SD5200G4

Intel Gen 8th 6 Cores i7 CPU w/ 10 x GbE (Optional 8 x PoE)/ 3 x COM/ 3 x DP/ 4 x HDMI/ 4 x USB 3.0/ NVIDIA® GeForce GTX 1060 1280 CUDA cores GPU/ DC 9-48V Input AI GPU Computing

Features

- **Intel GEN 8th 6 Cores i7-8700T**
- **NVIDIA® GeForce GTX 1060 GPU**
- **Support 1280 CUDA Cores**
- **8 x GPI and 4 x GPO and 3 x RS-232/422/485**
- **Dual Hot Swappable SATA Storage RAID 0,1,5**
- **9-48V DC Input and Operating Temp.: -40~60°C**
- **10 x GbE LAN (Optional for 8 x PoE)**

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

Introduction

The SD5200G4 Fanless Box Computers are powered by Intel Gen 8th 6 Cores i7 CPU with 10 x GbE (Optional 8 x PoE) and NVIDIA® GeForce GTX 1060 1280 CUDA cores GPU/ 9-48V/ AI GPU Computing. It provides high computing performance to accelerate computational workloads. SD5200G4 Fanless Box Computers include the ability to process deep learning operations with NVIDIA CUDA technology and support end-to-end deep learning solutions, which plays a vital role in managing autonomous vehicles and factory automation. Furthermore, it can assist systems in detecting objects, performing basic classification, and alerting drivers.
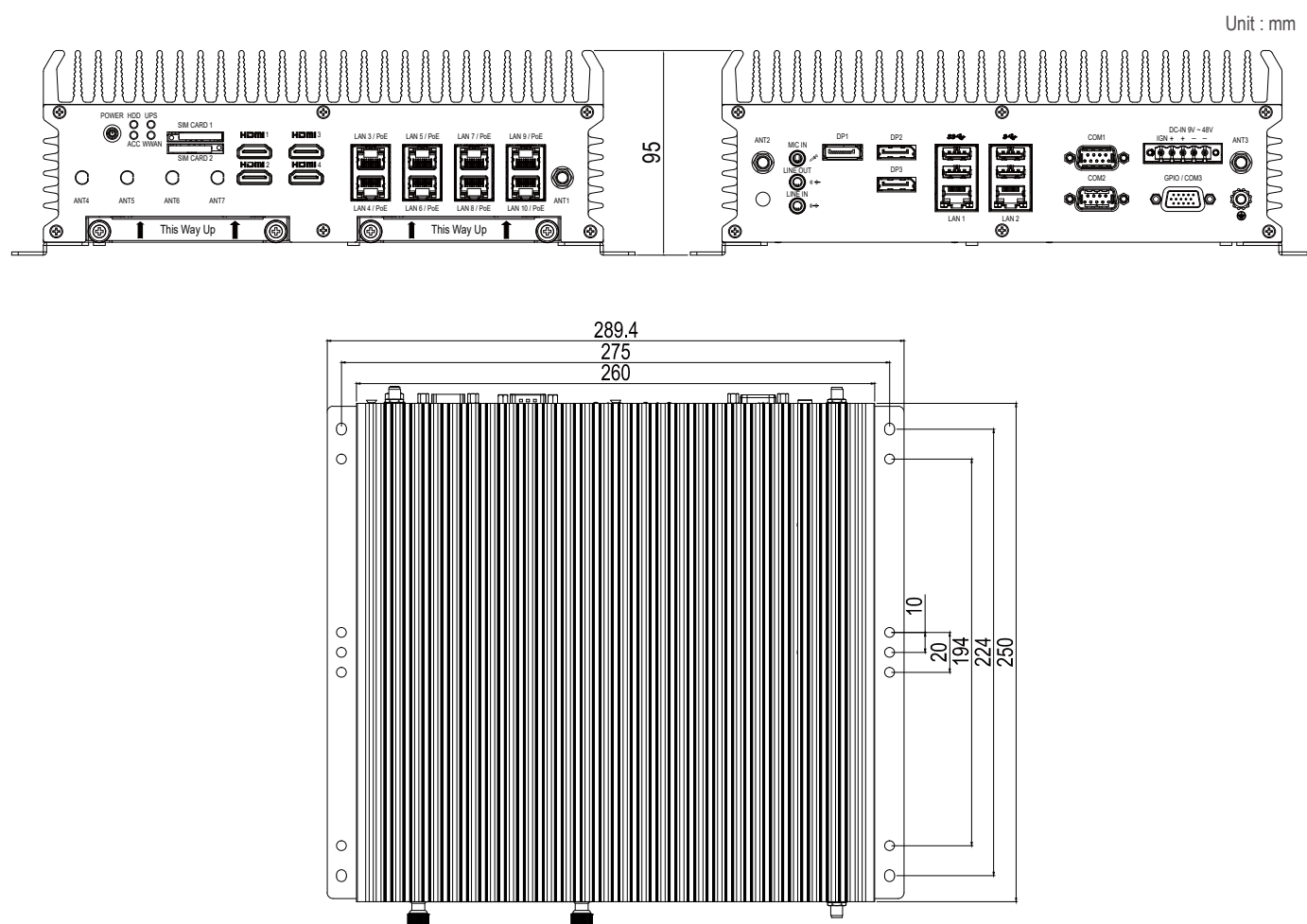
SD5200G4 can be implemented to autonomous vehicles and mining machine, mining trucks, as well as driving performance monitoring. It provides advanced intelligent assistance to monitor and track the traffic.

