

SIGM-3251

Intel® Skylake/Kabylake-U SOC CPU, MLU220(8TOPS), Dual- channel DDR4, 4*LAN, 1*SFP, 2*USB3.0, 4*USB2.0, 1*DP, 1*VGA, 4*isolated COM, 1*8-bit programmable DIO, 4*Mini PCIe, EN50155 certification **JHCTECH**

IoT Computer
Connecting the Dots

Fanless In-Vehicle Computer,
SIGM



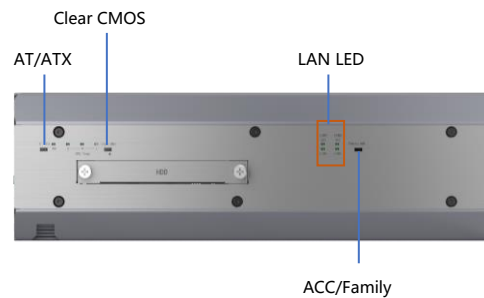
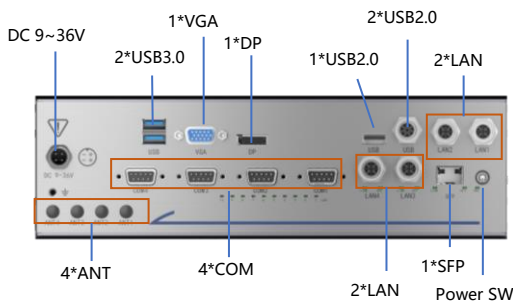
Key Features

- All-in-One Rugged structure design, aluminum chassis with fanless heat dissipation
- Intel® Skylake/Kabylake-U CPU
- 2-ch DDR4, On-board 4GB+SODIMM (up to 16GB)
- Onboard Cambrian MLU220 AI accelerated chip, AI accelerated computing power 8TOPS(INT8), 4GB Ram
- 1*DP, 1*VGA, two independent displays
- 4*LAN, 1*SFP, 2*USB3.0, 4*USB2.0
- 4*isolated COM, 1*8-bit programmable DIO with LEDs
- 4*Mini PCIe(one mSATA optional), supporting GPS, WiFi, LTE, and 4G
- Iron standard power supply input DC 9~36V wide voltage supply
- Operating temperature -40°C to +70 °C

Description

The SIGM-3251 is a fanless and ruggedized on-board computer with an Intel® Skylake /Kabylake-U SOC CPU and an onboard Cambrian MLU220 AI acceleration chip. Dual-channel DDR4, onboard 4GB+ SODIMM(Max. 16GB). It is equipped with iron standard power supply input DC 9~36V wide voltage power supply and EN50155 iron gauge certification. It is suitable for road vehicular, intelligent rail communication system industry applications.

