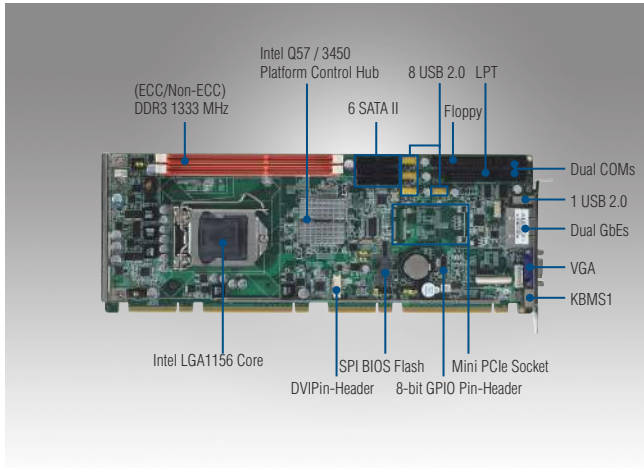


# PCE-5125

LGA1156 Intel® Core™ i7/i5/i3/Xeon® SHB with DDR3/Dual GbE/SATA 2.0



## Features

- LGA 1156 Intel® Core™ i7/i5/i3/Pentium®/Xeon® processors
- Dual Channel (ECC/Non-ECC) DDR3 1333 MHz up to 8 GB
- Supports mini-PCIe 1.2 interface
- Supports embedded software APIs and Utilities

