

Rockchip RK3588:

Android 12 8K



Product Overview

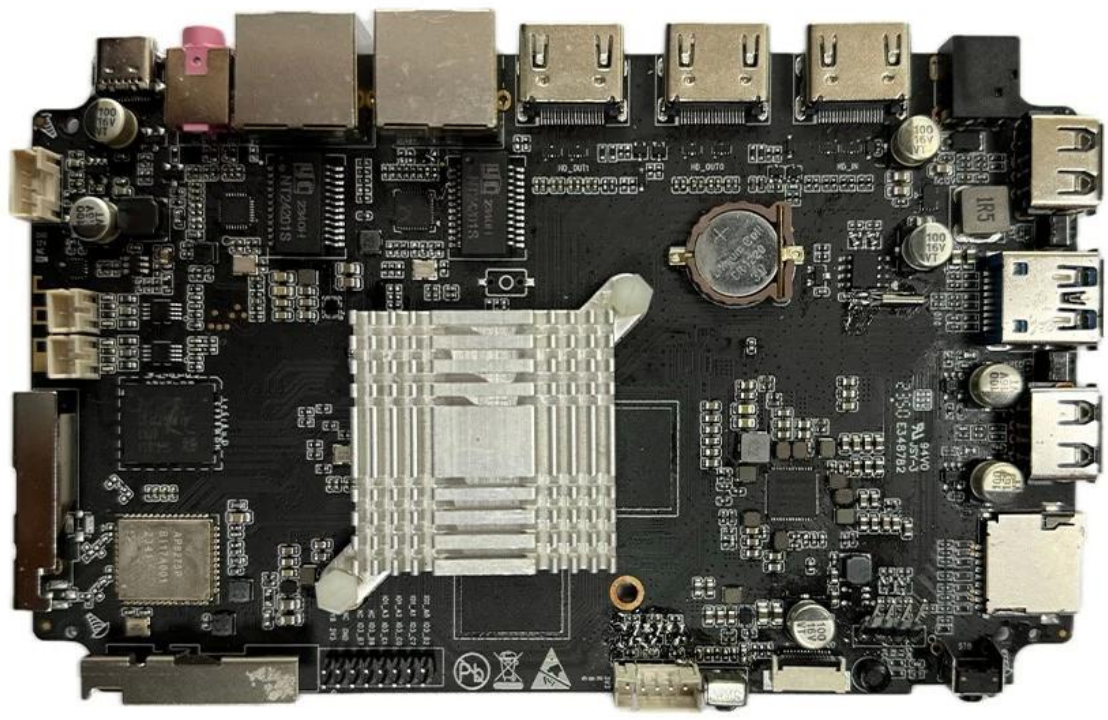
Processor	Rockchip RK3588
Core	Rockchip RK3588 8 Core, Quad-Core Cortex-A76 Quad-Core Cortex-A55
GPU	ARM Mali-G610 MC4 OpenGL ES 1.1/2.0/3.1/3.2 Vulkan 1.1, 1.2 OpenCL 1.1,1.2,2.0
Cache	2D
IO	6 (int4/int8/int16/FP16/BF16/TF32)
Memory	4GB/8GB (64 LPDDR4/LPDDR4x)
Storage	32G/64G/128G/256G (eMMC5.0/ 5.1)
Network	IEEE 802.11a/b/g/n/ac
Wireless	Wi-Fi6 2.4GHz/5.8GHz (PCIe v3.0)
Video	2T2R
OS	Android 12
Display	5.0

