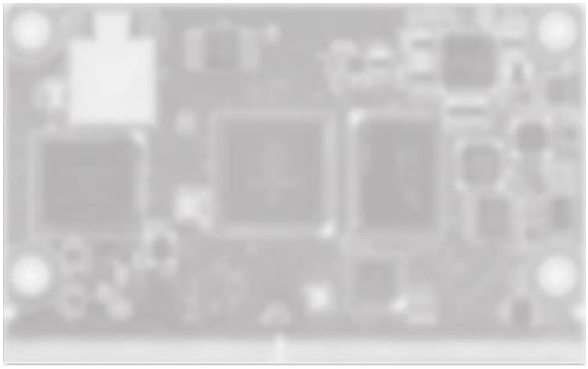
F95000

NXP i.MX95 Processor
SMARC



Top View

Bottom View

KEY FEATURES

NXP iMX95

Up to 6 Arm Cortex A55 cores

LPDDR5

2/4/8GB LPDDR5 Memory Down

Display Options

1 Dual channel LVDS, 1 HDMI

Multiple Expansion

2 PCIe 3.0

Rich I/O

2 GbE LAN, 1 USB OTG, 1 USB 3.0, 3 USB 2.0

SPECIFICATION

SYSTEM	**Processor**	NXP i.MX95 series up to 6 Arm Cortex A55 cores, up to 2.0GHz	
	Memory	2/4/8GB LPDDR5-6400 Memory Down	
GRAPHICS	**Controller**	Arm® Mali ™ G310 GPU	
	Feature	OpenGL ES 3.2 Vulkan 1.2, OpenCL 3.0	
	Display	1 x Dual channel LVDS (default) 1 x 4-lanes MIPI-DSI, or 1 x HDMI (BOM option)	
EXPENSION	**Interface**	2 x PCIe x1 (Gen 3) 1 x SDIO 3.0 4 x I2C 2 x SPI 2 x 4-wire UART and 2 x 2-wire UART 2 x CAN bus 1 x 4-lanes MIPI CSI Optional 1 x 2-lanes CSI (BOM option with HDMI)	
AUDIO	**Interface**	2 x I2S	
ETHERNET	**Controller**	2 x 10/100/1000Mbps GbE 1 x 10Gbps Ethernet port (BOM option)	
WIRELESS	**Wireless**	IEEE 802.11 ac/a/b/g/n wireless LAN + Bluetooth 5.0 (BOM option)	
I/O	**USB**	1 x USB OTG 1 x USB 3.0 3 x USB 2.0	
	eMMC	Supports eMMC 5.1, BGA-153 Ball up to 128GB	
	GPIO	1 x 14-bit GPIO	
SECURITY	**TPM**	TPM 2.0	
POWER	**Type**	5V DC-In	
	Consumption	TBD	
OS SUPPORT	**OS Support (UEFI Only)**	Linux Yocto	
ENVIRONMENT	**Temperature**	Operating: -5 to 65°C or -40 to 85°C	
	Humidity	Operating: 5 to 90% RH	Storage: 5 to 90% RH
	MTBF	TBD	
MECHANISM	**Dimensions**	SMARC form factor	82 mm (3.23") x 50 mm (1.97")
	Compliance	SMARC specification revision 2.1 compliance	
STANDARDS AND CERTIFICATIONS	**Certifications**	CE, FCC, RoHS	

ORDERING INFORMATION

Model Name	P/N	CPU Cores	Memory	Display	TPM	USB 2.0	eMMC	Operating Temp.
F95000-BC41HC	TBD	6	4GB	LVDS	1	3	16GB	-5 to 65°C

PACKING LIST

- 1 F95000 board

OPTIONAL ITEMS

- SMARC Carrier Board
- Heat spreader
- Heat sink

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