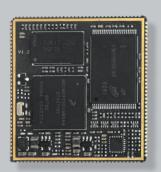
PRODUCT OVERVIEW

SLX Porcupine SOM

SLX Porcupine SOM is ready to get you quickly out of the gate for your next project: a robust, versatile, high-performance, highly power-efficient System-on-Module that is preconfigured for cloud connectivity.





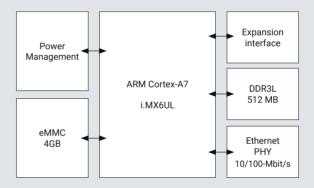
The SLX Porcupine SOM packs a punch above its weight (pictured here at scale)

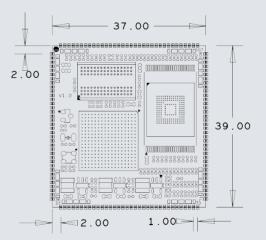
- 528MHz NXP i.MX 6UL ARM Cortex-A7 Processor
- 512MB DDR3 DRAM
- 4GB eMMC Flash
- On-board 10/100M Ethernet PHY
- 1.0mm pitch 140-pin Stamp Hole Expansion Interface
- Ready-to-Run Linux 4.9.123

Here's What You Get

Measuring only 37mm by 39mm, the SLX Porcupine SOM is covered with a shield and powered by NXP i.MX 6UltraLite processor based on the ARM® Cortex®-A7 architecture. Running at 528MHz and integrated with 512 MB DDR3L RAM and 4GB eMMC Flash, SLX Porcupine SOM delivers high performance with ultra-efficient power for numerous industrial and IoT applications. It carries many peripheral signals and IOs through a 1.0mm pitch 140-pin stamp hole expansion interface to allow for your customer's extension for their next embedded design. The module is ready to run Linux and can support an industrial operating temperature range from -40 to +85 Celsius.

SLX Porcupine SOM can also be purchased as the SLX Porcupine, a single-board computer with the same form-factor and pin headers as the Raspberry Pi. The SLX Porcupine can serve as a development board, and is also a production-ready product in its own right.





Visit seluxit.com/porcupinesom



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Hardware Specifications

SLX Porcupine SOM uses the 14 x 14mm, 0.8 mm ball pitch, 289 MAPBGA package. The i.MX 6UltraLite applications processor includes an integrated power management module that reduces the complexity of external power supply and simplifies power sequencing. There are various memory interfaces, including 16-bit DDR3L, eMMC, Quad SPI and a wide range of other interfaces for connecting peripherals such as WLAN and Bluetooth[™].

Software Features

SLX Porcupine SOM supports Linux and is provided with software packages. Many peripheral drivers are in source code to help accelerate customers' designs with a stable and reliable hardware and software platform. The SLX Porcupine SOM is available with SLX OS which is pre-configured for cloud connectivity with Seluxit-published SSL certificates. Viasens by Seluxit, the Secure IoT Infrastructure, securely connects devies to the Internet, wherever the data needs to go.

Processor	NXP MCIMX6G3CVM05AB
Core	ARM® Cortex-A7
Speed	528 MHz
Cache	32 KB-I, 32 KB-D, 128 KB L2
OCRAM	128 KB
DRAM	16-bit DDR3L
eFuse	2048-bit
NAND (BCH40)	Yes
EBI	Yes
Ethernet	10/100-Mbit/s
USB	OTG, HS/FS x 2
CAN	2
Security	TRNG, Crypto Engine (AES with DPA/TDES/SHA/ RSA),Secure Boot, tamper monitor, PCI4.0 pre- certification and on-the-fly (OTF) DRAM encryption
Quad SPI	1
SDIO	2
UART	8
I2C	4
SPI	4
I2S/SAI	3
S/PDIF	1
Timer/PWM	Timer x 4, PWM x 8
12-bit ADC	2 x 10-ch.
Temparatures	-40 to +85 Celsius
Dimensions	37mm x 39mm
Power supply	+3.3V

OS	SLX OS (native version without OS also available)
Bootstrap	
u-boot	The primary bootstrap (source code)
Kernel	
Version	Linux 4.9.123 (source code)
USB	HOST and OTG driver (source code)
Ethernet	Ethernet driver (source code)
MMC/SD	MMC/SD card driver (source code)
NandFlash	Nand Flash driver (source code)
eMMC	eMMC driver (source code)
UART	UART driver (source code)
GPIO	GPIO driver and library (source code)
CAN	CAN driver (source code)
RS485	RS485 driver (source code)
WiFi/Bluetooth	bcmdhd driver (SDI, source code)
4G LTE	4G LTE Module driver (source code)
SPI	SPI driver (source code)
Compiler Tool Chain	
MetaToolchain	Yocto
Applications Tool Chain	SDK by Yocto

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