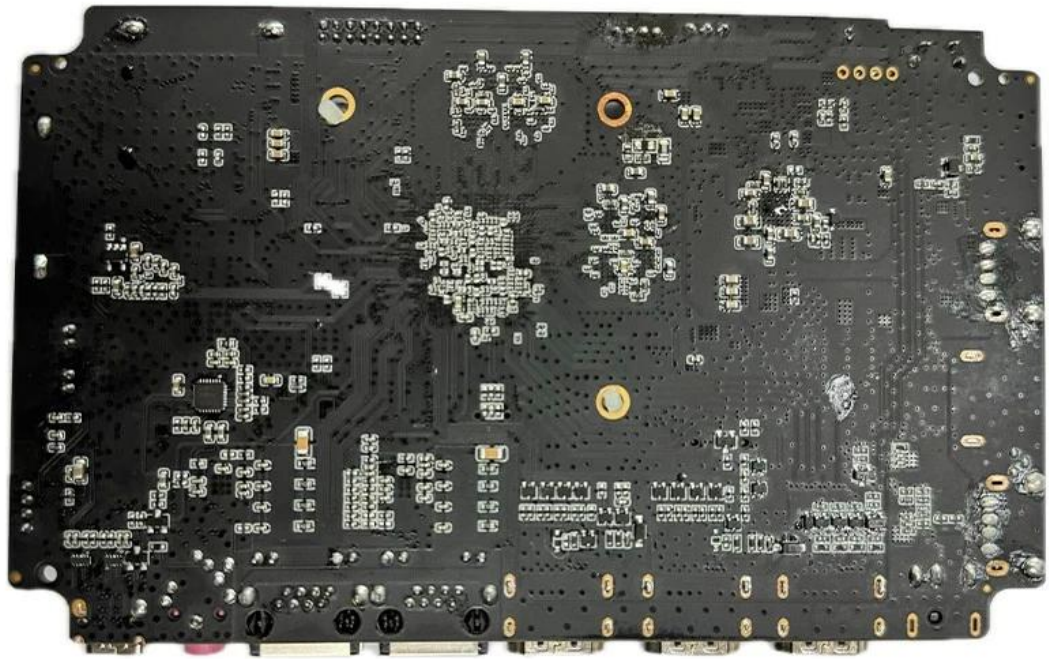
Video Capabilities

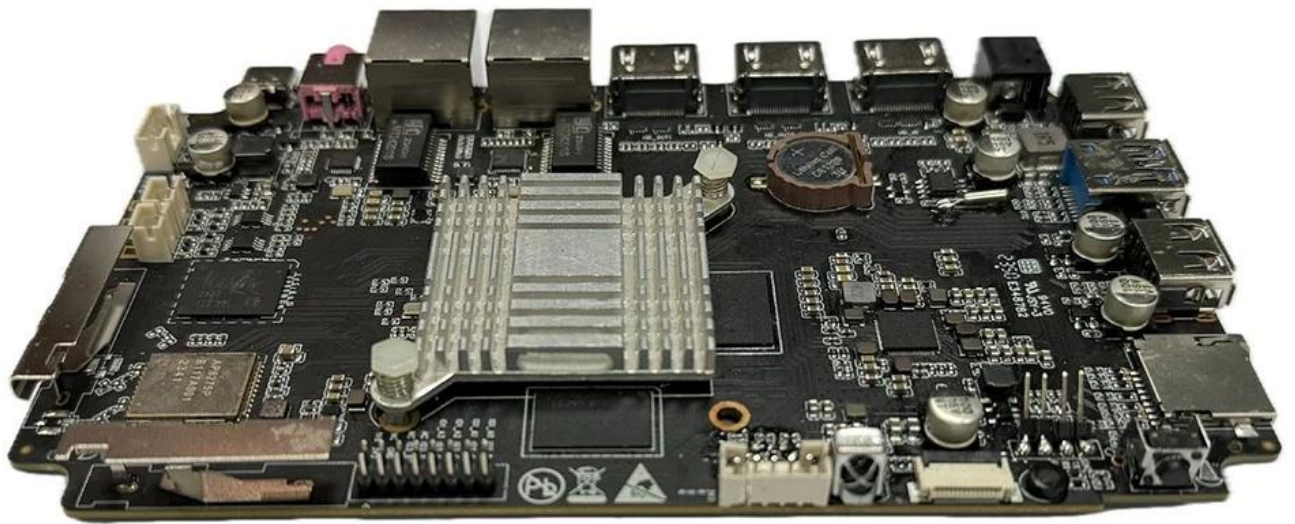
Video Codec	MPEG-1, MPEG-2, MPEG-4, H.263, H.264, H.265, VC-1, VP9, VP8 MVC, AV1
MMU	
Resolution	H.264 AVC/MVC Main10 L6.0 : 8K@30fps (7680x4320)
Resolution	VP9/2 L6.1 : 8K@60fps (7680x4320)
Resolution	H.265 HEVC/MVC Main10 L6.1 : 8K@60fps (7680x4320)
Resolution	AVS2 Profile0/2 L10.2.6 : 8K@60fps (7680x4320)
Resolution	AV1 8/10 L5.3 : 4K@60fps (3840x2160)
Resolution	MPEG-2 MP : 1080p@60fps (1920x1088)
Resolution	MPEG-1 MP : 1080p@60fps (1920x1088)
Resolution	VC-1 AP 3 : 1080p@60fps (1920x1088)
Resolution	VP8 2 : 1080p@60fps (1920x1088)
Resolution	H.265/H.264 8K@30fps
Resolution	HDR&3DNR
ISP	ISP 16M HDR&3DNR
I2S	I2S0 8
I2S	8 TX 8 RX
I2S	16 32
I2S	192KHz
I2S	3 I2S (early, late1, late2, late3)
I2S	4 PCM (early, late1, late2, late3)
I2S	TDM 1/2, 1, 2
I2S	I2S, PCM, TDM

