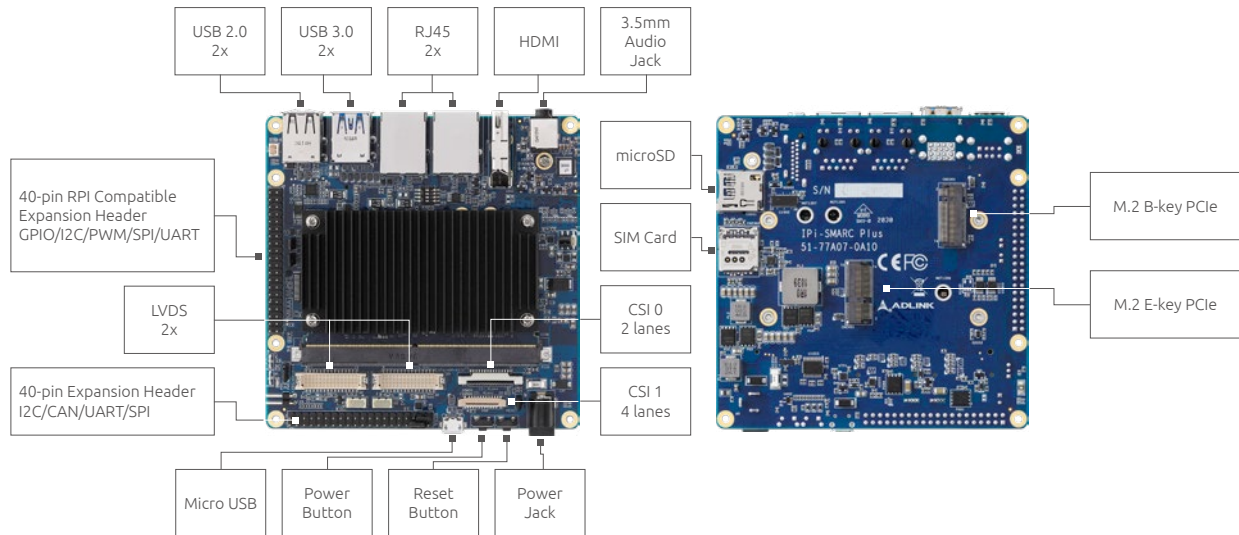


I-Pi SMARC IMX8M Plus

Industrial Prototyping Kit for IoT/AIoT with Off-the-Shelf SMARC Computer-on-Module



Features

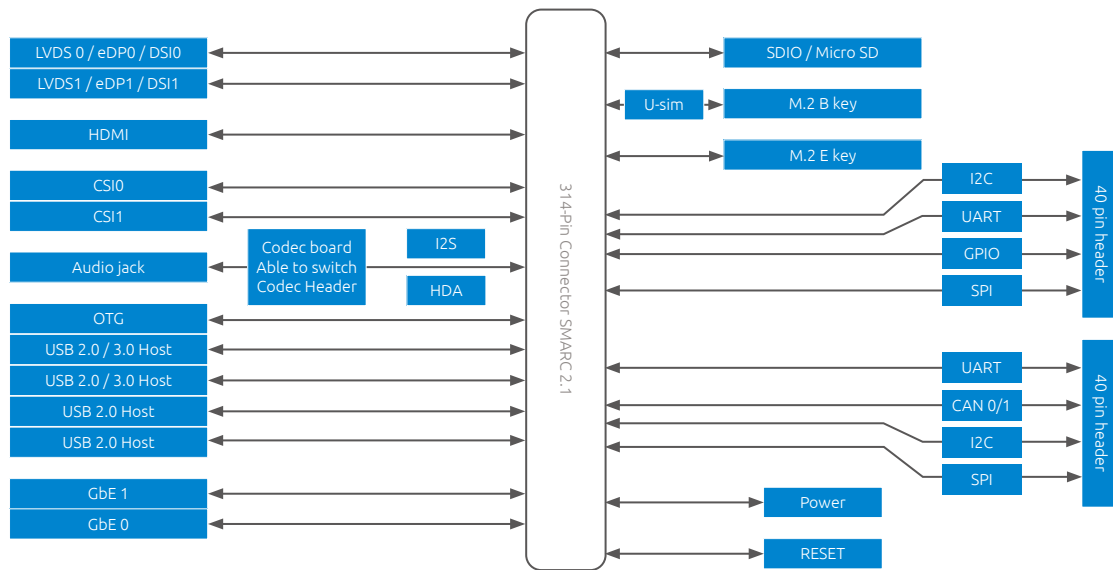
- Based on NXP i.MX8M Plus quad-core SoC with integrated NPU, VPU and GPU units
- Equipped with SMARC 2.1 compatible module specially designed for industrial embedded applications requiring long life, high MTBF and strict revision control
- Includes everything needed to go live in minutes
- Industrial grade quality and 15 year product availability
- Supports Android, Ubuntu and Yocto OS

