

phyCORE[®]-i.MX 8X

ARM Cortex[™]-A35/-M4F

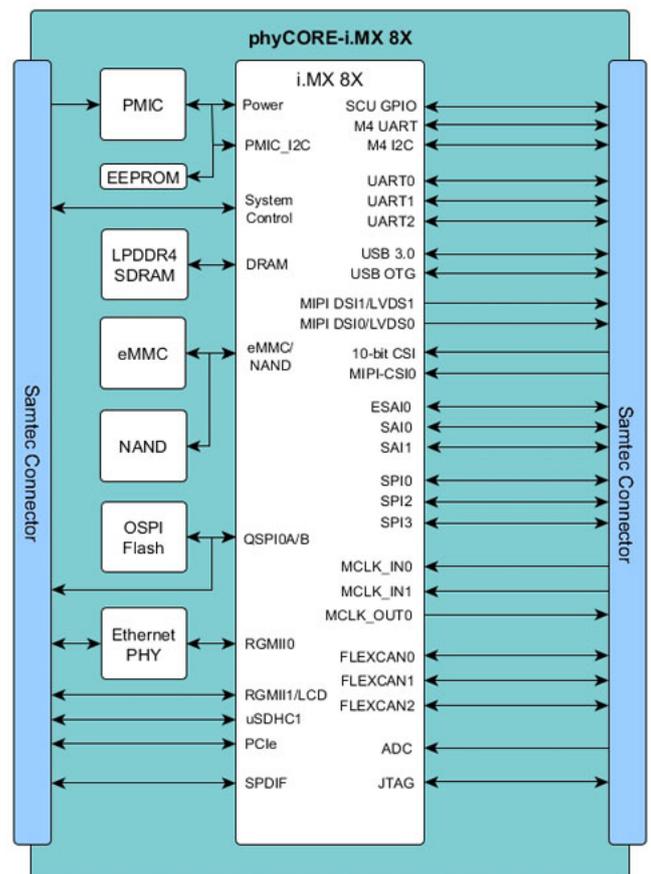
The phyCORE-i.MX 8X System on Module combines high performance with low power consumption. It was designed to be used for general purpose embedded control tasks with a good price-performance ratio.

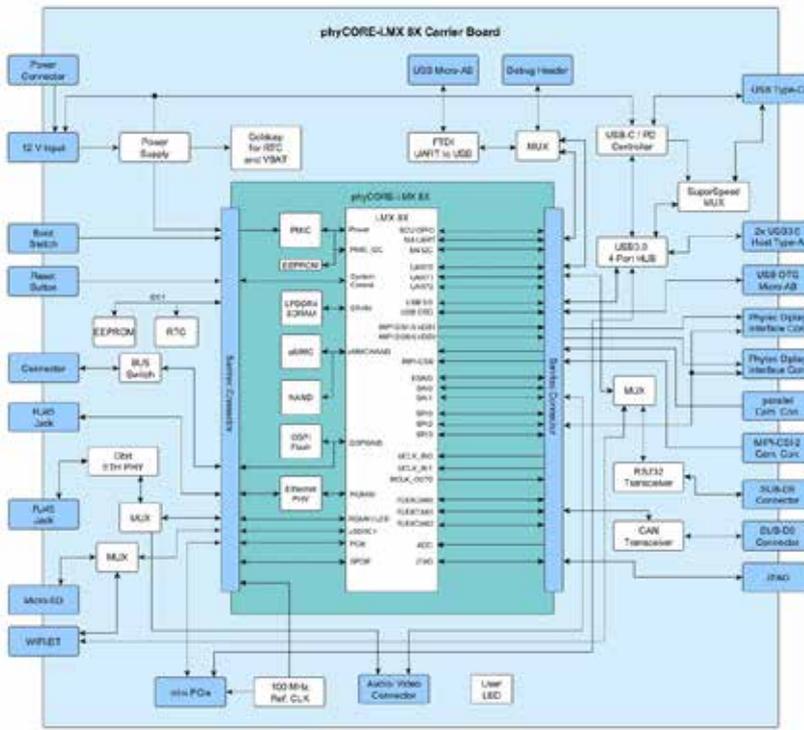
Due to its industrial interfaces such as CAN, the phyCORE-i.MX 8X System on Module is best suitable for common industrial applications.



Features

- i.MX 8QuadXPlus / i.MX 8DualXPlus / i.MX 8DualX
- ARM Cortex-A53/-M4F
- Latest RAM technology with up to 4 GB LPDDR4 RAM
- 64 – 256 MB Octal SPI/DualSPI Flash
- PHYTEC is official member of Micron's Xccela consortium
- 4 GB – 128 GB eMMC (option: NAND Flash)
- 2x LVDS or 2x MIPI DSI, parallel
- 1x MIPI CSI, 1x parallel





phyCORE-i.MX 8X

phyCORE-i.MX 8X Kit / Carrier Board

Processor	i.MX 8QuadXPlus/ i.MX 8DualXPlus/ i.MX 8DualX
Architecture	ARM Cortex-A35/-M4F
Bit width	32 bit
Clock frequency	up to 1.2 GHz
Graphics	Vivante GC700Light (4 Shader, 25.6 GFLOPs)
Video acceleration	1080p encode and decode
Crypto	AES, 3DES, RSA, ECC Ciphers, SHA1/256, TRNG
MEMORY	
SPI NOR Flash	64 MB up to 256 MB Octal SPI/Dual SPI Flash
eMMC	4 GB up to 128 GB (optional with NAND Flash)
LPDDR4 RAM	512 MB up to 4 GB
EEPROM	4 kB
INTERFACES	
Ethernet	2x 10/100/1000 Mbit/s (1x onboard / 1x RGMII)
USB	1x OTG, 1x USB3.0
Serial	–
CAN	3x
UART	2x
PCI / PCIe	1x
I2C	up to 10
SPI	1x OCTAL SPI or 2x Quad SPI + 3 SPI
MMC/SD/SDIO	1x (only with eMMC available)
LCD Interface	2x LVDS or 2x MIPI DSI, parallel
Audio	ESAI
Camera	1x MIPI CSI, 1x parallel
RTC	i.MX 8 internal
Power Supply	3.3 V
Dimensions	52 mm x 42 mm
Temperature range	-40°C up to +85°C

