SolidRun
Embedded Edge Computing

HummingBoard Hailo-15 AIOT SBC

- Based on Hailo 15H SOM quad core Arm Cortex A53, up to 1.3GHz
- M.2 extension card support LTE
- Industrial Interfaces Support: 2x RS232, 1Gb Ethernet with PoE
- AI experience with pre-tuned support for the Sony IMX678 camera module, integrated with the ISP

Extended Temperature

Many Customization Options

Cost Effective

AI Inference

Industrial Grade, 10 year longevity

Superior Image Quality

Based on AI-powered vision enhancement, it offers 4K60 or 4K30 resolution, supported by a comprehensive vision library. It excels at removing noise while preserving important image details and textures, resulting in higher SNR and SSIM. Furthermore, this solution combines a cutting-edge vision processor with an advanced ISP pipeline, delivering 4K@60FPS image processing capabilities.

Industrial Grade Enclosure

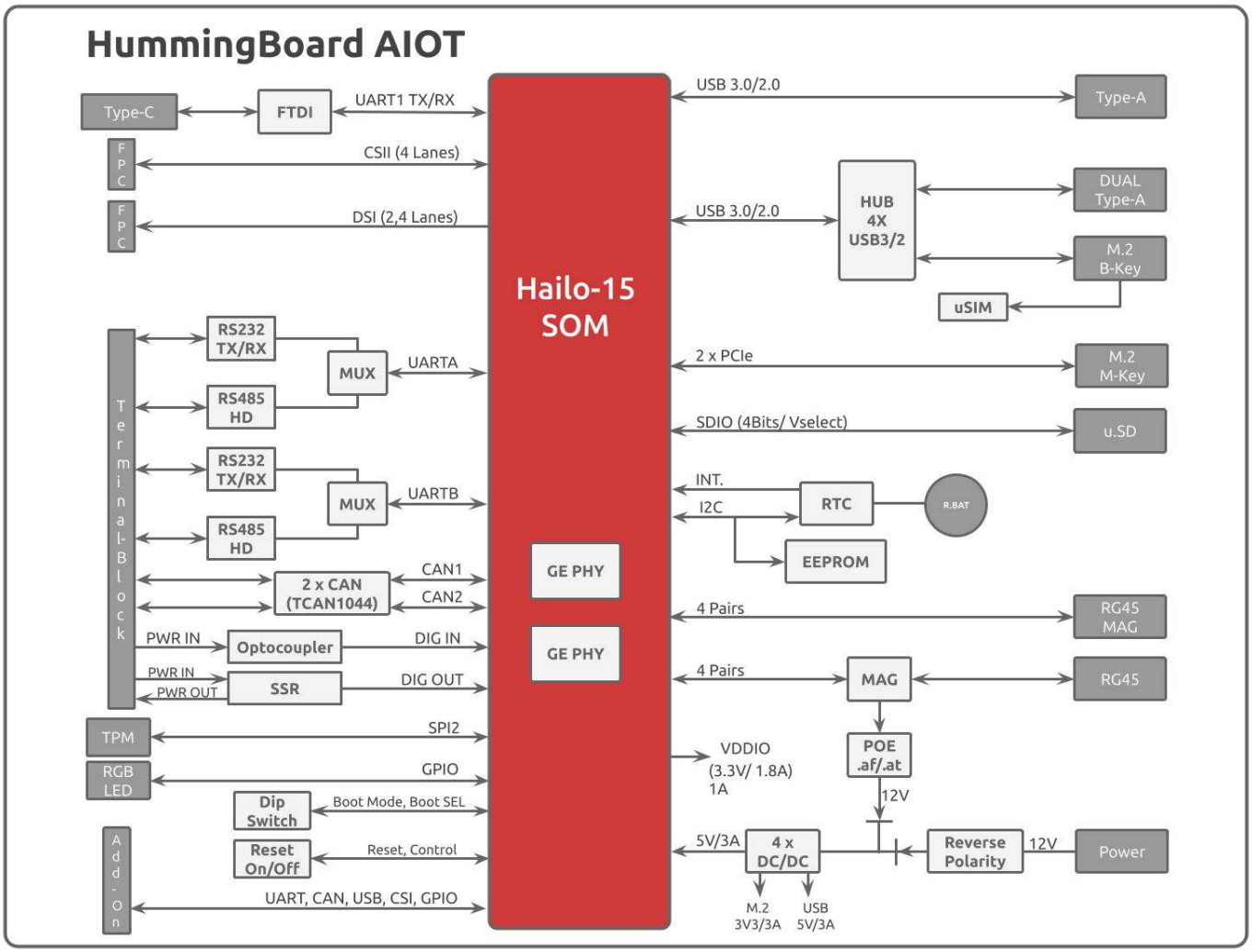
The HummingBoard Hailo15 AIOT can be housed in a robust extruded aluminum enclosure, designed for industrial installations with a temperature range of -40° to 85°. The AIOT-200-H15 features a compact size of only 120x80x30mm and includes support for DIN rail mounting. Custom branding support is possible.

Expandable Connectivity and Scalability

It supports M.2 cards for LTE connectivity with M.2 B-key, including dual SIM support. Additional addon card options for enhanced features.
Highly scalable and upgradeable to meet diverse requirements.

Comprehensive Software Support

Broad Linux based software support including a dataflow compiler and a library of deep learning and application examples. Supporting standard ML frameworks such as Keras, TensorFlow, PyTorch and ONNX. Yocto-based Linux distribution.
Industry standard ML frameworks. Secure system.



	HummingBoard Hailo15 AIOT SBC
I/Os	1 x USB 3.0 2 x MIPI-CSI RS232 communication and Digital I/Os
Networking	1 x Ethernet RJ45 10/100/1000 1 x 802.11 a/b/g/n/ac WiFi and Bluetooth (2.4/5 GHz) *
Processor	Hailo-15, 4 x Cortex A53 1.3GHz; 12 kDMIPS
Memory & Storage	Up to 8GB LPDDR4 (4GB default configuration) 32GB eMMC up to 128GB Quad SPI 32Mb
Display	MIPI-DSI
Misc	TPM2.0 1 x Reset button 3 x LED indicators RTC
Development and Debug interfaces	Micro USB
Power	9V – 32V PoE sink support 802.3af Class 0
Expansion card I/Os	M.2 mPCIe* *Mini PCIe with SIM holder (USB interface for modem connection)
Temperature	Commercial: 0°C to 70°C Industrial: -40°C to 85°C
Dimensions	120 x 80 x 30mm
Enclosure	Extruded aluminum