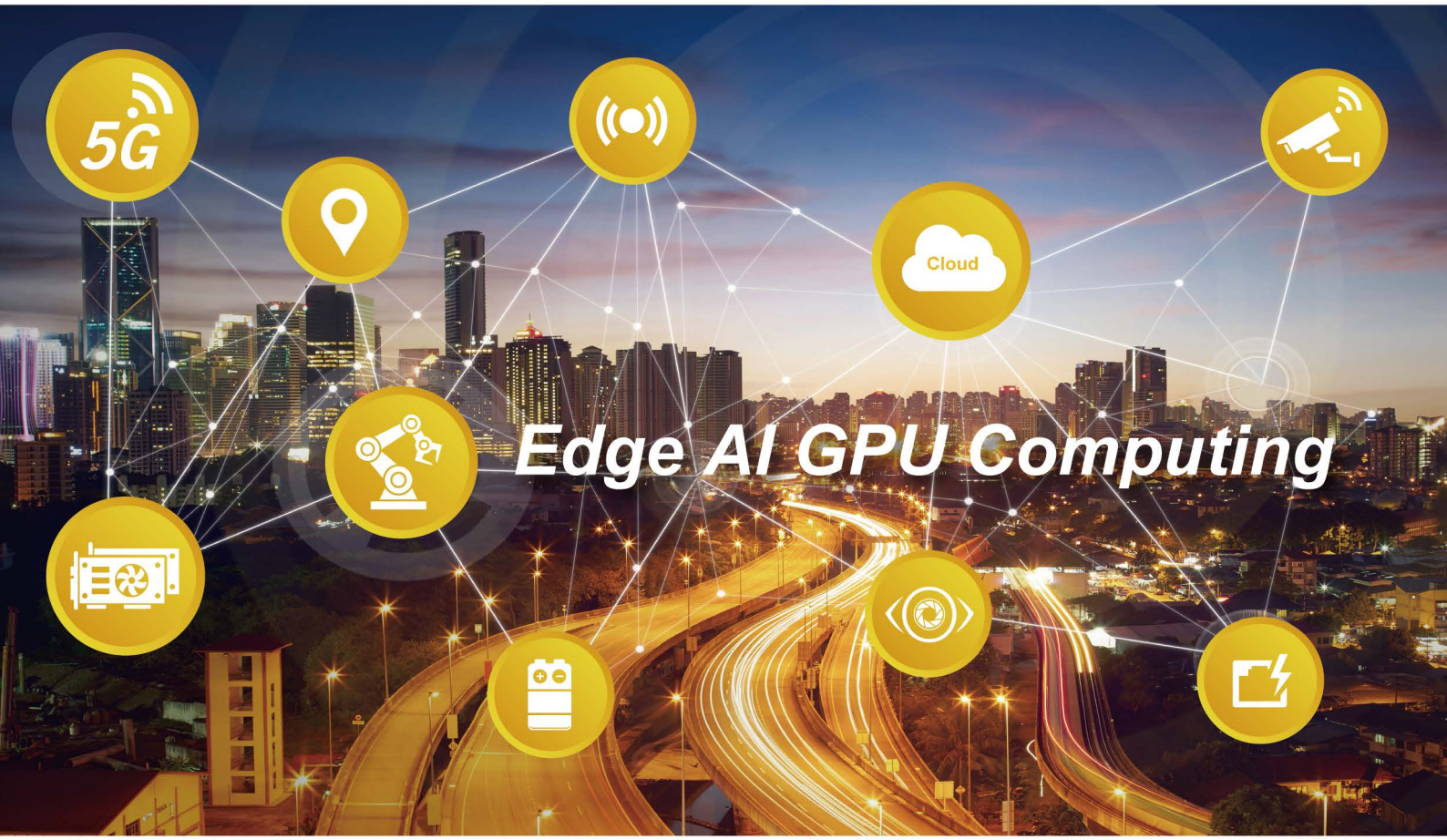


SD7000

Intel 9th Gen Core i7/ Intel 8th Gen Core i7/i5/i3 CPU w/ 6 x RJ45 GbE (optional 4 x PoE Max. 100W)/ 4 x COM / 1 x DP/ 1 x HDMI/ 1 x DVI-I/ 4 x USB 3.0/ 9-48V Edge Computing

