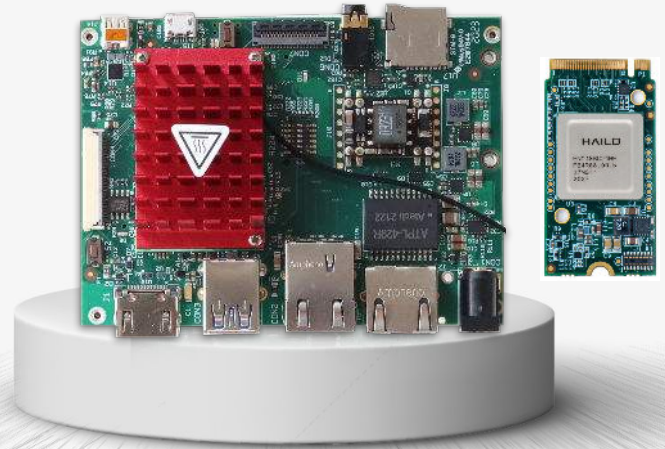


Highly optimized SBC for machine vision and other AI applications

- Quad-core Arm Cortex A53 processor (Up to 1.8GHz) and up to 8 GB LPDDR4 memory on the Single Board Computer (SBC)
- Features dual Gigabit Ethernet with PoE support, dual MIPI-CSI camera interfaces, HDMI display capabilities
- Integrated with the advanced Hailo-8 AI accelerator (Keras, TensorFlow, TensorFlow Lite, Pytorch, ONNX) through the M.2 PCIe interface



Built in AI



Many Customization Options



Cost Effective



Industrial Grade, 10 year longevity



Low Power



EMPOWER YOUR PRODUCT WITH AI

With 2 Neural Network accelerators on board we provide your product with up to 28 TOPS (26 TOPS with the Hailo-8 and 2 TOPS with the iMX8MP NPU) of dedicated inferencing compute capabilities. This paired with up to 8GBs of memory allow for a wide variety of AI inferencing models to be deployed on the device. Optical Character Recognition, Image Classification, Traffic monitoring, and Facial recognition only touch the surface of the possible use cases.



EASE OF USE

By having partnered with industry leading hardware solution providers like NXP, Basler, and Hailo we have access to their software and drivers. SolidRun has already done the work of integrating their BSPs with our own which means all hardware and software is already enabled and ready for testing out of the box.



Flexible connectivity options

Our carrier provides a no compromises approach to connectivity. There are no additional hats, or adapter boards needed to have full access to the hardware potential of this platform. On the SOM we support dual gigabit Ethernet PHYs, 1 MIPI-CSI Basler connector, and 802.11AC/BT 5.1 Wireless connectivity. On the carrier we include dual ethernet ports (one supporting PoE), dual USB 3.1 Gen 1 Type-A ports, 1 MIPI-CSI Basler connector, and a mini-PCIe slot with SIM-Card tray.

