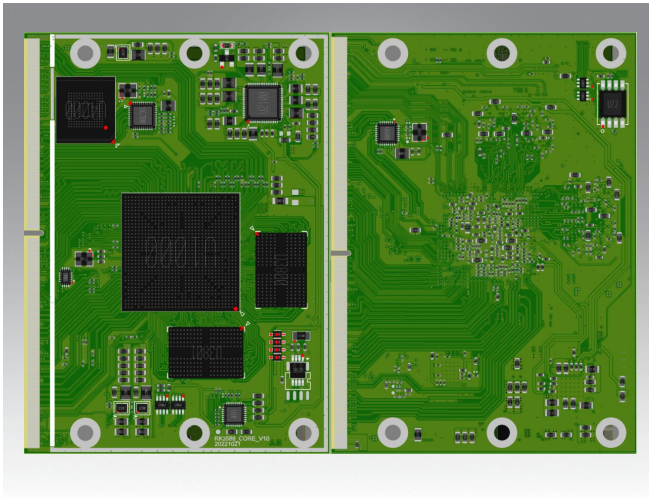


CoolPi CM5

Rockchip ARM RK3588 Core Board



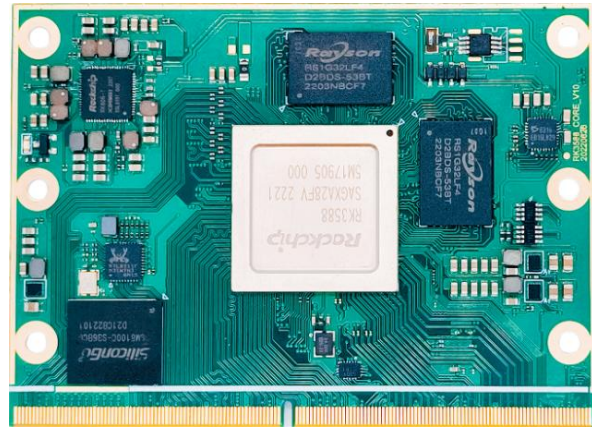
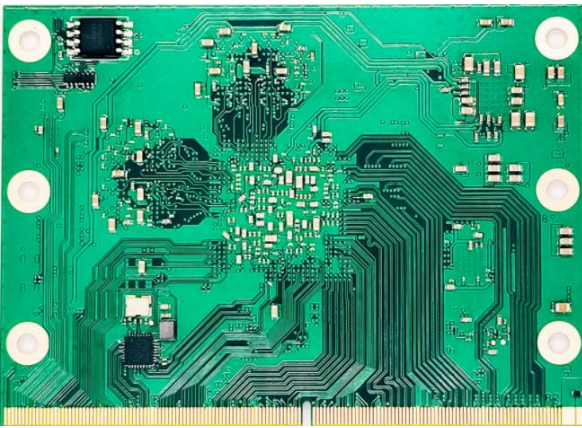
- RK3588 ARM Quad Cortex-A76 and Quad Cortex-A55 2.X GHz
- Onboard 2/4/8/16GB/32GB LPDDR4 memory and 32/64/128GB eMMC(Optional)
- 6T NPU support
- Integrated with 2 Gigabit Ethernet phys, no external expansion required
- Integrated audio codec circuit, 1 output, 2 input
- Integrated RTC
- Export all interfaces of RK3588 externally,excellent scalability performance
- Android12 support
- Ubuntu22 support
- Yocto support
- System Compatible with Raspberry Pi

CM5 adopts a core board design approach, which introduces almost all interfaces of RK3588, making it very convenient for users to design the motherboard. The core board integrates two gigabit Ethernet circuits internally, eliminating the need for adding PHY circuits to the motherboard. It integrates high-performance audio codec and RTC circuits internally, simplifying the user's design threshold, effectively shortening the product development cycle, and achieving mass production as soon as possible.

Please obtain detailed PIN definition and design documents from the coolpi wiki: <https://wiki.cool-pi.com/en/home>

Any questions in the design can be asked in the coolpi community:<https://forum.cool-pi.com/>

Processor	RK3588	Rockchip RK3588 ARM dual Cortex-A76 and quad Cortex-A55 2.X GHz
Memory	LPDDR4/4X	2GB/4GB/8GB/16GB/32GB
Disk	Emmc	32GB/64GB/128GB/256GB
2xEthernet	Chipset Speed	RTL8111HS+RTL8211F 10/100/1000 Mbps
AUDIO	Encoding and decoding	ES8336
PCIE	4 independent PCIE controllers	2X(PCIE3.0X2) 2X(PCIE2.0X1)
Power	Power Supply Voltage Power Type	4.2V---4.8V VDC-in



Part Number	CPU	Memory	Flash	HDMI	DP	DSI	LAN	CSI	SATA	USB	SD	Operating Temperature
RCP-CM5-8GNO	RK3588	8GB		2	2	2	2			4	1	0 ~ 70 °C
RCP-CM5-16GNO	RK3588	16GB		2	2	2	2			4	1	0 ~ 70 °C
RCP-CM5-8GNJ	RK3588J	8GB		2	2	2	2			4	1	-40 ~ 85 °C
RCP-CM5-16GNJ	RK3588J	16GB		2	2	2	2			4	1	-40 ~ 85 °C

Note: The capacity of other DDR or EMMC can be customized, please consult coolpi@cool-pi.com.