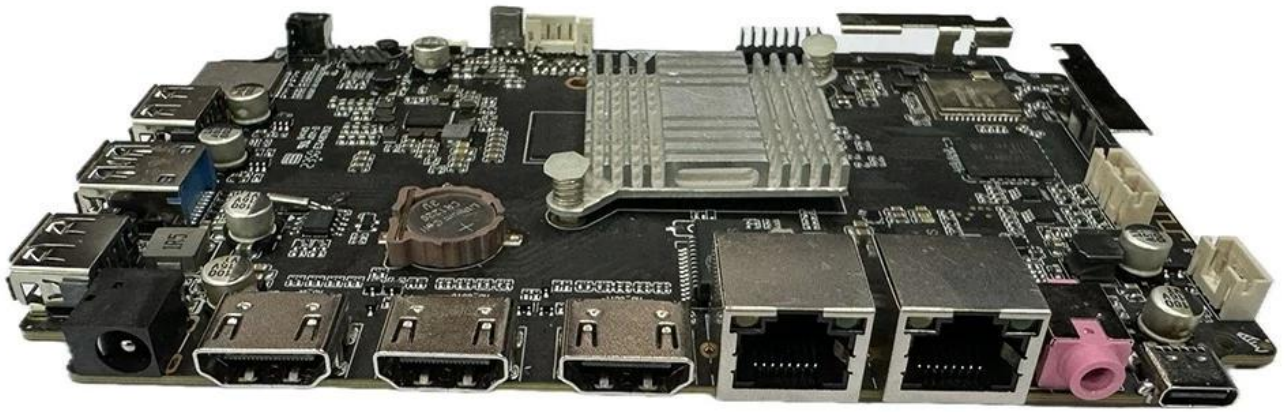
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HDMI OUT 1: HDMI 2.1/7680x4320@60Hz
HDMI OUT 2: HDMI 2.1/4096x2304@60Hz
HDMI IN: HDMI 2.0/HDMI 1.4b □□□□□□□□□□□□ 4K x 2K (3840x
2160p@24Hz/25Hz/30Hz □□□ 4096x2160p@24Hz)
□□□□□ □□□□□ 1*3.5 □□
□□□□□□□□□□□□ □□□□□□□□□□□□ 1:1*1000M(RGMII)
□□□□□□□□□□□□ 2:1*1000M
□□□□ TF 1 * □□□□ TF
□□□□□ USB 2*□□□□□□□□□□ 2.0 (□□□□□□)
1 * USB3.0 (□□□□□□)
□□□□□□-C 1 * □□□□□□□□□□□□□□□□□□□□ Type C 3.0 (□□□□□□□□□□□□□□)

