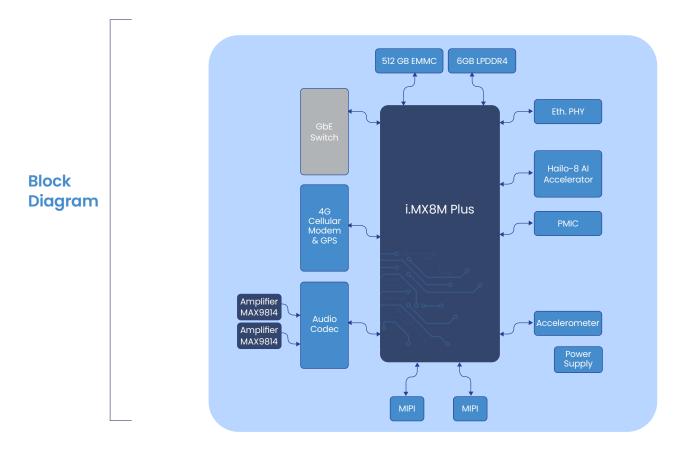
Onyx

Ruggedized miniature and low-power edge computing solution supporting video streaming & recording and AI applications



External Interfaces

- Dual USB 2.0 for USB camera
- Ethernet
- Dual microphone
- Dual 4G cellular antenna
- Single GPS antenna
- 4 x GPIOs
- 12V power input

Internal Interfaces

- PCIe to Hailo-8
- USB to 4G cellular modem
- SDIO 512GB EMMC
- I2S to audio codec via amplifier



Functionality

- Dual USB camera capture
- Dual microphone capture
- USB camera raw video transfer to Hailo-8
- Dual USB camera h.265 encoding
- Dual transport stream (TS) generation (video and audio blocks)
- Dual TS low-latency streaming (UDP, RTP, RTSP in Unicast, Multicast, Broadcast)
- Dual TS recording on EMMC
- Files download via Ethernet and USB (when connected to PC instead of a camera and recognized as mass storage device)
- GPIOs control
- Powerful onboard Hailo-8TM, 26 TOPS AI Accelerator enabling high AI accuracy, detection & tracking, and hosting customer AI processes
- Control using web browser and SW API via GbE

Mechanical

- IP67 housing
- Binder connectors
- SMA connectors for LTE and GPS antennas
- Passive cooling
- SIM accessible by opening the case
- Dimensions: L 76.40 x W 40.00 x H 40.00 mm





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