





Features:

- Supports Intel® 12th/13th Gen Core / Pentium / Celeron Desktop CPU, TDP 65W, LGA1700
- Equipped with Intel® Q670 chipset
- 2 Intel network interfaces (11GbE & 12.5GbE)
- 3 display outputs: HDMI, DP++, and internal LVDS, supporting up to 4K@60Hz resolution
- Rich USB, serial expansion interfaces, and PCIe, mini PCIe, M.2 expansion slots
- Intelligent fan active cooling







Remote Management



Status Monitoring



Remote Operations and Maintenance



Security Control

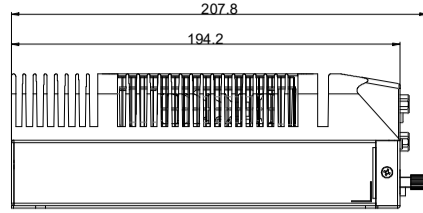
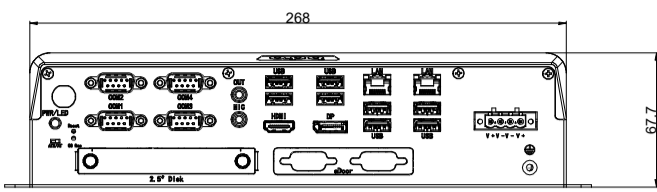
Product Specifications

Model		E7S	E7DS	E7QS
CPU	CPU	Intel® 12/13th Generation Core / Pentium/ Celeron Desktop CPU		
	TDP	65W		
	Socket	LGA1700		
	Chipset	Q670		
	BIOS	AMI 256 Mbit SPI		
Memory	Socket	2 * Non-ECC SO-DIMM Slot, Dual Channel DDR4 up to 3200MHz		
	Max Capacity	64GB, Single Max. 32GB		
Graphics	Controller	Intel® UHD Graphics		
Ethernet	Controller	1 * Intel i219-LM 1GbE LAN Chip (LAN1, 10/100/1000 Mbps, RJ45) 1 * Intel i225-V 2.5GbE LAN Chip (LAN2, 10/100/1000/2500 Mbps, RJ45)		
Storage	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, 5		
	M.2	1 * M.2 Key-M (PCIe x4 Gen 4 + SATA3.0, NVMe/SATA SSD Auto Detect, 2280)		
Expansion Slots	PCIe Slot	N/A	①: 1 * PCIe x16 (x16) + 1 * PCIe x4 (x4) ②: 1 * PCIe x16 + 1 * PCI ③: 2 * PCI PS: ①、②、③ One out of three, Expansion card length ≤ 185mm, TDP ≤ 130W	①: 2 * PCIe x16 (x8/x8) + 2 * PCI ②: 1 * PCIe x16 (x16) + 1 * PCIe x4 (x4) PS: ①、② One out of two, Expansion card length ≤ 185mm, TDP ≤ 130W
	aDoor	1 * aDoor Bus (Optional 4 * LAN/4 * POE/6 * COM/16 * GPIO expansion card)		
	Mini PCIe	2 * Mini PCIe (PCIe x1 Gen 3 + USB 2.0, with 2 * SIM Card)		
	M.2	1 * M.2 Key-E (PCIe x1 Gen 3 + USB 2.0, 2230)		
Front I/O	Ethernet	2 * RJ45		
	USB	2 * USB3.2 Gen2x1 (Type-A, 10Gbps) 6 * USB3.2 Gen 1x1 (Type-A, 5Gbps)		
	Display	1 * HDMI1.4b: max resolution up to 4096*2160 @ 30Hz 1 * DP1.4a: max resolution up to 4096*2160 @ 60Hz		
	Audio	2 * 3.5mm Jack (Line-Out + MIC)		
	Serial	2 * RS232/485/422 (COM1/2, DB9/M, Full Lanes, BIOS Switch) 2 * RS232 (COM3/4, DB9/M, Full Lanes)		
	Button	1 * Power Button + Power LED 1 * AT/ATX Button 1 * OS Recover Button 1 * System Reset Button		
Rear I/O	Antenna	4 * Antenna hole		
	SIM	2 * Nano SIM card slots		
Internal I/O	USB	6 * USB2.0 (wafer)		
	LCD	1 * LVDS (wafer): LVDS Resolution up to 1920*1200 @ 60Hz		
	Front Panel	1 * FPanel (PWR+RST+LED, wafer)		
	Audio	1 * Audio (Header) 1 * Speaker (2-W (per channel)/8-Ω Loads, wafer)		

