

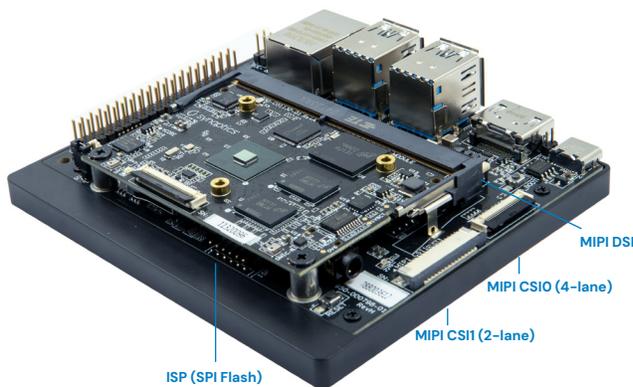


Future-Ready AI-Native Compute for the IoT

MULTIMODAL > SECURE > LOW POWER



The Synaptics Astra™ Machina SL2600 Series Developer Kit enables easy and rapid prototyping of multimodal AI-native IoT applications. A flexible design approach supports a core compute module, an I/O base board, daughter cards for integrated Wi-Fi / Bluetooth connectivity, debug, and programmable I/O. The evaluation system supports the Synaptics SL2619 SoC family that delivers unprecedented levels of price performance for the IoT, and enabled via an open, unified software experience built on Yocto Linux. The Machina SL2600 Series supports the Synaptics Torq™ Edge AI platform, featuring the T1 NPU and the industry's first production implementation of the RISC-V-based Coral NPU Machine Learning (ML) core from Google. Torq promotes a developer-first approach, with an open-source Edge AI compiler and runtime based on IREE/MLIR, capable of processing industry standard model formats such as PyTorch, ONNX, JAX and TFLite (LiteRT).



EASY + FAST PROTOTYPING



UNIFIED SOFTWARE EXPERIENCE



COMPREHENSIVE AI TOOLKIT



PRE-PAIRED WIRELESS OPTIONS



MODULAR DESIGN

Features

Core Modules:

- Synaptics Astra SL2619 SoC
- Storage (eMMC 5.1), memory (DRAM), PMIC, SD card slot
- Audio Input/Output
- DMICs
- RGMII-TX/RX

Daughter Card Interface Options:

- MIPI DSI®, MIPI CSI-2®
- JTAG, 40-pin header
- 4-pin PoE+

I/O Board:

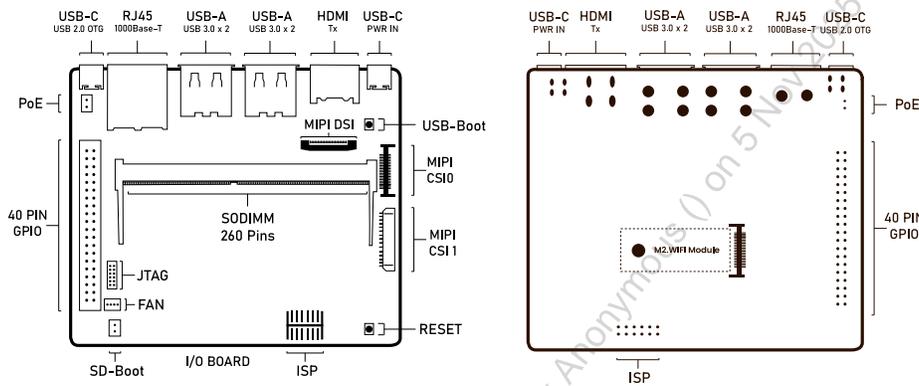
- HDMI Type-A Tx
- M.2 E-key 2230 slot for SDIO, PCIe®, and UART
- USB 3.0 Type-A: 4 ports, host mode
- USB 2.0 Type-C: OTG host or peripheral mode
- Push buttons: USB-BOOT selection and system RESET
- 2pin Header: SD-BOOT selection
- Type-C power supply with 15V @ 1.8A

¹ SL2610 Product Line does not support PCIe on the M.2 connector

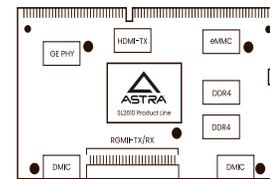
Synaptics Astra Machina

SL2600 Series Developer Kit System Diagrams

I/O Module Front and Back Views



SL2619 Core Module



- SYN43711
- SYN4612
- SYN4384, SYN43752/56, SYN4381/82/83/84 *

*More SKUs being added

Resources

- Synaptics Astra GitHub: <https://github.com/synaptics-astra>
- Synaptics Astra AI Developer Zone: <https://developer.synaptics.com/>



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Visit our website at www.synaptics.com to locate the Synaptics office nearest you.

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