Features

- **Intel 9th Gen Core i7/ Intel 8th Gen Core i7/i5/i3**
- **1 x PCIe 3.0 x16 Interface Expansion (optional 2 x PCIe 3.0 x8 Interface)**
- **6 x RJ45 GbE (optional 4 x PoE Max. 100W)**
- **8 x GPI, 4 x GPO and 2 x RS-232/422/485**
- **1 x DP + 1 x HDMI + 1 x DVI-I (Single Link w/o Analog Video)**
- **Dual Hot Swappable SATA Storage RAID 0,1,5**
- **9-48V DC Input and Operating Temp.: -40~70°C**
- **TPM 2.0**

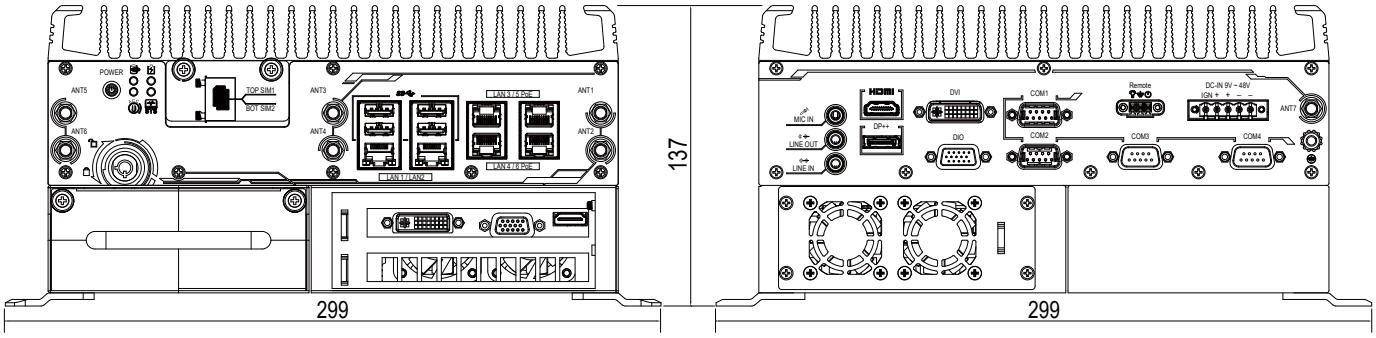
Introduction

The SD7000 Edge Computing is suitable for various factory automation and Industrial Internet of Things (IIoT) control system in large-scale processes such as mining and manufacturing. It is powered by Intel 9th Gen Core i7/ Intel 8th Gen Core i7/i5/i3 CPU with 6 x RJ45 GbE (optional 4 x PoE Max. 100W).

SD7000 features TPM 2.0 and memory 2 x DDR4 2400/2666 MHz SO-DIMM up to 32GB. Furthermore, the environmental tolerance continually maintains a wide range of operating temperatures (-40ºC ~ 70 ºC). In addition, it provides Intel® UHD Graphics 630 with max resolution (HDMI): 4096x2304@24Hz.