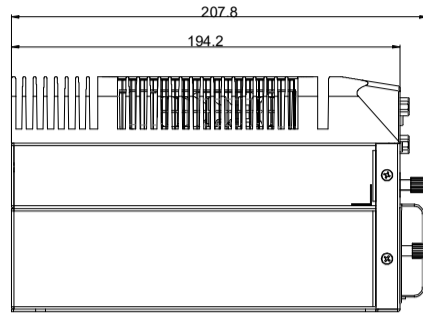
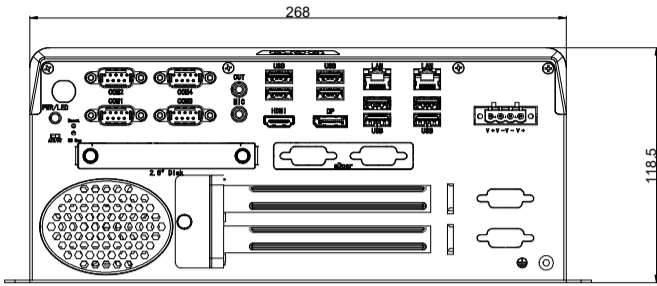
	Serial	2 * RS232 (COM5/6, wafer)		
	GPIO	1 * 16 bits DIO (8xDI and 8xDO, wafer)		
	LPC	1 * LPC (wafer)		
	SATA	3 * SATA 7P Connector, up to 600MB/s		
	SATA Power	3 * SATA Power (wafer)		
	FAN	1 * CPU FAN (wafer) 2 * SYS FAN (KF2510-4A)		
	Power Supply	Type	DC, AT/ATX	
Power Input Voltage		9~36VDC, P≤240W 18~60VDC, P≤400W		
Connector		1 * 4Pin Connector, P=5.00/5.08		
RTC Battery		CR2032 Coin Cell		
OS Support	Windows	Windows 10/11		
	Linux	Linux		
Watchdog	Output	System Reset		
	Interval	Programmable 1 ~ 255 sec		
Mechanical	Enclosure Material	Radiator: Aluminum alloy, Box: SGCC		
	Dimensions	268mm(L) * 194.2mm(W) * 67.7mm(H)	268mm(L) * 194.2mm(W) * 118.5mm(H)	268mm(L) * 194.2mm(W) * 159.5mm(H)
	Weight	Net: 4.5 kg Total: 6 kg (Include packaging)	Net: 4.7kg Total: 6.2 kg (Include packaging)	Net: 4.8 kg Total: 6.3 kg (Include packaging)
	Mounting	VESA, Wall mounted, Desktop		
Environment	Heat Dissipation System	PWM FAN Cooling		
	Operating Temperature	-20~60°C (Industrial SSD)		
	Storage Temperature	-40~80°C (Industrial SSD)		
	Relative Humidity	10 to 90% RH (non-condensing)		
	Vibration During Operation	With SSD: IEC 60068-2-64 (3Grms@5~500Hz, random, 1hr/axis)		
	Shock During Operation	With SSD: IEC 60068-2-27 (30G, half sine, 11ms)		
	Certification	CE/FCC, RoHS		

Product Dimensions

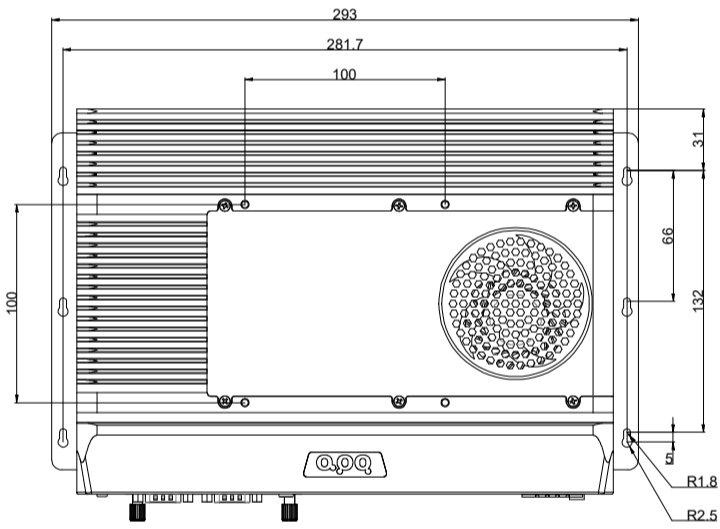
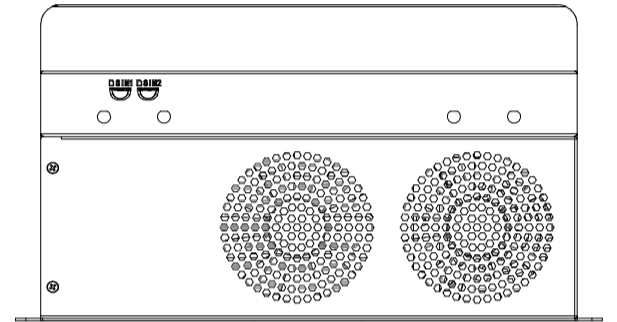
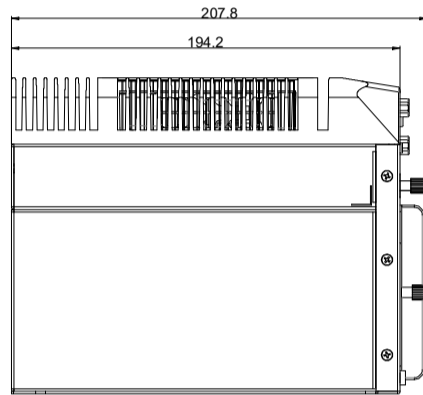
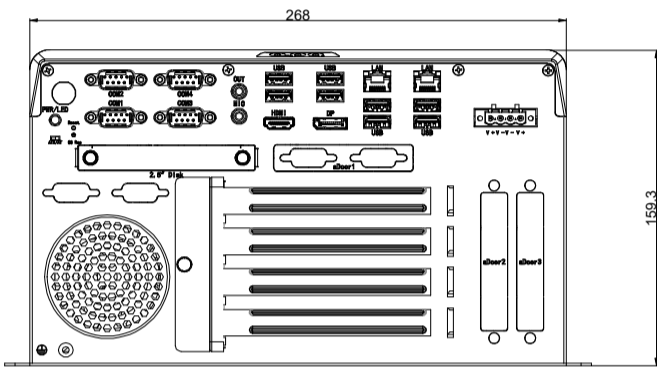
E7S



E7DS



E7QS



Product I/O