I/O View

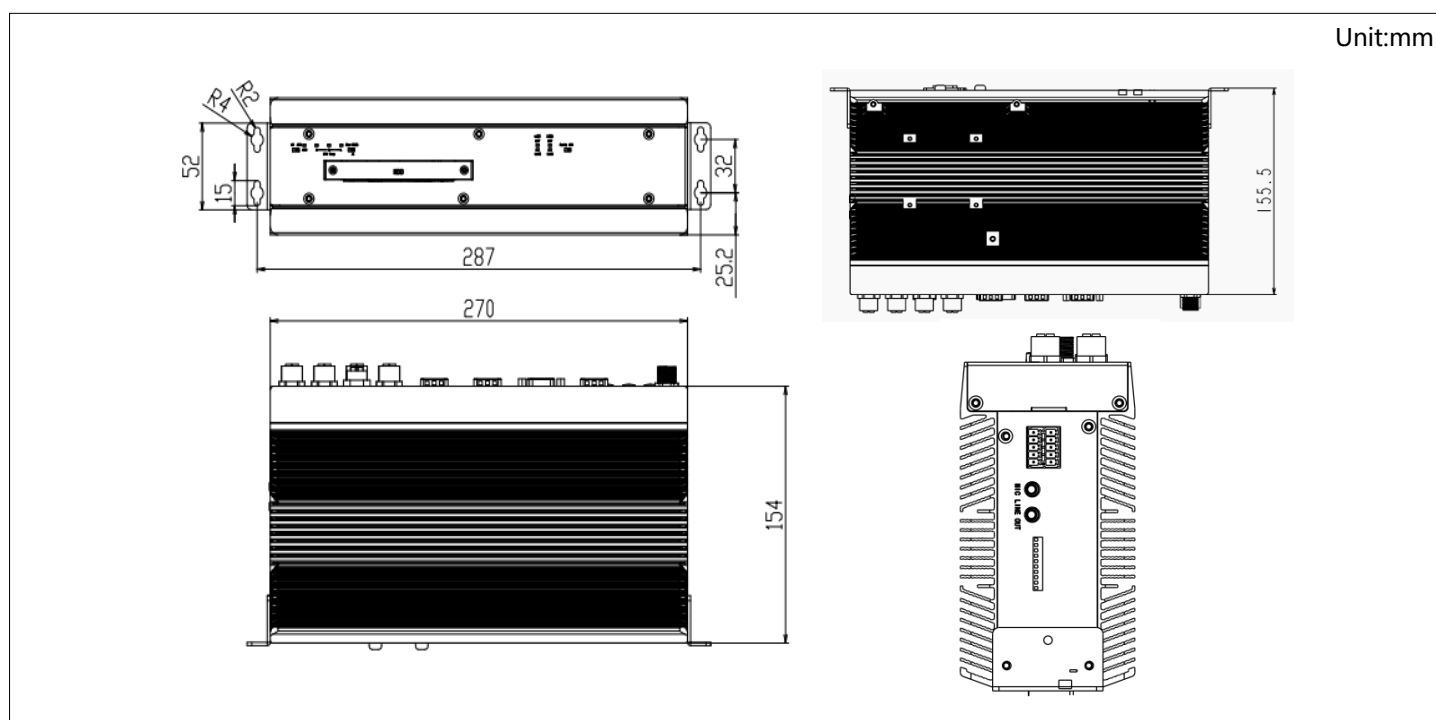


SPEC.

CPU	Intel Skylake-U/Kabylake-U Core I3/I5/I7, 2.4GHz, 2C4T, TDP 15W
MLU220	8TOPS(INT8), 4GB Ram, TDP8.5W
System Memory	2-ch DDR4, On-board 4GB+SODIMM (up to 16GB)
Expansion	2*Mini PCIe (with PCIe X1+USB signal), with dual SIM slot, support dual 4G LTE/Wifi/BT/GPS 1*Mini PCIe with SATA+USB hub signal, optional mSATA 1*Mini PCIe with PCIeX1+USB hub signal
Intel Graphics	Intel Gen. 9 HD Graphics, the highest resolution: DP is 4096*2304@60Hz, VGA is 1920*1200@60Hz, support 2 independent displays
Audio	optional support Realtek ALC662, Audio out and MIC
LAN	4*Intel I210AT PCIe Gig. Ethernet, 4*M12 1*Intel I210IS PCIe Gig. Ethernet, 1*SFP
Storage	1*2.5" HDD SATA bay, 1*mSATA
DIO	1*8-bit DIO
I/O ports	4*Gig-LAN (4*M12), 1*SFP 2*USB3.0 (Type A); 2*USB2.0 (Type A, one of them is built-in), 2*USB2.0 (M12) 8-bit programmable DIO (2*5Pin Phoenix terminal) , 1*Audio-out and 1*MIC (3.5mm phone jack) 1*DP+1*VGA, 4*ANT, 4*RS232/RS485 DB9 (2.5 KV optical isolation)
LED	10* Red, yellow and green LEDs, controlled by programmable 30-bit DIO 1* Power LED, 1* HDD LED, 3*CPU temperature level LEDs (Red for alarm, Yellow for high temperature, Green for normal temperature) 5* Network Connection Status LEDs (ACT/LINK)
Control SW	1*power button, 1*AT/ATX switch, 1*Clear CMOS switch, 1*ACC/Family switch
Power Supply	Railway power module 9~36V input, 4-pin terminal port(M12), TDP: 12V/3.14A(I7-6500U CPU, 8G DDR4, MLU220)
Watchdog Timer	Programmable timeout interrupt or system reset, 1 to 255 seconds
OS Support	Linux Fedora Ubuntu

Structure	Aluminum moment profile cooling shell, stainless steel wire drawing box
Color	Silver gray
Mounting	Desktop installation/rack installation
Dimension	(W*H*D): 270*154*155.5mm
Net weight	3.93KG
Operating temperature	EN50155 TX: -40 ~ 70°C
Storage Temperature	-40°C~85°C
Storage Humidity	10~90%@40°C, Non-condensing
Vibration	MIL-STD-810G, EN50155
Shock	MIL-STD-810G, EN50155
Certification/EMC	EN50155, CE/FCC Class A

Dimension



Ordering Info

Model No.	CPU	Introduction
SIGM-3251/S001	CoreB-6100U/7100U	Fanless In-Vehicle Computer , MLU220(8TOPS), onboard 4GB+1*SODIMM DDR4, 4*LAN,1*SFP, 2*USB3.0, 4*USB2.0, 4*isolated COM, 4*Mini PCIe(one mSATA optional), 1*DP, 1*VGA, 1*Audio out, 1*Mic, 1*8-bit DIO, 1*2.5" SATA drive bay, DC 9~36V
SIGM-3251/S002	CoreI5-6200U/7200U	
SIGM-3251/S003	CoreI7-6500U/7500U	
Mounting kits	19 inch 2U rack mounting kits	
M12A-4P DC Cable	DC cable with M12 A-Code Female 4pin connector to bare wire, 4 core 18AWG PVC, non-halogen free low smoke flame retardant, 100cm	
M12A-8P UAB Cable	USB cable, M12 A-code Male 8pin connector to 2*Type A with double M3 nut earholes, 8-core shielded PVC, non-halogen free low smoke flame retardant, 50cm	
M12X-8P LAN/POE Cable	Internet cable, M12 X-code Male 8pin connector to RJ45 crystal head, 8-core CAT6, halogen free, low smoke flame retardant, 180cm	
PA-60DC12-M12A-4P	AC/DC power adapter, M12 A-code Female 4pin connector, DC12V@5A 60W (non-halogen free low smoke, no on-board certification)	