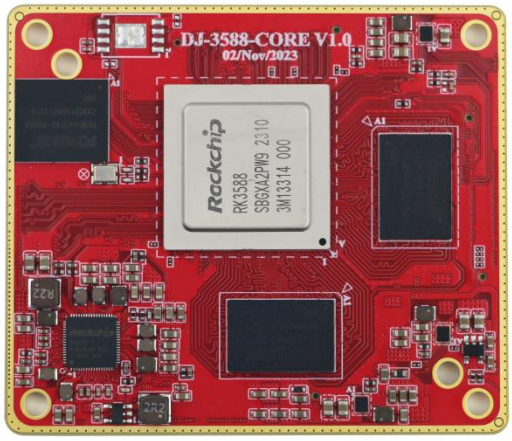

Introduction

DJ-3588-CORE is an eight-core, 8K, 6TOPs computing power industrial-grade core board based on the domestic Rockchip flagship RK3588 high-end processor, equipped with a quad-core Cortex-A76+quad-core Cortex-A55 eight-core CPU, built-in The powerful embedded hardware engine supports 8K@60fps H.265/8K@30fps H.264 encoding/decoding, as well as 8K display output, and provides a neural network processor NPU with up to 6 TOPs computing power.

The DJ-3588-CORE core board adopts high TG HDI board design technology. The board integrates CPU, LPDDR4, eMMC, and PMU. The signal interface is connected to the base plate through four precision industrial-grade sockets. It has high reliability and is easy to install. The core board size is only 60mm*70mm, which greatly meets product applications in different spaces.

The DJ-3588-CORE core board can provide different RAM/eMMC configurations for users to choose according to different customer needs. It can also provide customized services for baseboards and single boards according to customer needs.

Features

- Industrial grade process, TG HDI board design process, equipped with cooling fan, with high reliability and stability
- Excellent embedded performance, eight-core 64-bit processor, quad-core ARM Cortex-A76+quad-core Cortex-A55 combination CPU, frequency up to 2.4GHz
- Super multimedia capabilities, built-in ARM Mali-G610 MC4 GPU, supports 8K video recording and playback, 8K display output
- Powerful AI computing power and 6 TOPs NPU idea various AI application scenarios
- Provide HDMI/eDP/LVDS/MIPI display interface, support multi-screen differential display

- Super image processing capability, 48MP ISP, supports multi-camera input
- Rich high-speed interfaces (PCIe, TYPE-C, SATA, 2.5GbE LAN, RS485, CAN, USB3.0), easy for peripheral access and expansion
- Android and Linux OS

Specifications

Processor	CPU	Rockchip RK3588 Octa-core 64-bit ARM architecture processor 4*Cortex-A76 @2.4GHz 4*Cortex-A55 @1.8GHz
	GPU	ARM Mali-G610 MC4, supporting OpenGL ES 1.1/2.0/3.1/3.2, Vulkan 1.1, 1.2, OpenCL 1.1, 1.2, 2.0, embedded with high-performance 2D image acceleration module
	NPU	6 Tops computing power, supporting int4/int8/int16/FP16/BF16/TF32
Storage	Memory	Standard 8GB LPDDR4 high-speed memory chip (optional 4GB/6GB/12GB/16GB…)
	Built in memory	Standard configuration 32GB eMMC 5.1 (optional 16GB/64GB/128GB...)
B2B Connector	Connector	Four 2*40PINHigh-reliability, high-precision industrial-grade high-speed connectors, tightly connected to the motherboard
	Number of pins	Total 320PIN
B2B Fixing hole	Fixing hole	Four
Electrical characteristics	Power supply	DC 2.7V-5V
Operating system	Android、Linux	
Environment	Operating Temperature:-10℃~60℃ Operating Humidity :10%~90%RH@31℃ ,no condensation	
	Storage Temperature:-40℃~85℃ Storage Humidity :5%~95%RH@39℃ ,no condensation	
Size	60mm * 70mm	

Size