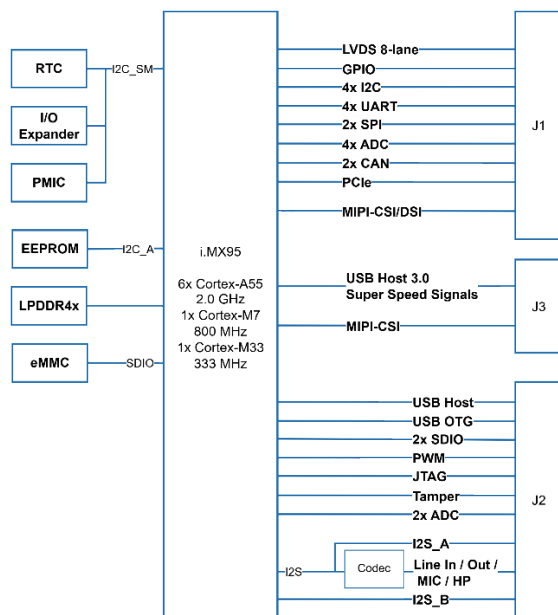


Characteristics

- **NXP i.MX 95** Application Processor:
6x Cortex®-A55 & Cortex®-M7 & Cortex®-M33, 2D/3D Arm Mali GPU, VPU, ISP, **NPU (8 eTOPS)**
Arm®TrustZone® architecture, EdgeLock® secure enclave
Energy Flex architecture
- LPDDR4x, eMMC, EEPROM
- Edgelock® Secure Enclave
- High-performance HMI applications, machine vision and secure networked edge computing.

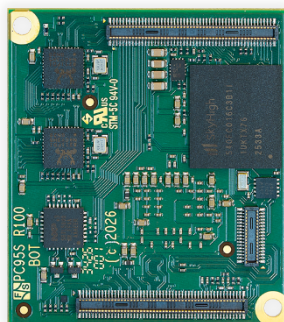
Block Diagram



Description

Powered by the NXP i.MX 95 processor, the PicoCoreMX95 delivers **integrated AI** and **machine learning** capabilities, optimized for demanding edge computing applications. With dual-camera support, 3D graphics acceleration, and 4k video encoding/decoding, it's ideal for advanced image processing and multimedia solutions.

Thanks to its extensive connectivity options featuring dual Gigabit Ethernet, USB 3.0 and PCIe interfaces the module seamlessly integrates into industrial and medical environments. Display support includes LVDS and MIPI-DSI. The SoM operates reliably in a wide temperature range from -40°C to +85°C. Robust security features such as **TrustZone**, **Secure Boot**, and a **Secure Element** ensure maximum data protection.



Operating Systems

F&S offers comprehensive software support for the operating system as well as various workshops*.

- Linux Yocto and Debian***
- QNX (under development)
- Windows 11 IoT Enterprise (under development)
- FreeRTOS / Zephyr for Cortex-M / Cortex-A
- Qt workshop
- **Secure Boot workshop**
- Asymmetric Multiprocessing workshop

Starterkit

To facilitate the implementation of the module in the target application, F&S offers a Starterkit*, including:

- PicoCoreMX95
- Baseboard
- Cable Kit
- 10" LVDS Touch-Display (1024 x 600) px
- Cooling Solution

Order Notations

PC95S-V4I-LIN

standard, industrial:

i.MX95: 6x Cortex-A55 @ 1.8GHz, 4GB RAM, 16GB eMMC, EEPROM, USB 3.0, USB 2.0, 2x Gbit LAN PHY, LVDS, RTC, -25°C +85°C, Linux

In addition to the standard version(s) listed on our homepage, F&S also offers and supports customer-specific configurations***.

PC95S-SKIT-LIN

Starterkit for PC95S.

Technical Data (Quickfacts)

Power Supply	5 V
Power Consumption	4 W (typ.)
Processor	NXP i.MX 95
Memory	LPDDR4x x32 up to 16GB eMMC up to 128GB 64Kb EEPROM
Interfaces**	2x Gbit Lan Phy, 2x SDIO (4 bit), PCIe , USB 3.0 Host, USB 2.0 OTG, 2x CAN-FD, 4x UART, 4x I2C, 2x SPI, 1x QSPI, 2x I2S, 3x PWM, 26x GPIO, 2x ADC, Tamper, JTAG
I/O voltage	3.3 V
Display	LVDS (2x 4-lane or 8-lane) and MIPI-DSI/CSI
Camera	1x MIPI-CSI (4-lane), 1x MIPI-DSI/CSI (4 lane)
RTC	PCF85263ATL
Security Element	EdgeLock® Secure Enclave
Temperature Range	-40°C ... +85°C
Size (L x B x H)	(35 x 40 x 5) mm

* You can find detailed information on our website.

** Other configurations possible

*** Please contact us for further information.