Specifications

System

CPU	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 2133 MHz SO-DIMM up to 32GB
LAN Chipset	9 x Intel i210-AT and 1 x i219LM (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	3 x RS-232/422/485 (Optional Max 4 x RS-232/422/485)
USB Port	4 x USB 3.0 Ports
LAN	10 x RJ45 Ports for GbE (Optional for 8 x POE total Max.100w)
Video Port	3 x DP, 4 x HDMI Ports
DIO Port	8 x GPI and 4 x GPO
Audio	1 x Line-out, 1 x Line-in and 1 x Mic-in
Expansion Bus	3 x Full Mini-PCIe Slots and 1x M.2 A-E Key 2230/3030 slot (2 x SIM Card Sockets for 3G/LTE)

Software

Operating System	Win 10, Ubuntu 18.04 64bit

Graphics

Graphics	NVIDIA® GeForce GTX 1060 GPU (1280 CUDA Cores) Support for OpenGL 4.5 and OpenCL™ 1.2 Support for DirectX® 12 (Feature Level 12_0) features, VR Ready
Resolution	Max Resolution (HDMI 2.0b) :4096x2160@60Hz

Environmental

Operating Temp.	-40°C ~ 60°C, ambient w/ 0.6m/s airflow
Storage Temp.	-40°C ~ 80°C
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 mSATA

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

Mechanical

Construction	Aluminum Alloy
Mounting	Wall-mount
Weight	5250g (Barebone)
Dimensions	260(L) x 250(W) x 95(H) mm

Dimensions

Unit : mm

Ordering Information

Part Number	SD5200PG4-i7 Optional for i5/i3/C1 (with PoE)
	SD5200G4-i7 Optional for i5/i3/C1
Description	Intel Gen 8th 6 Cores i7 CPU w/ 10 x GbE (Optional 8 x PoE)/ 3 x COM/ 3 x DP/ 4 x HDMI/ 4 x USB 3.0/ NVIDIA® GeForce GTX 1060 1280 CUDA cores GPU/ DC 9-48V Input AI GPU 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 MLC/TLC 64GB~1TB 0~70C/-40~85°C
mSATA	MLC 16G~512GB, 0~70C/-40~85°C
Wifi	M.2 802.3a/b/g/n/ac
Modem	LTE miniPCIe card
GPS	GPS miniPCIe card
CANBUS	CANBUS miniPCIe card
Battery backup kit	N/C, cannot install battery backup kit
Power adapter	AC/DC 280W/24V power adaper
Fan kit	SD5200 FAN kit, total size 260x253x120.7mm