SD-5000-8L

Intel 6th/7th-Gen Quad Core Xeon/ Core i7/i5/i3 CPU w/ 8 x GbE/ 4 x ISO COM/ 2 x DP/VGA/ 4 USB 3.0 Fast Expansible Slot 9-36V Fanless Computer

Features

- Intel® 6th/7th-Gen Quad Core Xeon/Core i7 LGA1151 CPU
- 4 x RS-232/422/485 with 1.5KVrms isolated
- 8 x GPI and 4 x GPO with 1.5KVrms isolated
- 8 x GbE LAN (optional for 4 x PoE)
- Dual Hot Swappable SATA Storage
- 9-36V DC input and operating Temp.: -40 ~ 70ºC
- Fast Expansible Slot support PCI-E, USB, SMBus, GPIO and SATA

| POE | GPS | Wireless | Wide Range | Delay Time |

Introduction

The SD5000 Fanless Box Computers are designed for multiple applications of industrial usage such us industrial control unit and intelligent / automatic factory. It is poared by Intel® 6th-Gen Skylake Core i7/i5/i3 CPU with 8 GbE/ 4 ISO COM/ 2 DP/ VGA/ 4 USB 3.0/ Fast Expansible Slot/ 9-36V. SD5000 was designed for multiple applications of industrial usage such us industrial control unit, mining machines and intelligent / automatic factory. In addition, the Fast Expansible Slot enhanced the expansible interfaces with mini PCIe slot, USB ports, SM Bus, GPIO Ports, PoE Ports and SATA slots. As for the power management, it has power protection with automatics recovery short circuit protection and vehicle power ignition for variety vehicle.
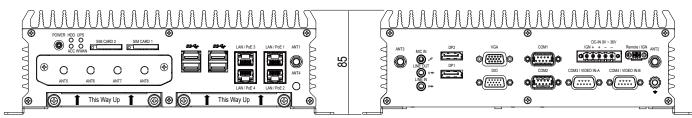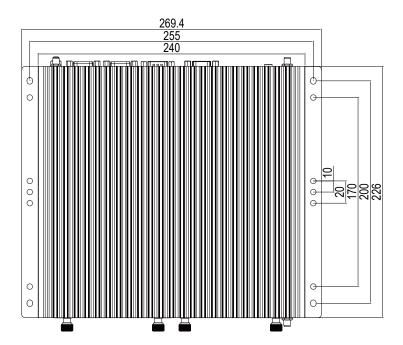
Specifications

System

CPU	Intel Xeon E3-1268L v5 (8M, cache 2.4~3.4GHz)
	Intel Gen6 Core i7-6700TE (8M Cache 2.4GHz up to 3.4GHz)
	Intel Gen6 Core i5-6500TE (6M Cache 2.3GHz up to 3.3GHz)
	Intel Gen6 Core i3-6100TE (4M Cache 2.7GHz)
Memory	2 x DDR4 2133 MHz SO-DIMM up to 32GB
Chipset	Intel Q170 for Intel 6th-Gen Skylake-S Core-i series
	Intel C236 for Xeon Quad Core E3-1268L v5 (optional)
LAN Chipset	3 x Intel i210-AT and 1 x i219LM (support iAMT) Gb/s Ethernet Controllers Onboard Support PXE and WOL; 4 x SMD Intel Ethernet Controller WGI210AT
Watchdog	1 ~ 255 Level Reset
TPM	2.0

I/O

Serial Port	4 x RS 232/422/485 w/1.5KVrms isolation (Auto Direction Control)
USB Port	4 x USB 3.0 Ports
LAN	8 x RJ45 Ports for GbE (Optional for 4 x POE 15.4W per port)
Video Port	2 x Display Port and1 x VGA Port (Triple Independent Display)
DIO Port	8 x GPI and 4 x GPO connector w/1.5KVrms isolation
Audio	1 x Line-out and 1 x Mic-in (Line-in Optional)
Expansion Bus	3 Full and 1 Half Mini-PCIe Slot (2 x SIM Card Socket for 3G/LTE)
FES Expansion	Support PCI-E Bus, USB Bus, SMBus, GPIO and SATA Bus (Customized for Customer without NRE charge)

Graphics

Graphics	Intel® HD Graphics 530
	DirectX Video Acceleration (DXVA) for Accelerating Video Processing - Full AVC/VC1/MPEG2 HW Decode Supports DirectX 11/10.1/10/9 and OpenGL 4.0
Resolution	Max Resolution (HDMI1.4) : 4096x2304@24Hz
	Max Resolution (DP) : 4096x2304@60Hz

Software

Operating System	Win 10, Ubuntu 16.04 64bit

Environmental

Operating Temp.	-40ºC ~ 70ºC (Default CPU 35Watt) , ambient w/ 0.6m/s airflow
Storage Temp.	-40ºC ~ 80ºC
Relative Humidity	10% RH – 90% RH (non-condensing)
Vibration (with SSD)	IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis
	MIL-STD-810G, Method 514.6, Procedure I, Cat.4, Operating
Shock	Operating: MIL-STD-810G, Method 516.6, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD
Certifications	CE, FCC Class A, E13

Storage

Type	2 x 2.5" Drive Bay for SATA Type HDD/SSD RAID 0, 1, 5
	1 x SATA DOM

Power Requirement

Power Input	9V - 36V 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)

Mechanical

Construction	Aluminum Alloy
Mounting	Wall-mount
Weight	3860g (Barebone)
Dimensions	240(L) x 226(W) x 79(H) mm

All specifications are subject to change without notice.

Dimensions

Unit : mm

POWER HDD UPS   SIM CARD 2   SIM CARD 1
          ACC WWAN

ANT5   ANT6   ANT7   ANT8

LAN / PoE 3   LAN / PoE 1   ANT1
LAN / PoE 4   LAN / PoE 2   ANT4

This Way Up   This Way Up

85

ANT3   MIC IN   DP2   VGA   COM1   DC-IN 9V ~ 36V   Remote / IGN   ANT2
           LINE OUT   IGN +   +   −   −
           LINE IN   DP1   DIO   COM2   COM3 / VIDEO IN-A   COM4 / VIDEO IN-B

269.4
255
240

10
20
170
200
226

Ordering Information

Part Number	SD5000P-i7 Optional for i5/i3/C1 (with PoE)
	SD5000-i7 Optional for i5/i3/C1
Description	Intel 6th/7th-Gen Quad Core Xeon/ Core i7/i5/i3 CPU w/ 4 GbE/4 ISO COM/ 2 DP/ VGA/ 4 USB 3.0 Fast Expansible Slot/9-36V Fanless Computer
State of Origin	Made in China

Optional Accessories

DRAM	SO-DIMM max.DDR4-2133,4GB~32GB,0~70ºC/-40~85ºC
SATA SSD	2.5inch MLC/TLC 64GB~1TB 0~70ºC/-40~85ºC
SATA DOM	MLC 8G~128GB, 0~70C/-40~85C
Wifi	Wifi miniPCIe half size card 802.3a/b/g/n/ac
Modem	LTE miniPCIe card
GPS	GPS miniPCIe card
CANBUS	CANBUS miniPCIe card
Extension for 3 x MINI-PCIe	FES-1 kit, 3 x Moden miniPCIe w/ 6*SIM cards
Extension for 4 x GbE	FES-4L kit, 4 x GbE LAN
Battery backup kit	2300mA/h, -30~60ºC, discharge -20~60ºC, operating about 10 mins.
Power adapter	AC/DC 220W/24V power adaper

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