

i.MX8 SOM – System On Module

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	SOM i.MX8 Dual	SOM i.MX8 Quad Lite	SOM i.MX8 Quad
System On Chip	i.MX8M D	i.MX8M L	i.MX8M Q
Processor core	Dual core ARM A53	Quad core ARM A53	Quad core ARM A53
General Purpose Processor	ARM Cortex M4	ARM Cortex M4	ARM Cortex M4
Processor speed	1.5GHz Commercial 1.3Ghz Industrial	1.5GHz Commercial 1.3Ghz Industrial	1.5GHz Commercial 1.3Ghz Industrial
Floating Point	VFPv4	VFPv4	VFPv4
SIMD	NEON	NEON	NEON
Graphics Processing Unit	Vivante GC7000 Lite	Vivante GC7000 Lite	Vivante GC7000 Lite
3D GPU Support	OpenGL ES1.1/2.0/3.0/3.1, OpenCL 1.2 & Vulkan	OpenGL ES1.1/2.0/3.0/3.1, OpenCL 1.2 & Vulkan	OpenGL ES1.1/2.0/3.0/3.1, OpenCL 1.2 & Vulkan
HW Video Dec/Enc	Multi Format	Multi Format	Multi Format
Memory	32 bit, up to 3GB LPDDR4-3200	32 bit, up to 4GB LPDDR4-3200	32 bit, up to 4GB LPDDR4-3200
Wired Network	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
Wireless Network	802.11 ac/a/b/g/n (Optional)	802.11 ac/a/b/g/n (Optional)	802.11 ac/a/b/g/n (Optional)
Bluetooth	BT 5.0 (Optional)	BT 5.0 (Optional)	BT 5.0 (Optional)
Display Max resolution	4K @60	4K @60	4K @60
Display Interfaces	HDMI 2.0, MIPI-DSI	HDMI 2.0, MIPI-DSI	HDMI 2.0, MIPI-DSI
Dual display support	✓	✓	✓
Supported External Storage	NOR-Flash, SD/microSD, PCIe SSD	NOR-Flash, SD/microSD, PCIe SSD	NOR-Flash, SD/microSD, PCIe SSD
Supported Internal Storage	eMMC, QSPI-NOR (Optional)	eMMC, QSPI-NOR (Optional)	eMMC, QSPI-NOR (Optional)
SD/MMC	2	2	2
USB 3.0	1+2 (HUB)	1+2 (HUB)	1+2 (HUB)
USB OTG	1	1	1
Serial ports	2 (RTS/CTS/RX/TX) +1 (TX/RX)	2 (RTS/CTS/RX/TX) +1 (TX/RX)	2 (RTS/CTS/RX/TX) +1 (TX/RX)
Digital audio serial interface	20 channels 32bits @384khz DSD512	20 channels 32bits @384khz DSD512	20 channels 32bits @384khz DSD512

