Industrial Edge Computing Host Specification

RU-IPC-3588-16-128-N4

1. Product Features:

- Equipped with on-board RK3588 CPU, multiple Ethernet ports, supports 4G/5G, and other communication interfaces; suitable for IoT and industrial control applications.
- Single-layer I/O design, conforming to industrial rugged and slim form factor standards
- Fanless design with monolithic extruded aluminum enclosure
- 1 × M.2 NVMe SSD interface
- 2 × HDMI output interfaces
- 1 × Mini PCIe interface supporting 4G; 1 × Mini PCIe interface supporting Wi-Fi/BT
- Supports watchdog, diskless boot, Wake-on-LAN, power-on startup, and scheduled startup

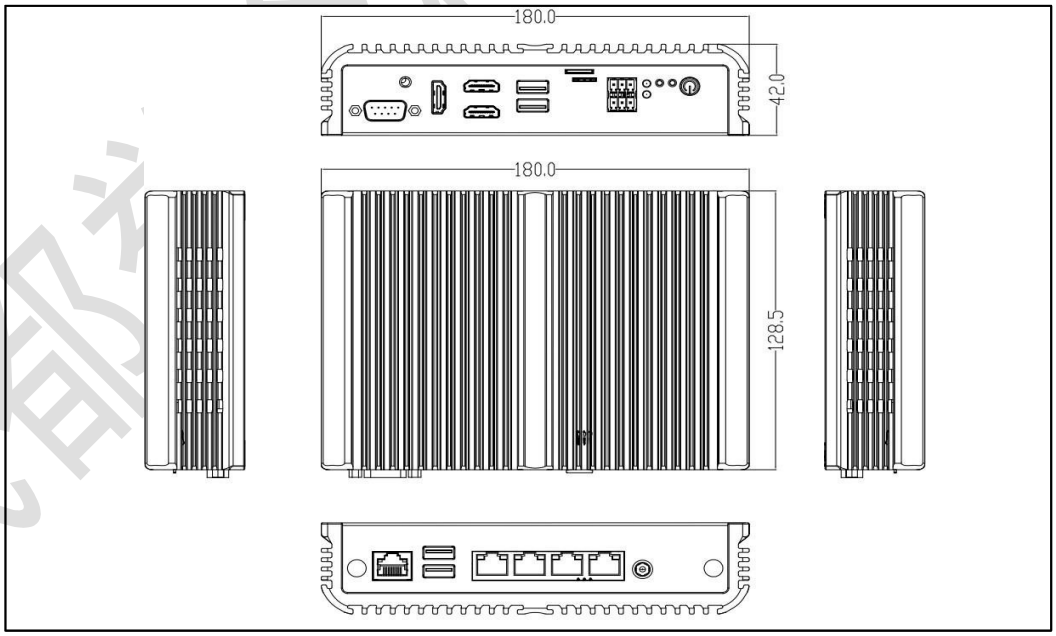
2. Product Specifications

Model	RU-IPC-3588-16-128-N4
Dimensions	180 × 128.5 × 42 mm(L × W × H)
CPU	Rockchip RK3588, Octa-core 64-bit 4×A76 + 4×A55, 8nm process, up to 2.4 GHz
GPU	ARM Mali-G610 MP4 Quad-core GPU, supports OpenGL ES 3.2 / OpenCL 2.2 / Vulkan 1.1, 450 GFLOPS
NPU	6.0 TOPS@INT8, supports INT4/INT8/INT16 mixed precision;compatible with TensorFlow / MXNet / PyTorch / Caffe model conversion
Memory	LPDDR4X 16 GB
Onboard eMMC	eMMC 5.1 128 GB
SSD	M.2 Key-M 2280 slot, supports PCIe 3.0 NVMe SSD
Display Output	2 × HDMI OUT,up to 7680 × 4320@60Hz
Display Input	1 × HDMI INPUT,up to 3840 × 2160p@60Hz
Audio	1 × Line Out + 1 × MIC
Network	4 × RJ45 (2 × 2.5G + 2 × Gigabit)
USB	USB 3.0 × 2,USB 2.0 × 2
Other Interfaces	1x RJ45（Debug Serial Port），1*Micro SD Card
Built-in Interfaces	Built-in 1 × M.2 Key-E 2230 for PCIe Wi-Fi module; Built-in 1 × M.2 Key-B 3052 for USB 3.0 4G/5G module
Power Adapter	DC-IN 12 V (2.5/5.5 mm Power Jack)
Operating Temp/Humidity	-20°C ~ +60°C, Relative Humidity < 95%, non-condensing
Material / Surface Treatment	Premium extruded aluminum alloy + SGCC sheet metal / sandblasted anodized + painted
Weight	Approx. 0.4 KG
Operating System	Ubuntu

3. Product Appearance


TAN
DC_12V
LAN3
LAN2
LAN1
LAN0
USB2.0
CONSOLE
TAN


Audio
HDMI_IN
HDMI_OUT1
USB3.0
TF
SIM
G A B
PWR V+ BOOT ON/OFF
RS-232
HDMI_OUT2
STATE
G A B
Q C
PASSED


180.0
42.0
180.0
128.5