Dimensions

Unit : mm



Specifications

System	
CPU	Intel Gen9 Core i7-9700TE (12M Cache 1.8GHz up to 3.8GHz)
	Intel Gen8 Core i7-8700T (12M Cache 2.4GHz up to 4.0GHz)
	Intel Gen8 Core i5-8500T (9M Cache 2.1GHz up to 3.5GHz)
	Intel Gen8 Core i3-8100T (6M Cache 3.1GHz)
	Intel Gen8 Celeron G4900T (2M Cache 2.9GHz)
Memory	2 x DDR4 2400/2666 MHz SO-DIMM up to 32GB
LAN Chipset	5 x Intel i210-AT and 1 x i219 (iAMT9.5 w/ i5, i7 only) Gb/s Ethernet Controllers Onboard Support PXE and WOL
Watchdog	1 ~ 255 Level Reset
TPM	2.0
I/O	
Serial Port	4 x RS 232/422/485 (Auto Direction Control)
USB Port	4 x USB 3.0 Ports
LAN	6 x RJ45 GbE (optional 4 x PoE Max. 100W)
Video Port	1 x DP + 1 x HDMI + 1 x DVI-I (Single Link w/o Analog Video)
DIO Port	8 x GPI (5~48VDC) and 4 x GPO (5VDC, 100mA)
Audio	1 x Line-out, 1 x Line-in and 1 x Mic-in
Expansion Bus	Riser card w/ 1 x PCIe x16 slot (1 x PCIe 3.0 x16 interface w/ 1 x ATX 6 Pin Power supports up to 185mm length and total 90W~150W PCIe cards) Optional riser card w/ 2 x PCIe x16 slot (2 x PCIe 3.0 x8 interface w/ 1 x ATX 6 Pin Power supports up to 185mm length total 90W~150W PCIe cards) *Maximum 90W power supply for PCIe cards when DC 9V system power input is in used. Maximum 150W power supply for PCIe cards requires DC power input to be above 15V.
	2 x Full Mini-PCIe Slots and 1x M.2 A-E Key 2230 slot (PCIe & USB2.0 Interface for WiFi/BT)
	1x M.2 B Key 2242 slot (USB3.0 Interface only for 3G/4G LTE w/ 2 x SIM sockets)

Graphics	
Graphics	Intel® UHD Graphics 630
Resolution	Max Resolution (HDMI) : 4096x2304@24Hz
Software	
Operating System	Win 10, Ubuntu 18.04 64bit
Environmental	
Operating Temp.	-40°C ~ 70°C, with SSD and ambient w/ air flow 0.6m/s (System only, not including PCIe cards)
	-20°C ~ 60°C with BAT-5200 Battery Kit
Storage Temp.	-40°C ~ 80°C
Relative Humidity	10% RH – 90% RH (non-condensing)
Certifications	CE, FCC Class A, RoHS (Self declaration)
Storage	
Type	2 x 2.5" Drive Bay for SATA Type HDD/SSD RAID 0, 1, 5
	1 x M.2 M key 2242 and 2280 (SATA)
Power Requirement	
Power Input	9V - 48V DC Power Input
Power Protection	Automatics Recovery Short Circuit Protection
Power Mgmt.	Vehicle Power Ignition for Variety Vehicle
Power Off Control	Power off Delay Time Setting by BIOS and Software
Battery (UPS)	Internal Battery Kit for 10 Mins Operating (Optional and cannot be installed with PoE module) UPS operating time varies depending on PCIe cards w/ different power consumption
Mechanical	
Construction	Aluminum Alloy
Mounting	Wall-mount
Dimensions	260(L) x 250(W) x 137(H) mm

Ordering Information

Part Number	SD7000XYY-ZZ (X= P= w/PoE, X= Empty= w/o PoE, YY= E1= w/1 x PCIe x 16 Slot, YY= E2= w/2 x PCIe 3.0 x8 interface, ZZ= i7R= i7-9700TE, ZZ = i7= i7-8700T, ZZ= i5= i5-8500T, ZZ= i3= i3-8100T, ZZ= C1= G4900T)
Description	Intel 9th Gen Core i7/ Intel 8th Gen Core i7/i5/i3 CPU w/ 6 x RJ45 GbE (optional 4 x PoE Max. 100W) / 4 x COM / 1 x DP/ 1 x HDMI/ 1 x DVI-I/ 4 x USB 3.0/ 9-48V Edge Computing
State of Origin	Made in China

Optional Accessories

DRAM	SO-DIMM max.DDR4-2666,4GB~32GB,0~70°C/-40~85°C
SATA SSD	2.5inch TLC 64GB~1TB -40~85°C
mSATA	M.2 M key TLC -40~85°C, 2280 64GB~1TB / 2242 64GB~512GB
Wifi	M.2 802.3a/b/g/n/ac
Modern	LTE M.2 B Key 2242 x 1, LTE miniPCIe card x 1

GPS	GPS miniPCIe card
CANBUS	CANBUS miniPCIe card
Battery backup kit	5200mA/h, -30~60°C, discharge -20~60°C, operating about 10 mins. Cannot be used w/PoE Module.
External cable	280W/24V power adaper
Power adapter	N/A