

IPC-221

Compact Industrial Computer System with 12th/13th/14th Gen Intel® Core™ i CPU Socket (LGA 1700)

NEW



Features

- Intel® 12th/13th/14th Gen Core™ i CPU socket-type (LGA1700) with Intel® Q670E/H610E chipset
- 2 x independent displays
- 2 x GigaLan and up to 8 USB 3.2 Gen2
- 2 x RS-232/422/485
- 1 x NVMe M.2 (Q670E Only), 2 x 2.5" HDD/SSD, and 1 x mSATA
- Built-in TPM module (TPM 2.0)
- Built in 100–240VAC, 250W Adaptor

Vertrieb durch



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Specifications

14th Generation Processors	CPU	I9-14900	I9-14900T	I7-14700	I7-14700T	I5-14500	I5-14500T	I5-14400	I5-14400T	I5-14400F	I3-14100	I3-14100T	I9-14901E	I9-14901TE	I7-14701E	I7-14701TE	I5-14501E	I5-14501TE	I5-14401E	I5-14401TE	300	300T
	P-core Base Frequency	2.0 GHz	1.1 GHz	2.1 GHz	1.3GHz	2.6 GHz	1.7 GHz	2.5 GHz	1.5 GHz	2.5 GHz	3.5 GHz	2.7 GHz	2.8 GHz	2.3 GHz	2.6 GHz	2.1 GHz	3.3 GHz	2.2 GHz	2.5 GHz	2 GHz	3.9 GHz	3.4 GHz
	L3 Cache	36 MB	36 MB	33 MB	33 MB	24 MB	24 MB	20 MB	20 MB	20 MB	12 MB	12 MB	36 MB	36 MB	33 MB	33 MB	24 MB	24 MB	24 MB	24 MB	6 MB	6MB
	Cores	24	24	20	20	14	14	10	10	10	4	4	8	8	8	8	6	6	6	6	2	2
13th Generation Processors	CPU	I9-13900(E)	I9-13900TE	I7-13700(E)	I7-13700TE	I5-13500(E)	I5-13500TE	I5-13500F	I3-13100	I3-13100T	I9-13901E	I9-13901TE	I7-13701E	I7-13701TE	I5-13501E	I5-13501TE	I5-13401E	I5-13401TE	I5-13401E	I5-13401TE	300	300T
	P-core Base Frequency	2.0 GHz	1.1 GHz	2.1 GHz	1.3GHz	2.6 GHz	1.7 GHz	2.5 GHz	1.5 GHz	2.5 GHz	3.5 GHz	2.7 GHz	2.8 GHz	2.3 GHz	2.6 GHz	2.1 GHz	3.3 GHz	2.2 GHz	2.5 GHz	2 GHz	3.9 GHz	3.4 GHz
	L3 Cache	36 MB	36 MB	33 MB	33 MB	24 MB	24 MB	20 MB	20 MB	20 MB	12 MB	12 MB	36 MB	36 MB	33 MB	33 MB	24 MB	24 MB	24 MB	24 MB	6 MB	6MB
	Cores	24	24	20	20	14	14	10	10	10	4	4	8	8	8	8	6	6	6	6	2	2
12th Generation Processors	CPU	I9-12900(E)	I9-12900TE	I7-12700(E)	I7-12700TE	I5-12500(E)	I5-12500TE	I5-12500F	I3-12100	I3-12100T	I9-12901E	I9-12901TE	I7-12701E	I7-12701TE	I5-12501E	I5-12501TE	I5-12401E	I5-12401TE	I5-12401E	I5-12401TE	300	300T
	P-core Base Frequency	2.4 GHz	1.1 GHz	2.1 GHz	1.3GHz	2.6 GHz	1.7 GHz	2.5 GHz	1.5 GHz	2.5 GHz	3.5 GHz	2.7 GHz	2.8 GHz	2.3 GHz	2.6 GHz	2.1 GHz	3.3 GHz	2.2 GHz	2.5 GHz	2 GHz	3.9 GHz	3.4 GHz
	L3 Cache	30 MB	30 MB	25 MB	25 MB	18 MB	18 MB	18 MB	12 MB	12 MB	36 MB	36 MB	33 MB	33 MB	24 MB	24 MB	24 MB	24 MB	24 MB	24 MB	6 MB	6MB
	Cores	16	16	12	12	6	6	6	4	4	8	8	8	8	6	6	6	6	6	6	2	2
Processor System	Socket	LGA 1700																				
	Chipset	Q670E / H610E																				
	BIOS	AMI 256Mbit SPI Flash																				
	Technology	Dual-channel DDR5 4800 MHz																				
Memory	Socket	2 x 262 pin DDR5 SODIMM (Up to 32GB per socket)																				
	Maximum Capacity	64GB																				
	Chipset	PCE-2133: Q670E PCE-2033: H610E																				
	Display	VGA Up to 1920 x 1080 @ 60Hz HDMI Up to 3840 x 2160 @ 60Hz																				
Ethernet	Controller	PCE-2133 LAN1: Intel® I219LM, LAN2: Intel® I226V PCE-2033 LAN1: Intel® I219V, LAN2: Intel® I226V																				
	Interface	LAN1: 10/100/1000 Mbps; LAN2: 10/100/1000/2500 Mbps																				
	Connector	2 x RJ45																				
	Storage	NVMe M.2 1 (PCIe x4 M-key 2280 type, Q670E Only) HDD/SSD 2 x 2.5" HDD/SSD (Max 15mm Height each) mSATA 1 RAID 0/1 (Q670E Only)																				
I/O	USB	Q670E: 8 x USB 3.2 Gen2 H610E: 4 x USB 3.2 Gen1 + 4 USB 2.0																				
	Serial Port	2 x RS-232/422/485 support auto flow control																				
	Audio	2 (Line-out, Mic-in)																				
	I/O Module	Support Advantech i-Door																				
Expansion	Expansion slots	One PCIe x16 One PCIe x4																				
	Support card size	111.15mm(Full height) x 168mm (Half length)																				
	Watchdog Timer	Output System reset Interval Programmable 1 – 255 sec/min																				
	Environment	Operating 0 – 40 °C Humidity 95% @ 40 °C (non-condensing) Vibration With SSD: 2 Grms @ 5 – 500 Hz, random, 1 hr/axis With 2.5" HDD: 0.5Grms @ 5 – 500 Hz, random, 1 hr/axis Shock With SSD: 10G, IEC-68-2-27, half-sine wave, 11 ms duration																				
Mechanical	Dimensions (W x D x H)	240 x 233 x 93 mm																				
	Weight	2.5 kg																				
	Installation	Desktop/wall mount																				
	Certifications	EMC CE/FCC Class A, CCC Safety CCC																				

