advantech PCE-5032 User Manual

Advantech PCE-5032 User Manual

Contents

Features

- Intel® Core™ i9/i7/i5/i3 LGA1200 processor with H420E chipset
- Up to 64 GB of dual-channel (non-ECC) DDR4 2666/2933 MHz
- PCIe 3.0, USB 3.2, and SATA 3.0 slots
- Supports VGA and DVI-D/DP display (with optional cable)

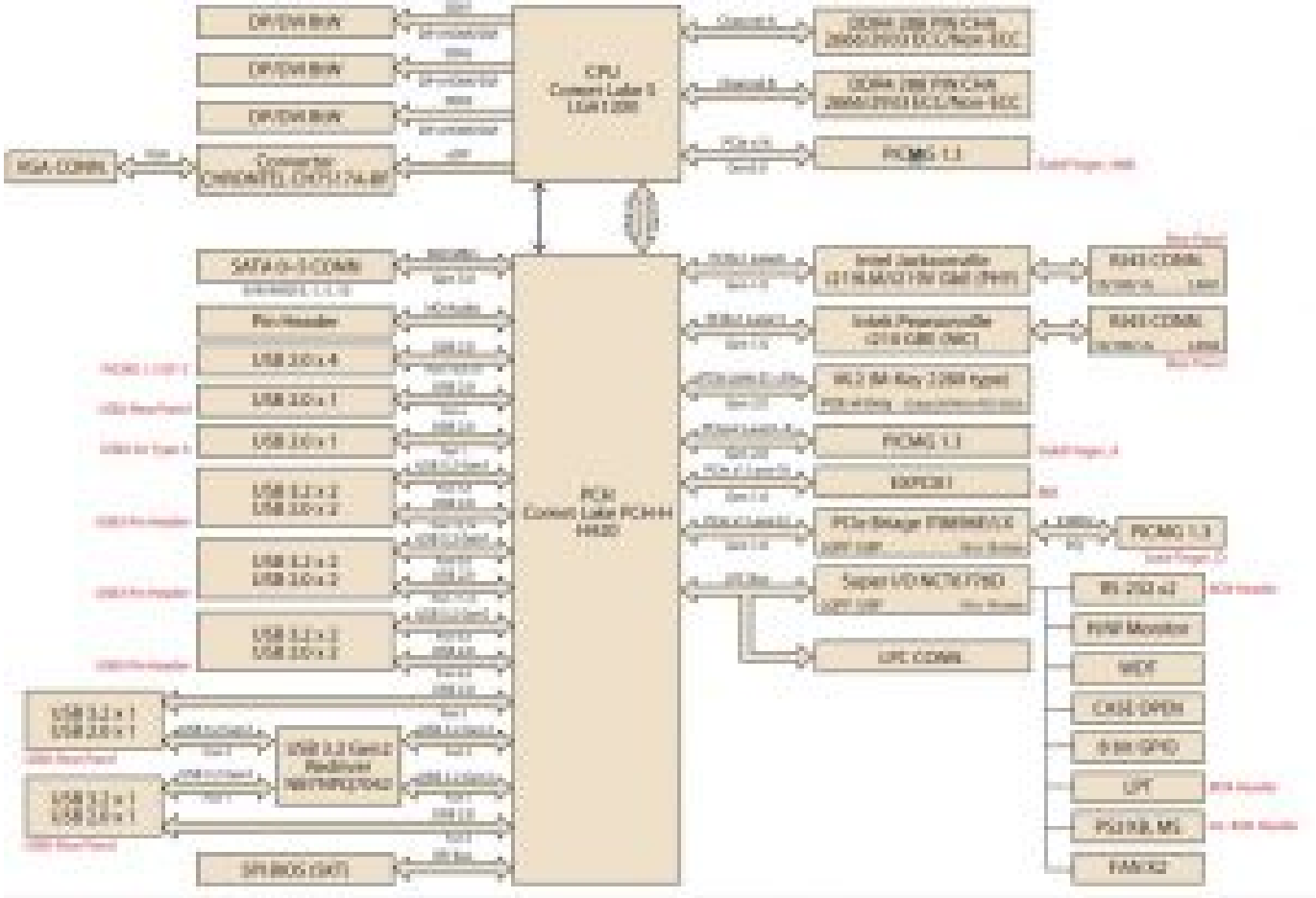
- Supports Advantech’s LPC modules, SUSI 4.0, and embedded software APIs