### Software APIs:



### Utilities:

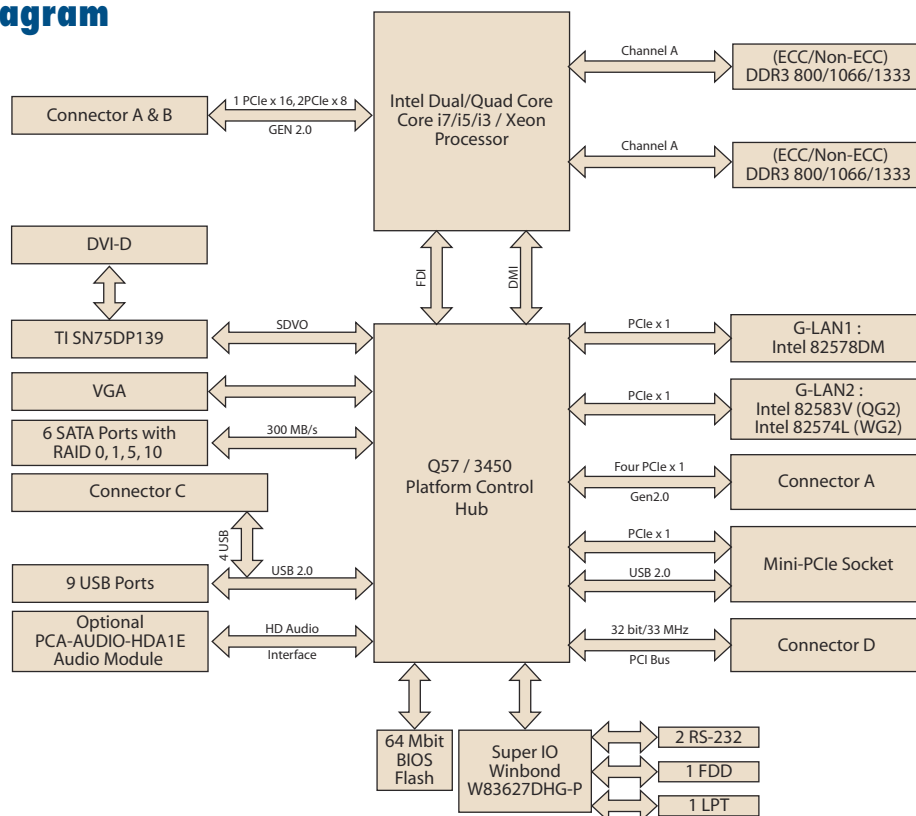


CE FCC

## Specifications

Processor System	CPU	Xeon X3450/3430	Core i7-860	Core i5-750	Core i5-660	Core i3-540	Pentium G6950	
	Speed	2.66/2.40 GHz	2.80 GHz	2.66 GHz	3.33 GHz	3.06 GHz	2.8 GHz	
	Integrated Graphics	-	-	-	Yes	Yes	Yes	
	L3 Cache	8 MB	8 MB	8 MB	4 MB	4 MB	3 MB	
	Support Model	WG2	QG2	QG2	QG2/WG2	QG2/WG2	QG2/WG2	
	Socket	LGA1156						
	Chipset	QG2: Intel Q57 WG2: Intel 3450						
BIOS	AMI 64 Mbit SPI Flash							
Bus	PCI-Express	One PCIe x16 or two x8, plus four x1 to backplane (Gen 2.0) (Only WG2 version supports two PCIe x8 to support PCE-7XXX backplanes)						
	PCI	Four 32-bit 33 MHz PCI Masters to Backplane						
Memory	Technology	Dual channel (ECC/Non-ECC) DDR3 800/1066/1333 MHz (ECC is only for WG2 version) Note: CPU don't support 512M x 8-bit memory technology						
	Max. Cap.	4 GB per DIMM, total 8 GB, non-ECC for QG2 version; ECC for WG2 version						
	Socket	Two 240-pin DDR3 memory sockets						
Graphics	Onboard	Intel HD Graphics (Only the Core i5 6XX, Core i35XX and Pentium G69XX processors are embedded with Intel HD Graphics)						
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed						
	Video Output	15 pin VGA D-sub connector x1/onboard DVI pin header x 1 (DVI cable optional)						
Ethernet	Interface	10/100/1000 Mbps						
	Controller	LAN1: Intel 82578DM LAN2: Intel 82583V for QG2 version; Intel 82574L for WG2 version						
	Connector	RJ-45 with LED Connector x 2 for QG2, WG2 versions						
SATA 2	Max. Transfer Rate	300 MB/s						
	Channel	6						
	RAID	0, 1, 5, 10						
EIDE	Mode	N/A						
	Channel	N/A						
I/O Interface	USB 2.0	9 ports on the SHB, 4 ports to the BP						
	Serial	2 RS-232 with pin Headers						
	Parallel	1 (EPP/ECP)						
	FDD	1						
	PS/2	1 (for mouse and keyboard, a Y cable is included in the package)						
	Mini PCI Express Socket	1 (1 PCIe x 1 Gen 2.0 and 1 USB 2.0)						
Watchdog Timer	Output	System reset						
	Interval	Programmable, 1~255 sec/min						
Miscellaneous	Audio Output	Intel High Definition audio interface (requires an audio extension module, P/N: PCA-AUDIO-HDA1E)						
	Test Equipment	Intel Core i7-860 processor; DDR3 1333 MHz 2 GB x 2						
Power Requirement	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V	
	Current	12.156 A	15.576 A	12.108 A	0.024 A	0 A	0 A	
	Operating	Non-Operating						
Environment	Temperature	0 ~ 60° C (32 ~ 140° F) (operating humidity: 40° C @ 85% RH Non-Condensing)				-40 ~ 85° C and 60° C @ 95% RH Non-Condensing		
Physical	Dimensions	338 x 122 mm (13.3" x 4.8")						

## Board Diagram



## Ordering Information

Model Name	Chipset	Memory	Backplane	LAN	VGA	USB	COM
PCE-5125QG2-00A1E	Q57	Non-ECC	PCE-5XXX	2 GbE	Yes	13	2
PCE-5125WG2-00A1E	3450	ECC/Non-ECC	PCE-5XXX/7XXX	2 GbE	Yes	13	2

Note 1: Only the Core i5 6XX, Core i3 5XX and Pentium G69XX processors support onboard VGA output, others do not have VGA output and a discrete graphics card is necessary for graphics functions.

Note 2: WG2 version supports all Advantech PCE-5XXX/7XXX backplanes EXCEPT PCE-7B10-04A1E\*.

Note 3: WG2 version: Intel Xeon 34XX CPU can configure 4\*PClex4 on PCE-7B10-04(PPCIE2-5(4\*PClex4); PPCIE1 is from PCH).

## Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	Audio extension module
1960047831N001	PCE-5125 Proprietary CPU Cooler
PCA-5650-00A1E	Mini PCIe graphic card with Silicon Motion SM750 GPU
PCA-5612-00A1E	PCI graphic card with XGI Z9s GPU
PCA-COM485-00A1E	COM485 module
PCA-TPM-00A1E	TPM module

Note: Purchasing PCE-5125's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with PCE-5125.

## Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x 2
1703150102	Serial ATA HDD power cable	x 2
1701260305	COM + printer ports cable kit	x 1
1700060202	Keyboard and mouse Y-cable	x 1
1700008461	4-port USB cable kit	x 1
9689000068	Jumper package	x 1
2190000902	Warranty Card	x 1
2002512510	Startup manual	x 1
2062512500	Utility CD	x 1

## Bracket View



PCE-5125QG2-00A1E  
PCE-5125WG2-00A1E