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All product specifications are subject to change without notice.

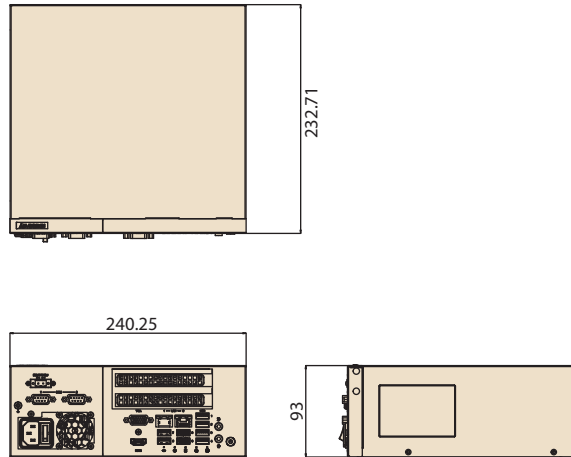


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Last updated: 16-Jul-2025

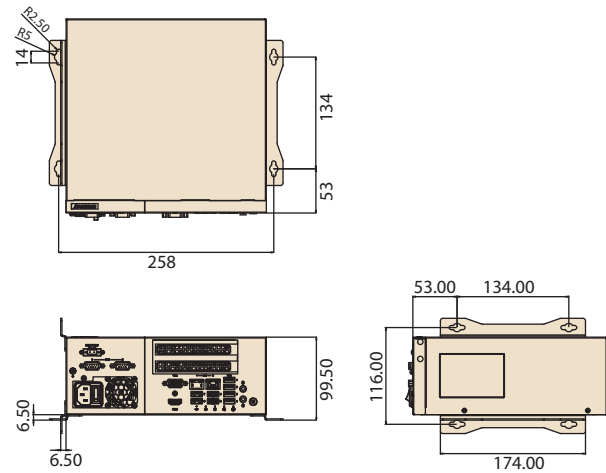
Dimensions

Unit: mm



Installation

Unit: mm



Front View



Rear View



Ordering Information

Part Number	Compatible Mother Board	PCIe x16	PCIe x4	PCI	Gbe	HDD/SSD	COM	Internal USB (2.0 Type A)
IPC-221-00A1	PCE-2133	1 (Gen4)	1 (Gen3)	0	2	2 x 2.5"	2	2
	PCE-2033	1 (Gen4)	1 (Gen3)	0	2	2 x 2.5"	2	2

Part Number	Chipset	TPM 2.0	USB 3.2	USB 2.0	Internal USB 2.0 (Box header)	NVMe M.2	miniPCIe
PCE-2133-00A1	Q670E	TPM 2.0	8	0	2	1	1 (mSATA, PCIe, USB)
PCE-2033-00A1	H610E	TPM 2.0	4	4	0	0	1 (mSATA Only)

PCE-2033/2133 Packing List

Item	Description
PCE-2033/2133	12th/13th/14th Gen Intel® Core™ i CPU (LGA 1700) CPU board
1950023035N022	Front IO Panel
-	Startup Manual for PCE-2033/2133

Optional Accessories

Part Number	Description
1970005354T001	CPU Cooler LGA1700 S-65W 110x110x45.4
1702002600	Power cord (USA) UL/CSA, 3-pin, 10A, 125V, 1.83 M, 180 D
1700022940-01	Power cord PSE, 3-pin, 7A, 125V, 3 m, DAC-ST01
1702002605	Power cord (EU) 2-pin, 10/16A, 220V, 1.83 M, 90 D

Embedded OS

PN	Description
20706WLH1S0050	img W11 2024HL LTSC PCE-2133 64b
20706WLV1S0050	img W11 2024VL LTSC PCE-2133 64b
20706WLE1S0050	img W11 2024EL LTSC PCE-2133 64b
20706WLH1S0049	img W11 2024HL LTSC PCE-2033 64b
20706WLV1S0049	img W11 2024VL LTSC PCE-2033 64b
20706WLE1S0049	img W11 2024EL LTSC PCE-2033 64b
20706WX1HS0053	img W10 21HL PCE-2133 64b 21H2 ENU
20706WX1VS0053	img W10 21VL PCE-2133 64b 21H2 ENU
20706WX1ES0053	img W10 21EL PCE-2133 64b 21H2 ENU
20706WX1HS0056	img W10 21HL PCE-2033 64b 21H2 ENU
20706WX1VS0056	img W10 21VL PCE-2033 64b 21H2 ENU
20706WX1ES0056	img W10 21EL PCE-2033 64b 21H2 ENU
20706U22DS0007	img UbuntuD PCE-2133 64b 22.04 ENU
20706U22DS0005	img UbuntuD PCE-2033 64b 22.04 ENU