



Features:

- Full-screen capacitive touchscreen design
- Modular design 12.1~21.5" selectable, supports square/wide screen
- Front panel meets IP65 requirements
- Front panel integrates USB Type-A and signal indicator lights
- Supports Intel® 6th to 9th Gen Core / Pentium/ Celeron Desktop CPU, TDP 65W
- Paired with Intel® Q170 chipset
- 2 Intel Gigabit network interfaces and 4 DB9 serial ports
- M.2 and 2.5 inch dual hard drive storage support
- 4 display outputs: VGA, DVI-D, DP++, and internal LVDS, supporting up to 4K@60Hz resolution
- 9~36V DC power supply (optional 12V)
- Embedded/VESA mounting



Remote Management



Status Monitoring



Remote Operations and Maintenance



Security Control

Product Specifications

Model	PL121CQ-E7S	PL150CQ-E7S	PL156CQ-E7S	PL170CQ-E7S	PL185CQ-E7S	PL191CQ-E7S	PL215CQ-E7S		
LCD	Display Size	12.1"	15.0"	15.6"	17.0"	18.5"	19.1"	21.5"	
	Display Type	XGA TFT-LCD	XGA TFT-LCD	FHD TFT-LCD	SXGA TFT-LCD	WXGA TFT-LCD	WXGA TFT-LCD	FHD TFT-LCD	
	Max.Resolution	1024 x 768	1024 x 768	1920 x 1080	1280 x 1024	1366 x 768	1440 x 900	1920 x 1080	
	Luminance	350 cd/m2	300 cd/m2	350 cd/m2	250 cd/m2	250 cd/m2	250 cd/m2	250 cd/m2	
	Aspect Ratio	4:3	4:3	16:9	5:4	16:9	16:10	16:9	
	Viewing Angle	80/80/80/80°	88/88/88/88°	89/89/89/89°	85/85/80/80°	89/89/89/89°	85/85/80/80°	89/89/89/89°	
	Max. Color	16.7M	16.7M	16.7M	16.7M	16.7M	16.7M	16.7M	
	Backlight Lifetime	30,000 hr	70,000 hr	50,000 hr	30,000 hr	30,000 hr	30,000 hr	50,000 hr	
Contrast Ratio	800:1	2000:1	800:1	1000:1	1000:1	1000:1	1000:1		
Touchscreen	Touch Type	Projected Capacitive Touch							
	Controller	USB signal							
	Input	Finger/Capacitive Touch Pen							
	Light Transmission	≥85%							
	Hardness	≥6H							
Processor System	CPU	Intel® 6/7/8/9th Generation Core / Pentium/ Celeron Desktop CPU							
	TDP	65W							
	Socket	LGA1151							
	Chipset	Q170							
	BIOS	AMI UEFI BIOS (Support Watchdog Timer)							
Memory	Socket	2 * Non-ECC SO-DIMM Slot, Dual Channel DDR4 up to 2133MHz							
	Max Capacity	64GB, Single Max. 32GB							
Graphics	Controller	Intel® HD Graphics							
Ethernet	Controller	1 * Intel i210-AT GbE LAN Chip (10/100/1000 Mbps) 1 * Intel i219-LM/V GbE LAN Chip (10/100/1000 Mbps)							
	SATA	1 * SATA3.0, Quick release 2.5" hard disk bays (T≤7mm) 1 * SATA3.0, Internal 2.5" hard disk bays (T≤9mm, Optional) Support RAID 0, 1							
Storage	M.2	1 * M.2 Key-M (PCIe x4 Gen 3 + SATA3.0, NVMe/SATA SSD Auto Detect, 2242/2260/2280)							
	MXM/aDoor	1 * APQ MXM (Optional MXM 4 * LAN/4 * POE/6 * COM/16 * GPIO expansion card) 1 * aDoor Expansion Slot							
Expansion Slots	Mini PCIe	1 * Mini PCIe (PCIe x1 Gen 2 + USB 2.0, with 1 * SIM Card)							
	M.2	1 * M.2 Key-B (PCIe x1 Gen 2 + USB3.0, with 1 * SIM Card, 3042/3052)							
	Ethernet	2 * RJ45							
Front I/O	USB	6 * USB3.0 (Type-A, 5Gbps)							
	Display	1 * DVI-D: max resolution up to 1920*1200 @ 60Hz 1 * VGA (DB15/F): max resolution up to 1920*1200 @ 60Hz 1 * DP: max resolution up to 4096*2160 @ 60Hz							
	Audio	2 * 3.5mm Jack (Line-Out + MIC)							
	Serial	2 * RS232/422/485 (COM1/2, DB9/M, Full Lanes, BIOS Switch) 2 * RS232 (COM3/4, DB9/M)							
	Button	1 * Power Button + Power LED 1 * System Reset Button (Hold down 0.2 to 1s to restart, and hold down 3s to clear CMOS)							
	Rear I/O	Antenna	4 * Antenna hole						
		SIM	2 * Nano SIM card slots						
Internal I/O	USB	2 * USB2.0 (wafer)							
	LCD	1 * LVDS (wafer): max resolution up to 1920*1200 @ 60Hz							
	TFront Panel	1 * TF_Panel (3 * USB 2.0 + FPANEL, wafer)							
	Front Panel	1 * Front Panel (PWR + RST + LED, wafer)							
	Speaker	1 * Speaker (2-W (per channel)/8-Ω Loads, wafer)							
	Serial	2 * RS232 (COM5/6, wafer)							
	GPIO	1 * 16 bits DIO (8xDI and 8xDO, wafer)							
	LPC	1 * LPC (wafer)							
	SATA	2 * SATA 7P Connector							
	SATA Power	2 * SATA Power (SATA_PWR1/2, wafer)							
FAN	FAN	1 * CPU FAN (wafer) 2 * SYS FAN (wafer)							
	Type	DC, AT/ATX							
Power Supply	Power Input Voltage	9 ~ 36VDC, P≤240W							
	Connector	1 * 4Pin Connector, P=5.00/5.08							
	RTC Battery	CR2032 Coin Cell							

