



## Highlights and Use Cases

For teams that need SMARC or second sources, and want to get the Toradex value

- ✔ Toradex Quality on SMARC
- ✔ Industry-Leading Linux Support
- ✔ Integrated Secure Remote Updates
- ✔ Fully SMARC-Compliant
- ✔ Comply with the EU Cyber Resilience Act
- ✔ Reliable Supply Chain
- ✔ Free Maintenance – Lowest Total Cost of Ownership

## Migrate to Toradex SMARC

- ✔ Use our Carrier Board Compatibility Check
- ✔ Simple Migration of your Software
- ✔ Get Built-in OTA Updates, Security Compliance, and more



	SMARC iMX95	SMARC iMX8M Plus
<b>SoC / CPU</b>	NXP i.MX 95 Up to 6x A55, 1.8GHz	NXP i.MX 8M Plus Up to 4x A53, 1.6GHz
<b>Microcontroller</b>	1x Arm Cortex-M7, 800MHz 1x Arm Cortex-M33, 333MHz	1x Arm Cortex-M7F, 800MHz
<b>Memory</b>		
<b>RAM</b>	Up to 16GB LPDDR5 (32-bit)	Up to 8GB LPDDR4 (32-bit)
<b>Flash</b>	Up to 128GB eMMC	Up to 128GB eMMC
<b>Connectivity</b>		
<b>USB 2.0</b>	1x OTG   2x Host	1x OTG   2x Host
<b>USB 3.2</b>	2x Host (Gen1)	2x Host (Gen1)
<b>Ethernet</b>	2x Gigabit with TSN (+1x USX/S/GMII)	2x Gigabit with TSN
<b>Wi-Fi</b>	2.4/5GHz Dual Band Wi-Fi 6 (802.11ax)	2.4/5GHz Dual Band Wi-Fi 5 (802.11ac)
<b>Bluetooth</b>	BT 5.4	BT 5.3
<b>PCIe</b>	2x (1x Gen3)	1x (1x Gen3)
<b>I2C</b>	5x	5x
<b>SPI</b>	2x	2x
<b>PWM</b>	3x	1x
<b>UART</b>	4x	4x
<b>SDIO/SD/MMC</b>	Up to 2x	1x
<b>CAN FD</b>	2x	2x
<b>JTAG</b>	1x (on samples)	1x (on samples)
<b>Multimedia</b>		
<b>NPU</b>	2-3x better performance vs iMX8M Plus	2.3 TOPS
<b>ISP</b>	✓	✓
<b>Display Controller</b>	Dual	Triple
<b>2D/3D Acceleration</b>	✓	✓
<b>Video Decoder/Encoder</b>	✓	✓
<b>Display Serial Interface</b>	1x Quad Lane MIPI DSI	1x Quad Lane MIPI DSI
<b>HDMI</b>	-	1x (Up to 4K)
<b>LVDS</b>	1x (up to 1920x1080)	1x (up to 1920x1080)
<b>Digital Audio</b>	2x I2S	2x I2S
<b>Camera Serial Interface</b>	1x Quad Lane MIPI CSI-2 1x Dual Lane MIPI CSI-2	1x Quad Lane MIPI CSI-2 1x Dual Lane MIPI CSI-2
<b>Software</b>		
<b>Operating Systems</b>	Torizon OS, Yocto Linux, Android FreeRTOS	Torizon OS, Yocto Linux, Android, FreeRTOS, Zephyr
<b>Physical</b>		
<b>Supply Voltage</b>	5V DC	5V DC
<b>Dimensions</b>	82 x 50mm	82 x 50mm
<b>Operating Temp</b>	Up to: -40°C to +85°C	Up to: -40°C to +85°C
<b>Vibration/Shock</b>	EN 60068-2-6/50g 20ms	EN 60068-2-6/50g 20ms
<b>Minimum Availability</b>	2039+	2036+

## Block Diagram

Refer to [SGET](#)