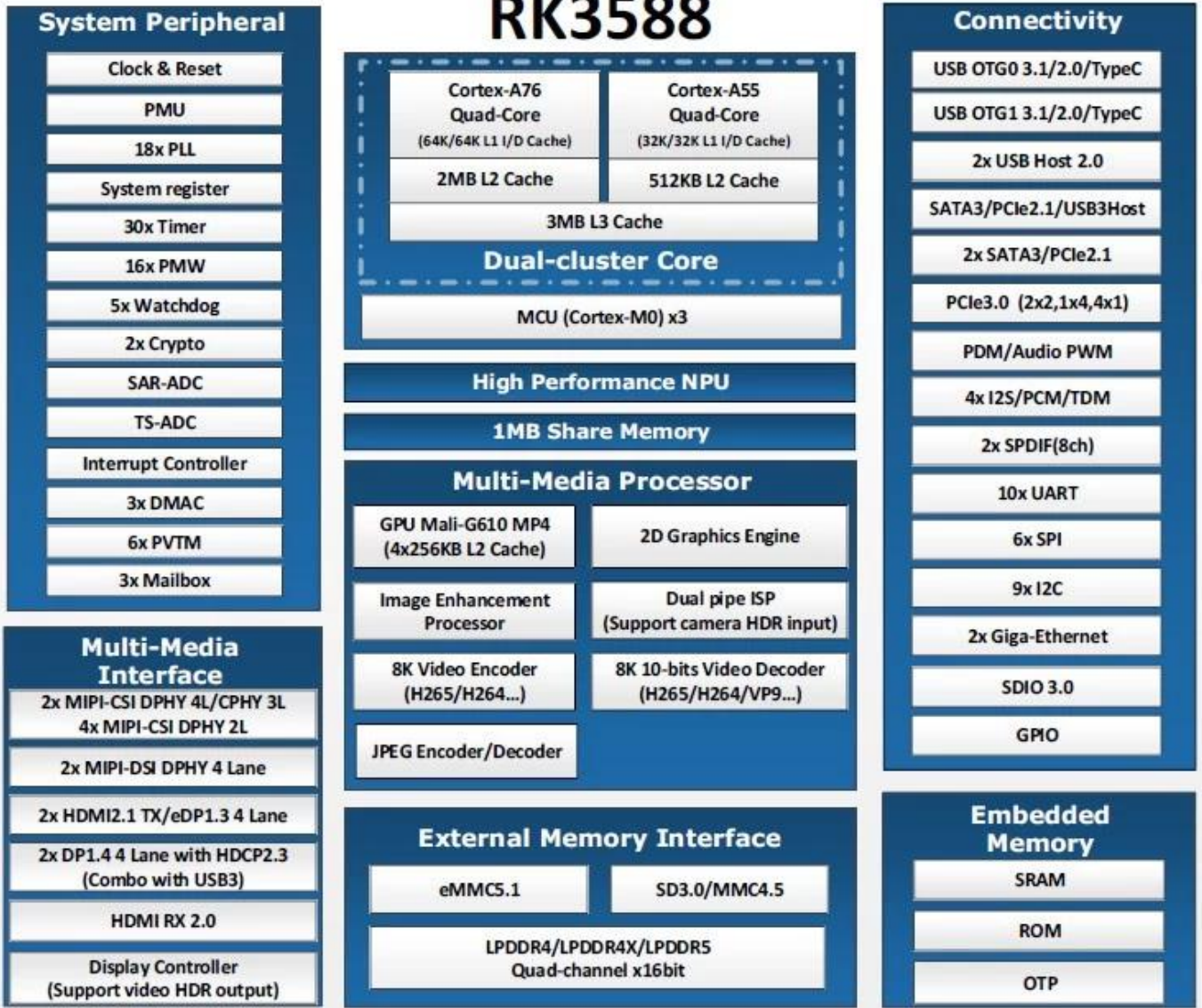








RK3588



Typical Application Diagram – AIoT





Rockchip

Rockchip RK3588
 Rockchip RK3588 Octa Core Android 12 8K
 Rockchip RK3588
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 Rockchip RK3588

Rockchip

Rockchip RK3588 Octa Core
 Rockchip RK3588 RAM 4GB
 Rockchip RK3588 16GB
 Rockchip RK3588

Android 12:

Rockchip RK3588 Android 12
 Rockchip RK3588 Android 12
 Rockchip RK3588 Google Play Store
 Rockchip RK3588 Android 12

8K

Rockchip RK3588
 Rockchip RK3588 8K
 Rockchip RK3588
 Rockchip RK3588

Rockchip RK3588

Processor

WiFi 6: Processor

Processor

Processor

Processor RK3588 WiFi 6

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Processor 8K WiFi 6

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Processor RK3588 Processor

Processor

Processor USB, HDMI 2.1 Processor

Processor Bluetooth Processor

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RK3588 Processor

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Processor Octa Core Processor 8K

Processor WiFi 6

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Processor Android 12 Processor

Processor

Processor

Processor RK3588 Processor