernet	Interface	10/100/1000 Mbps															
	Controller	LAN 1: Intel I217V LAN 2: Intel I211AT															
	Connector with LED	RJ-45 x 2															
SATA	Max. Data Transfer Rate	SATA 3.0 x 2 (600 MB/sec), SATA 2.0 x 2 (300 MB/sec)															
Rear I/O	USB 2.0	1															
	Ethernet	2															
	VGA	1															
	PS/2	1 (PS/2 Y cable supports 1 x keyboard and 1 x mouse)															
Internal Connector	USB	Seven USB 2.0 (Pin-header x 6 + USB Type A x 1); Two USB 3.0 (Pin header)															
	SATA	4															
	DVI-D	1															
	COM	2															
	Parallel	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	Intel Core i7-4770S (3.1GHz), DDR3 1600 8GB*2															
	Voltage	12V	5V	3.3V	5VSB	-5V	-12V										
	Current	7.26	1.06	0.42	0	0	0										
Environment	Operating	0 ~ 60 °C (32-140 °F); Depends on CPU frequency and cooler solution										Non-operating					
	Temperature/Humidity	Operating humidity: 40 °C @ 85% RH Non-Condensing										-40 ~ 85 °C and 60 °C @ 95% RH Non-Condensing					
Physical	Dimensions (L x H)	167.64 x 126.39 mm (6.6" x 4.98")															

## Block Diagram



## Ordering Information

Part Number	PCH	Memory	Backplane	LAN	VGA	DVI-D	COM	SATA III	SATA II	USB 2.0	USB 3.0	S/W Raid	AMT
PCE-3028G2-00A1E	H81	Non-ECC	PCE-3XXX	2	1	1	RS-232 x 2 onboard Optional RS-422/485 x 4 or RS-232 x 4 via module	2	2	8	2	No	No

Note: DVI-D cable is optional

## Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x1
1703150102	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
1700020277-01	2 ports USB 3.0 cable W/BKT	x1
1700014398	4-port USB cable kit	x1
1703040100	Power Converter	x1
9689000002	Jumper package	x1
2190000902	Warranty Card	x1
2006302800	Startup manual	x1
2066302800	Utility CD	x1

## Optional Accessories

Part Number	Description
PCA-COM485-00A1E	4 x RS-244/485 module
PCA-COM232-00A1E	4 x RS-232 module
PCA-AUDIO-HDA1E	Audio module
PCA-TPM-00A1E	TPM module (Trust Platform management)
1700021831-01	DVI-DVI cable with bracket
1960047831N001	2U cooler for Intel Core i7-4770S, i7-4770TE, i5-4570S, i5-4570TE, i3-4330, i3-4330TE, G3420, G3220TE, G1820, G1820TE
1960053207N001	1.5 U cooler for Intel Core i7-4770S, i7-4770TE, i5-4570S, i5-4570TE, i3-4330, i3-4330TE, G3420, G3220TE, G1820, G1820TE
1960053065N001	1U blower for Intel Core i5-4570S, i5-4570TE, i3-4330, i3-4330TE, G3420, G3220TE, G1820, G1820TE

## I/O View