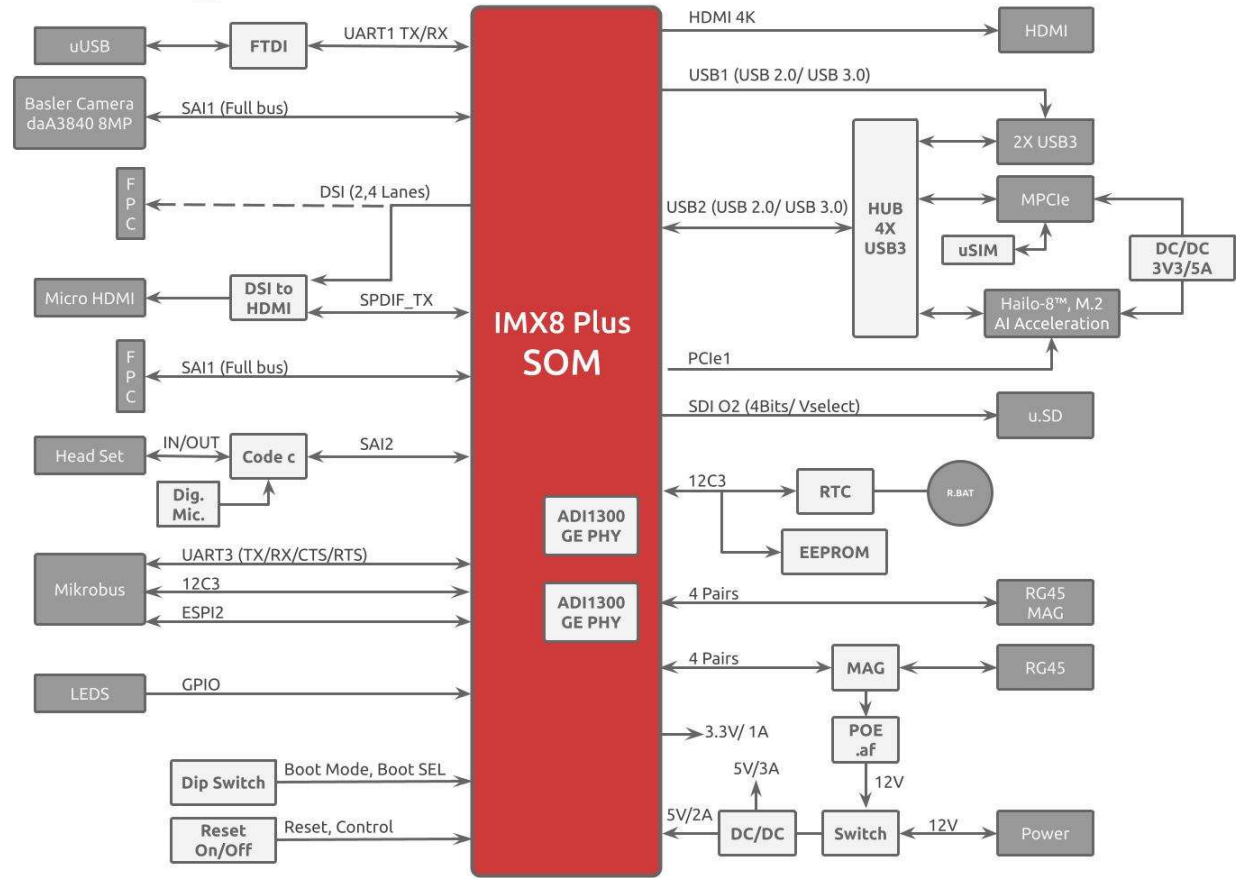


INDUSTRIAL GRADE AND LOW POWER AI

Unlike their data-center counterparts, Edge AI solutions need to be able to operate in harsh environmental conditions and on limited power budgets. We provide a platform that provides industry leading compute per Watt with a system that can achieve 28 TOPS in a 10 Watt power budget.



HB 8P Edge AI



	i.MX8M Plus
I/O	2 x USB 3.1 Gen 1 (One supporting peripheral/OTG Mode) 2 x MIPI-CSI 1 X Digital audio (Riser interface FPC connector) 1 x Onboard audio codec
Network Connectivity	2 x Ethernet RJ45 10/100/1000 1 x 802.11 a/b/g/n/ac WiFi and Bluetooth (2.4/5 GHz)
Processor	NXP i.MX 8M Plus Dual/Quad core Arm Cortex A53 up to 1.8GHz (with Arm M7 GPP)
Memory & Storage	Up to 8GB LPDDR4 Up to 64GB eMMC MicroSD
Display	HDMI MIPI-DSI
Misc.	1 x Reset button 1x Configurable push button 3 x LED indicators RTC
Development and Debug interfaces	Micro USB
Power	7V - 28V PoE sink support 802.3af class 0
Expansion card I/Os	M.2 B-Key (Populated with the Hailo-8 accelerator) Mini PCIe with SIM holder (USB connectivity only)
Temperature	Commercial: 0°C to 70°C Industrial: -40°C to 85°C
Dimensions	PCBA: 100 x 70mm Enclosure: 142 x 80 x 30mm
Enclosure	Extruded aluminum

