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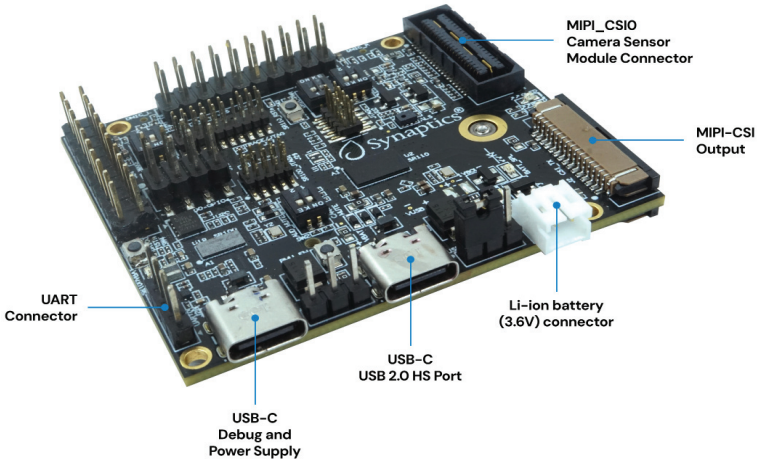
Astra Machina Micro
Product Brief

The Synaptics Astra™ Machina Micro dev kit enables rapid prototyping for the Synaptics SR100 Series of high-performance, context-aware, multimodal AI MCUs. The dev kit brings interfaces and I/O ranging from qSPI for storage, M.2 for connectivity, digital mics for voice processing, and MIPI-CSI for multiple camera inputs. The SR100 series of MCUs – including SR110, SR105, and SR102 deliver AI-accelerated performance at all power levels in combination with ultra low-power multimodal sensing.



- FAST PROTOTYPING
- STANDARD RTOS DEVELOPER EXPERIENCE
- PRE-INTEGRATED, OPTIMIZED AI MODELS
- MATCHED WIRELESS

 | | PN: 190-000435-01 Rev A

Features

SR100 Series MCU Dev Kit:

- Synaptics SR100 Series SoC
- Storage (xSPI): pSRAM & QSPI
- 2xDMICs
- 1 Buck-boost converter
- 1x 3-Axis accelerometer
- 1xALS (Ambient Light Sensing)

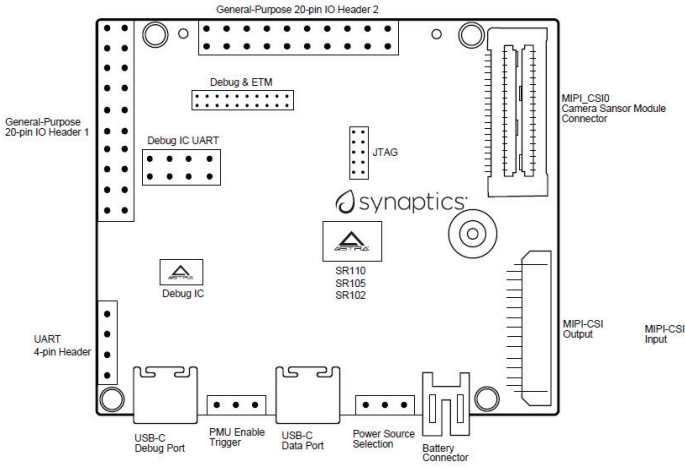
Daughter card interface and I/O header options:

- MIPI CSI-0, camera sensor input
- MIPI CSI01, output
- General Purpose 20-pin I/O header 1: PDM1, I2S, SDIO0
- General Purpose 20-pin I/O header 2: I2C, SPI UART1, PDM0
- UART0 (4-pin header)
- Debug ports: JTAG, UART
- M.2 E-key 2230 slot for SDIO, UART, PCM
- USB 2.0 Type-C: HS (480Mb/s), device controller
- Push buttons: system reset, PMU enable/ disable, SoC Reset, User button
- Camera and audio mute
- 2-pin header: external Vbat supply optional
- Type-C power supply with 15V @ 1.8A

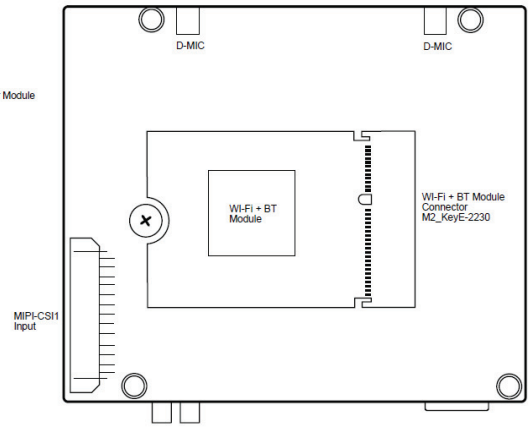
Synaptics Astra Machina Micro

SR100 Series MCU Dev Kit

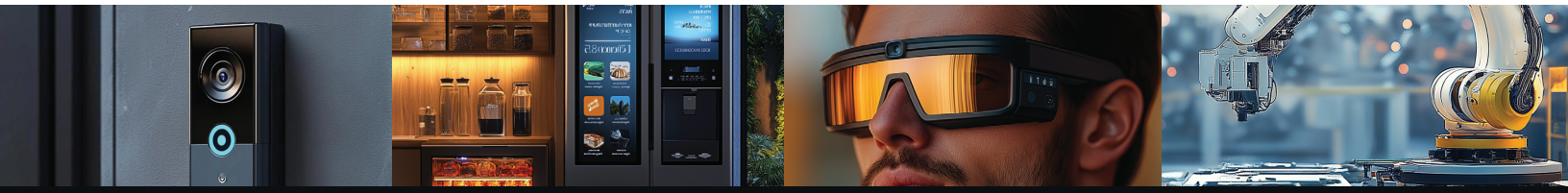
Front



Back



System Block Diagram



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Contact

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

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