Specifications

Processor System	CPU	i9-10900K	I9-10900E	I9-10900TE	I7-10700TE	I7-10700E	I5-10500E	I5-10500E	I5-10500TE	I3-10100E	I3-10100TE	G6400E	G5900E	G5900TE
	Speed	3.7 GHz	2.80 GHz	1.80 GHz	2.00 GHz	2.90 GHz	3.10 GHz	3.10 GHz	2.30 GHz	3.60 GHz	2.30 GHz	3.80GHz	3.20 GHz	3.00 GHz
	L3 Cache	20MB	20MB	20MB	16MB	16MB	12MB	12MB	12MB	6MB	6MB	4MB	2MB	2MB
	Cores	10	10	10	8	8	6	6	6	4	4	2	2	2
	TDP	125 W	65W	35W	35W	65 W	65 W	65W	35W	65 W	35W	58 W	58W	35W
	Socket	LGA 1200												
	Chipset	Intel H420E												
	BIOS	AMI 128Mbit SPI Flash												
Bus	PCI-Express	1 x PCIe x16 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 2666/2933 MHz												
	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 2048 x 1152 @ 60MHz												
	DVI-D	Supports resolutions of up to 1920 x 1200 @ 60MHz												
	Display Port	Supports resolutions of up to 4096 x 2160 @ 60MHz												
	Dual Display	CRT+DP/CRT+DVI												
Ethernet	Interface	10/100/1000 Mbps												
	Controller	LAN 1: Intel® I219-V LAN 2: Intel® I211-AT												

	Connector with LED	RJ45 x 2			
Rear I/O	USB 3.2 (Gen1)	2			
	USB 2.0	1			
	Ethernet	2			
	VGA	1			
Internal Connector	USB	5 x USB 2.0 (1 USB Type A + 4 on backplane)			
	SATA	4			
	DP/DVI-D	1 (Pin header)			
	COM	2			
	Parallel	1			
	GPIO	8 bits			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1-255 sec			
Miscellaneous	Audio	Intel® High Definition audio interface (requires audio extension module PCA-AUDIO-HDB1E)			
Power Requirement	Test Environment	Intel W-1290E, Memory 2* DDR4 2666U 32GB			
	Voltage	+3.3V, 5V, 12V			
	Current	1.09A, 1.30A, 0.50A			
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



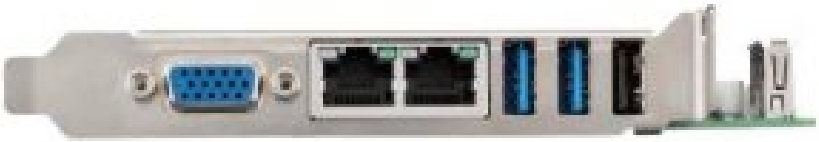
Ordering Information

Part Number	Chipset	Memory	Backplane	Display	USB 3.2	USB 2.0	COM	GbE LAN	AMT	SATA	SW RAID	Intelligent,System Module Support
PCE-5032G2-00A1	H420E	Non-ECC	PCE-5BXX	VGA + DVI/DP	4	6	2	2	No	4	Yes	Yes

Packing List

Part,Number	Description	Quantity
1700003194	Serial ATA HDD data cable	X2
1701260305	COM + printer ports cable kit	X1
2190000902	Warranty card	X1
2041513200	Startup manua	X1

I/O View



PCE-5032G2-00A1

Optional Accessories

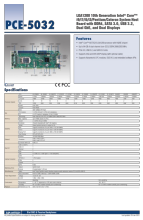
Part Number	Description
1700020277-01	2-port USB 3.0 cable w/ BKT (30 cm)
1700002204	2-port USB 2.0 cable w/ BKT (27 cm)
1700021831-01	DP to DVI-D cable w/ BKT for G2 SKU
1701090401	Single COM cable (40 cm)
1701092300	Dual COM cable (28.5 cm)
1960049408N001	CPU cooler for 1U Chassis and 84W TDP
1960050255N001	CPU cooler for 2U Chassis and 95W TDP
1960052651N021	CPU cooler for 2U/4U Chassis and 80W TDP
1960067860N001	CPU cooler for 2U/4U chassis and 125W TDP
PCA-COM485-00A1E	4-port RS-422/485 LPC module
PCA-COM232-00A1E	4-port RS-232 LPC module
PCE-DP10-00A1E	DP redriver board (25 cm) for G2 SKU
PCA-AUDIO-HDB1E	Extension module for HD audio
PCA-TPM-00B1E	TPM 2.0 Module
PCE-SA01-00A1E	Extension Stack Board
20706WX9HS0099	PCE-5032 win 10 embedded OS (high-end)
20706WX9VS0103	PCE-5032 win 10 embedded OS (value)
20706WX9ES0113	PCE-5032 win 10 embedded OS (entry)

*For PCE-7132/5132/5032, PCE-SA01-00A1E miniPCIe only support PCIex1 signal

Online Download

www.advantech.com/products

Documents / Resources

	advantech PCE-5032 [pdf] User Manual PCE-5032

References

- Advantech Co-Creating the Future of the IoT World