

XENO+ ML SOM



XENO+ ML SOM with WiFi+BLE and LoRa (26 x 32 x 5 mm)



XENO+ ML SOM with LTE (32 x 38.5 x 5 mm)

- The XENO+ ML (Machine-Learning) SOM (System-On-Module) modules are production ready solderable SOM modules.
- Can be used as core CPU module of any new Battery powered low power IoT/AI/ML devices.
- These SOM modules supports common pin mapping for easy migration among WiFi/BLE/ LoRa/ LTE connectivity.

XENO+ ML SOM with WiFi+BLE and LoRa Variants:

- XENO+ WiFi+BLE ML SOM
- XENO+ LoRa ML SOM

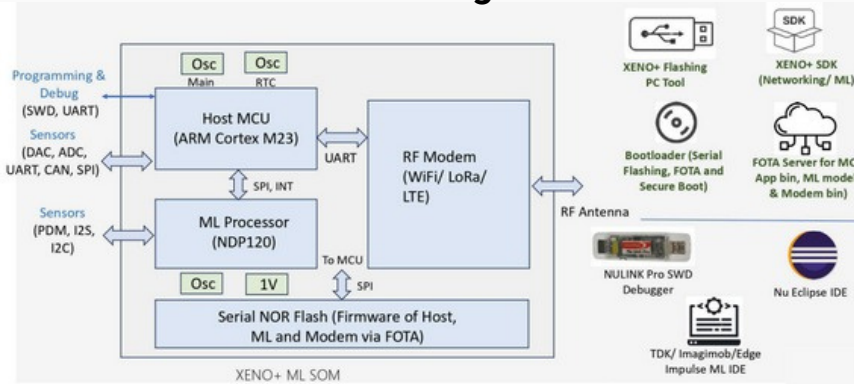
XENO+ ML SOM with LTE Variants:

- XENO+ LTE Cat-1 ML SOM
- XENO+ LTE Cat-1.bis ML SOM
- XENO+ LTE Cat-M ML SOM
- XENO+ NB-IoT ML SOM

XENO+ ML SOM Specifications

XENO+ ML SOM	WiFi+BLE SOM WN100X-WBE	LoRa SOM WN100X-LOR	LTE Cat1 SOM LN100X-LC1	LTE Cat1bis SOM LN100X-L1B	LTE Cat-M SOM LN100X-LCM	LTE NB-IoT SOM LN100X-LNB
Connectivity	Ultra-low power WiFi 2.4G b/g/n and BLE5.0	LoRaWAN Class A/B/C protocol in 868/915 MHz bands	LTE-Cat1, EDGE, GPRS & SMS and GPS.	LTE-Cat1.bis and GPS.	LTE-Cat-M	LTE-Cat NB1/NB2 for B1/B3/B5/B8 bands
MCU	ARM Cortex-M23 @ 96MHz					
Memory	1MB Flash, 256KB RAM, 8MB NOR Flash					
Neural Decision Processor	Syntiant Core 2 NDP120					
ML Applications	Runs multiple DNN applications up to 256 layers.					
OS	FreeRTOS					
Standby current	Very less (~55uA)					
Size	26 x 32 x 5 mm		32 x 38.5 x 5 mm			
PCB Foot-print	Common PCB foot-print for HW compatibility		Common PCB foot-print for HW compatibility			
FOTA	Host MCU firmware and NDP120 ML model files					

XENO+ ML SOM Block Diagram



KEY BENEFITS

- The customers can save up to 40% of hardware and software development time.
- The Software SDK offered along with ML SOM modules helps the Customers with reduced Embedded SW development time.
- Common pin mapping across all XENO+ ML SOM modules brings SW compatibility among all connectivity variant devices.
- The customers can leverage FOTA feature to upgrade MCU Application binary and ML Model binaries.