Specifications

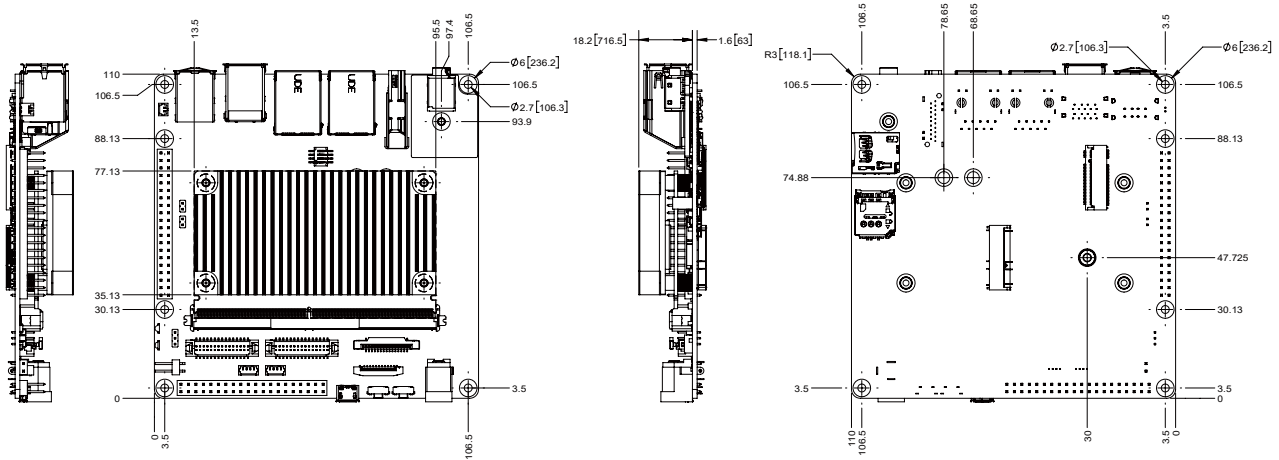
CORE SYSTEM	SoC	NXP i.MX8M Plus Quad Core
	NPU	2.3 TOPS Neural Processing Unit
	Architecture	ARM Cortex-A53 + Cortex-M7
	Memory	2GB LPDDR4
	Storage	32GB eMMC 5.0
	IoT Security	TPM 2.0 (optional) / TrustZone / Crypto ATECC608A RDC, OCRAM, CAAM, PKHA, RTIC, True RNG, SNVS
	CONNECTIVITY	Wi-Fi
Bluetooth		Bluetooth 5.0 complaint with Bluetooth 2.1+EDR (optional)
ETHERNET	LAN	2x GbE (1x TSN capable)
AUDIO	Codec	WM890
VIDEO	GPU Core	Vivante GC7000UL
	Video Decoding	1080p60 HEVC, H.265 for decode H.264, VP9, VP8
	Video Encoding	1080p60 H.265, H.264
	Camera	1x MIPI-CSI (4 data lanes) 1x MIPI-CSI (2 data lanes)

I/O INTERFACES	40-pin RPI Expansion Header	GPIO / I2C / PWM / SPI / UART
	40-pin Expansion Header	I2C / CAN / SPI / UART
CONNECTORS	Display	1x HDMI 2x LVDS
	Audio	1x 3.5mm Audio Jack
	Network	2x RJ45
	USB	2x USB 3.0 2x USB 2.0 1x Micro USB
	Buttons	1x Reset 1x Power
	SD Card Slot	1x microSD
	SIM Card Slot	1x SIM
	M.2 Card Slots	1x M.2 B-key PCIe 1x M.2 E-key PCIe
	Input	19V+/-5% DC
	Connector	DC Jack
OPERATING SYSTEMS	Standard Support	Android / Ubuntu / Yocto
	Form Factor	SGET SMARC Specifications v2.1
MECHANICAL AND ENVIRONMENTAL	Dimensions	SMARC short size module (82mm x 50mm)
	Operating Temperature	Standard: 0°C to +60°C Rugged: -40°C to +85°C (optional)
	Humidity	5-90% RH operating, non-condensing 5-95% RH storage
	Shock and Vibration	IEC 60068-2-64 and IEC-60068-2-27 MIL-STD-202 F Method 213B, Table 213-I, Condition A Method 214A, Table 214-I, Condition D
	HALT	Thermal Stress, Vibration Stress, Thermal Shock and Combined Test

Functional diagram



Dimensional drawing



Ordering information

I-Pi SMARC IMX8M Plus (EU)

I-Pi SMARC development kit based on LEC-IMX8MP module including 32GB eMMC, Micro USB cable and EU AC power adapter

I-Pi SMARC IMX8M Plus (US)

I-Pi SMARC development kit based on LEC-IMX8MP module including 32GB eMMC, Micro USB cable and US AC power adapter



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