HAILO
Empowering Intelligence

Hailo-8™ Deep Learning Processor for Edge Devices

The Hailo-8™ Provides Groundbreaking Efficiency for Neural Network Deployment

End-To-End Solution

TARGET MARKETS
- Automotive
- Smart City
- Smart Home
- Smart Retail
- Industry 4.0

HARDWARE
- Up to 26 TOPS
- Numeric representation: 8, 16 -bit
- Typical power consumption: 2.5W

SOFTWARE
- Comprehensive toolchain
- TensorFlow and ONNX support
- Offline Emulator and Profiler

AUTOMOTIVE COMPLIANCE
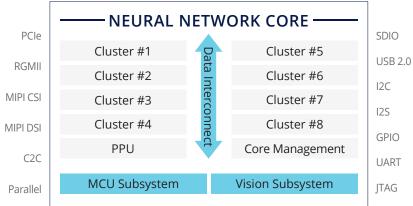- A-SPICE L2 development flow
- AEC-Q100 Grade 2 compliant
- ISO-26262, ASIL-B (D) compliant

KEY Features

- Proprietary novel Structure-driven Data Flow architecture (vs. CPU/GPU/DSP/HW Accelerator)
- Holistic solution comprising HW & SW
- Unprecedented performance efficiency enabling
  - Processing of FHD stream in real-time
  - Low power consumption solution
- Enable smaller size and lower the solution cost
- Used as a standalone processor or as a co-processor
- Scalable performance via chip cascading
- Easy HW integration (no additional external memory)
- Seamlessly integrates with popular SW frameworks

Hailo-8™

Block diagram: NEURAL NETWORK CORE containing Cluster #1–#8, PPU, Core Management, Data Interconnect, MCU Subsystem, Vision Subsystem. Left interfaces: PCIe, RGMII, MIPI CSI, MIPI DSI, C2C, Parallel. Right interfaces: SDIO, USB 2.0, I2C, I2S, GPIO, UART, JTAG.

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