



碩久科技有限公司

MaxLong Technology Co., Ltd

SG2245(SDK)

Multifunction Controller -5G Controller +LoRa Controller (SDK)

Feature

- Built-in Raspberry Pi CM4
- Wide Range Input Power (DC 9 ~ 32V)
- Multiple I/O Interfaces
- Powerful Computing capability
- CPU Heatsink Transfer Heat To Metal Housing
- M.2 key B for 5G (Default)
- M.2 key M for PCIe SSD / AI (optional)
- Mini-PCIe (for 4G/NB-IoT/LoRa)



5G

AI

IoT

Raspberry Pi **COMPUTE MODULE 4** is built on the **64-bit quad-core BCM2711 applications processor**. Compared with the previous version, **Compute Module 4** has major changes in performance, such as **faster CPU cores, better multimedia and more interface functions.**

High performance

The core adopts industrial Broadcom BCM2711, which has 4 core computing capabilities and can perform AI extreme data edge computing .

Great flexibility(Optional):

1. Use LTE 4G/5G modules to achieve high transmission, low latency, and meet field applications .
2. Use the LoRa module to become a LoRa controller. After collecting local data, it communicates with the cloud through the mobile network.
3. USB 3.0 can be connected to AI nerve stick for high-speed computing.

Multifunctional

With 2 Ethernet networks, 2 RS232 or 2 RS485 and 1 DO, meet the different needs of each field.

Specification

System

CPU	Broadcom BCM2711 QuadCore Cortex A72 (ARM v8) 64 bits SoC @ 1.5G
RAM	2 G Bytes LPDDR4 SDRAM
ROM	8 G Bytes EMMC Flash Memory
GPU	VideoCore VI (OpenGL ES 3.0, H.265 HEVC (4Kp60fps decode), H.264(1080p60fps decode)
OS	Linux OS

Connectivity

Wireless	Wifi 802.11b / g / n / ac (2.4/5GHz) (optional) Bluetooth 5.0 BLE (optional)
5G	M.2 key B USB 3.0 / PCI-E for 5G (optional)
4G	Mini-PCIe : USB 2.0 for 4G / NB-IoT / LoRa (optional) Nano SIM Slot for 5G / 4G / NB-IoT
Ethernet	10/100/1000 Mbps Giga Lan * 1 (RJ45) · 10/100Mbps * 1 (RJ45)

Interface

USB 3.0 * 2, USB 2.0 * 2 · (optional) M.2 key M for PCIe SSD

Serial Port

Port 1: RS-232/422/485 * 1 · Port 2: RS-232/485 * 1

Digital Input / Digital Output

Digital Input

Digital Input * 5 Pin
(Active High / Active Low Selectable)
Dry contact : Logic level 0 : close to GND ,
Logic level 5 : open
Wet contact : Logic level 0 : 0 ~ 3 V,
Logic level 1 : 10 ~ 30 V

Digital Output

Digital Output * 1 Pin
(Active High / Active Low Selectable)
120VAC @0.5A, 240VAC @0.25A, 30VDC @1A

Video Output

Micro HDMI * 1 (4Kp60fps with audio)

Mechanical & Environment

Operating Temperature : - 20 °C ~ 75 °C
Storage Temperature : - 25 °C ~ 80 °C

Dimensions : 170 * 110 * 30 mm (W * D * H)
Weight : 950 gm
Housing : Metal.

Power

DC 9~32V, 1000mA@12V (DC Jack or Terminal Input)

LED

PI PWR / EMMC / Serial / DI / DO / SYS-Customer defined / 5G / 4G

Others

RTC : Real Time Clock * 1 (with Battery)
Buzzer * 1
Watch Dog Timer

Reset Button * 1
MIPI CSI 2-lane * 1 (optional)
Fan - DC 12V (optional)

Warranty

Warranty period : 1 year

Raspberry Pi Computing Module Core Board Backplane - Compute Module 4 I/O Board

