SolidRun
Embedded Edge Computing

i.MX95 SoM Comparison Chart

CPU Name	NXP i.MX95 Hexa/Quad	NXP i.MX8M Plus Quad	NXP i.MX8M Mini Quad
CPU Type	Up to 6 x Cortex A55 1 x Cortex M7 1 x Cortex M33 1 x NPU up to 2.3 TOPS*	4 x Cortex A53 1 x Cortex M7 1 x NPU up to 2.3 TOPS	4 x Cortex A53 1 x Cortex M4
RAM	Up to 16GB LPDDR5/X	4 GB LPDDR4 default, optional: 1 GB LPDDR4, 2 GB LPDDR4, 3 GB LPDDR4, 8 GB LPDDR4	2 GB LPDDR4 default, optional: 1 GB LPDDR4, 3 GB LPDDR4, 4 GB LPDDR4
Internal Storage	Up to 128GB eMMC 2 x 10/100/1000 Mbps with TSN 1 x 10Gbps with TSN	8 GB eMMc default, optional: Up to 64 GB eMMC	8 GB eMMc default, optional: Up to 64 GB eMMC
Ethernet	2 x 10/100/1000 Mbps with TSN 1 x 10Gbps with TSN	2 x 10/100/1000 Mbps 1 x with TSN	10/100/1000 Mbps
Wireless	802.11 b/g/n/ac + BT 5.0	802.11 ac/a/b/g/n + BT 5.0	802.11 ac/a/b/g/n + BT 5.0
GPU	Mali-G310 Valhall	Vivante GC 7000UL	GC NanoUltra 3D + GC320 2D
3D GPU Support	OpenGL ES 3.2 Vulkan 1.3 OpenCL 3.0	OpenGL ES 3.1/ 3.0, Vulkan, Open CL 1.2 FP, OpenVG 1.1	OpenGL ES 2.0
AI Accelerator	eIQ Neutron NPU Up to 2.3 TOPS	1 x NPU up to 2.3 TOPS	-
Video Decoder	H.264/ H.265	1080p60	1080p60
Video Encoder	H.264/ H.265	1080p60	1080p60
Display Interfaces	MIPI-DSI LVDS	HDMI 2.0, MIPI-DSI, LVDS	MIPI-DSI
Camera Interface	2x MIPI-CSI-2 (x4 lane D-PHY 2.5Gbps) Up to 8 cameras using MIPI virtual channels 500 Mpixel/s, 1x4Kp60 ISP	1 x MIPI-CSI2 (4 Lanes), 2 x ISP	1 x MIPI-CSI2 (4 Lanes)
USB 2.0	1x USB 2.0	-	2
USB 3.0	1x USB 3.0	2	-
PCIe	2x PCIe Gen 3 (x1)	1 (Gen 3.0)	1 (Gen 2.0)
12C	8x shared (see pinout planner)	3	2
SPI	1x XSPI + 5x SPI	1	1
UART	Up to 7x shared (see pinout planner)	2 x (RTS/CTS/RX/TX) +1 (TX/RX)	2 x (RTS/CTS/RX/TX) +1 (TX/RX)
GPIO	74	75	75
PWM	4	4	4
CAN-FD	4	2 x CAN-FD	1 x CAN-FD
Size	47 x 30 mm	47 x 30 mm	47 x 30 mm