

I-Pi SMARCElkhart Lake

I-Pi SMARC Plus Prototyping DevKit powered by Intel® 6th Gen. Atom® x6425E



Features

- Based on Intel® 6th Gen. Atom® x6425E quad-core SoC with integrated GPU
- Equipped with SMARC 2.1 compatible module specially designed for industrial embedded applications requiring long life, high MTBF, and strict revision control
- Industrial-grade quality and 10-year product availability
- Supports Windows 10, Yocto, Ubuntu OS

Specifications

Core System	SoC	Intel® 6th Gen. Atom® x6425E 4-Core SoC
	Architecture	x86
	Memory	4GB LPDDR4
	Storage	64GB eMMC 5.0
	IoT Security	TPM 2.0*, Intel® AES-NI, Secure Key, Execute Disable Bit, Intel® OS Guard, Intel® Boot Guard
Video	GPU Core	Intel® UHD Graphics for 10th Gen Intel® Processors
	Video Decoding	4kp60 HEVC, H.265 for decode, H.264, VP9, VP8
	Video Encoding	4kp60 H.265, H.264
Audio	Codec	Realtek ALC888
Ethernet	LAN	2x 2.5GbE

Specifications

Connectors/Headers	Display	1x HDMI 1x LVDS or eDP
	Audio	1x 3.5mm Audio jack
	Network	2x RJ45
	USB	2x USB 3.0, 2x USB2.0, 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
	40-pin RPI Expansion Header	GPIO / I ² C / PWM / SPI / UART
	40-pin Expansion Header	I ² C / CAN / SPI / UART
Power	Input	19V+/-5% DC
	Connector	DC Jack
Operating Systems	Standard Support	Windows 10 / Yocto / Ubuntu
Mechanical	Form Factor	SGET SMARC Specification v2.1
	Dimensions	SMARC short size module (82mm x 50mm)
	Operating Temperature	Standard: 0°C to 60°C Rugged: -40°C to 85°C*
	Humidity	Operating: 5-90% RH, non-condensing Storage: 5-95% RH
	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

Ordering Information

Development Kit	Description/Configuration
I-Pi SMARC ElkhartLake US	SMARC LEC-EL-6425E Prototyping Dev Kit with 4G-64G and US power cable
I-Pi SMARC ElkhartLake EU	SMARC LEC-EL-6425E Prototyping Dev Kit with 4G-64G and EU power cable
Accessories	Description/Configuration
I-PI WIFI DEV KIT w/ M.2 2242 AX210	Wi-Fi 6E (6GHz), 2x2, Bluetooth® 5.2, M.2 2230 module with antenna kit. The module supports dual-stream Wi-Fi in 2.4GHz, 5GHz and 6GHz bands as well as Bluetooth® 5.3. It also supports Wi-Fi 6 R2 features, including UL MU-MIMO1

*optional, subject to the module used