OS Support	Windows	6/7th Core™: Windows 7/10/11 8/9th Core™: Windows 10/11						
	Linux	Linux						
Watchdog	Output	System Reset						
	Interval	Programmable via Software from 1 to 255 sec						
Mechanical	Enclosure Material	Radiator: Aluminum alloy, Box: SGCC						
	Mounting	VESA, embedded						
	Dimensions (L * W * H, Unit: mm)	321.9*260.5*95.7	380.1*304.1*95.7	420.3*269.7*95.7	414*346.5*95.7	485.7*306.3*95.7	484.6*332.5*95.7	550*344*95.7
Environment	Heat Dissipation System	PWM Fan Cooling						
	Operating Temperature	-20~60°C	-20~60°C	-20~60°C	-20~60°C	-20~60°C	0~50°C	0~50°C
Environment	Storage Temperature	-20~60°C	-20~70°C	-30~80°C	-30~70°C	-30~70°C	-20~60°C	-20~60°C
	Relative Humidity	5 to 95% RH (non-condensing)						
	Vibration During Operation	With SSD: IEC 60068-2-64 (1Grms@5~500Hz, random, 1hr/axis)						
	Shock During Operation	With SSD: IEC 60068-2-27 (15G, half sine, 11ms)						

Product Dimensions

A	System Dimension			Panel Mount							
	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3	F1	F2
12.1"	321.9	260.5	95.7	307	245.6	28	309.8	248.4	8	7.1	8.5
15.0"	380.1	304.1	95.7	364.2	288.2	28	367	291	8	7.1	8.5
15.6"	420.3	269.7	95.7	404.5	253.8	28	407.3	256.6	8	7.1	8.5
17.0"	414	346.5	95.7	398.2	330.6	28	401	333.4	8	7.1	8.5
18.5"	485.7	306.3	95.7	469.8	290.4	28	472.6	293.2	8	7.1	8.5
19.1"	484.6	332.5	95.7	468.7	316.6	28	471.5	319.4	8	7.1	8.5
21.5"	550	344	95.7	538.7	327.7	28	539.5	330.9	8	7.1	8.5

Product I/O

Front Panel I/O:

- 2.5" Disk
- DC IN
- LAN*2
- USB 3.0*4
- USB 3.0*2
- DP
- VGA
- DVI-D
- Audio
- COM4/3
- COM2/1
- Reset
- PWR/LED
- GND
- aDoor/MXM

Internal Components:

- CPU FAN
- Nano SIM