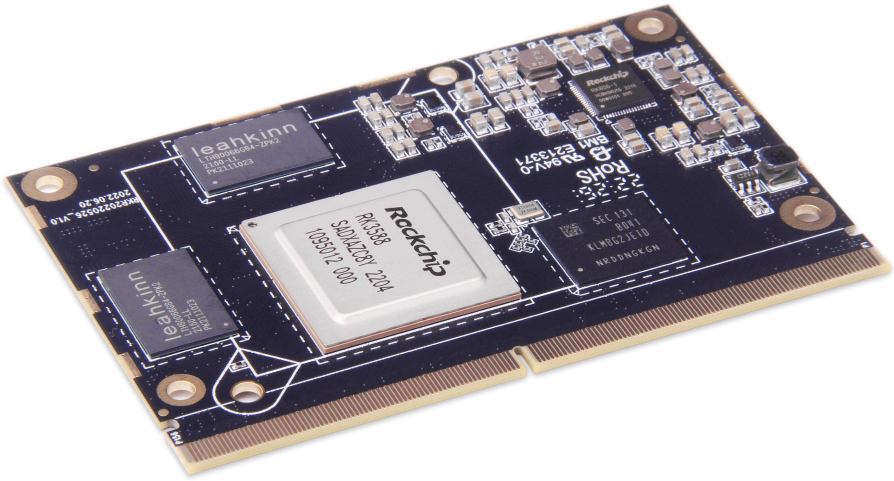
SOM3588 Core Board



The SOM3588 Core Board is designed by Geniatech, based on Rock-chip RK3588, with quad-core Cortex-A76 and quad-core Cortex-A55, build-in NPU 6TOPs It supports Bluetooth, Wi-Fi, audio, video, camera and other functions, and has a variety of video input and output interfaces. With the dual-gigabit adaptive RJ45 Ethernet port, it is suitable for intelligent NVR, cloud terminal, Internet of Things gateway, industrial control, information publishing terminal, multimedia advertising machine and other scenarios, and can also be widely used in the field of embedded artificial intelligence. It constitutes a complete AI development board by connecting the core board to the baseboard through the standard SODIMM 314P interface

- High performance: Quad-core Cortex-A76 and Quad-core Cortex-A55, build-in NPU up to 6TOPs, Support mainstream deep learning frameworks; Can bring more optimized performance for all kinds of AI application scenarios
- Multiple OS: Android 12.0 and Debian11

The standard SODIMM 314P interface is only 82 mm x 53 mm. Combined with the baseboard, it can form a complete high-performance industrial mainboard. It has more expansion ports and can be directly applied to various intelligent products to accelerate the landing of products.

- Powerful video encoding and decoding capabilities:

  Support 8KP60 video, can realize multiple 1080@30FPS codec, support with programming and solution
- High reliability: industrial-grade motherboard design, strict quality control, 7*24h continuous and stable operation

Multiple hard disk access: it provides PCIe2.1 and SATA3.0 ports and supports the expansion of multiple large-capacity storage devices with SSDS or HDDS, allowing the device to easily expand to a large capacity of TB

Specification

CPU	Quad-core Cortex-A76 and Quad-core Cortex-A55
GPU	Mali-G610 MP4 (4x256KB L2 Cache)
RAM	4GB(8/16/32G optional)
Storage	32GB （64G/128G/256G optional）
OS	Android12 / Debian11
SODIMM Interface	2 x GIGABIT Ethernet
	PCIe3.0 (2×2lanes,1×4lanes,4×1lanes),3×PCIE2.0(1 lanes)
	USB3.0*3、USB2.0 Host 2*4 、USB2.0 OTG*2
	MIPI CSI*1
	MIPI DSI*2
	I2S*4
	HDMI OUT*2(7680x4320@60Hz), HDMI IN*1(4096x2160p@60Hz)
	GPIO*137
	SDIO*12
	eDP*1
	Type-c*2
	DVP*1
	SATA*3
	SPDIF*2
	SPI*5
	ADC*6
	PWM*16
	DEBUG*1
	I2C*9
	POWER：5V/3A
Size	82 x 53 mm

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