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
- < 5 Watt (fully active)

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™

NEURAL NETWORK CORE

Left Interfaces		Right Interfaces
PCIe	Cluster #1 — Cluster #5	SDIO
RGMII	Cluster #2 — Cluster #6	USB 2.0
MIPI CSI	Cluster #3 — Cluster #7	I2C
MIPI DSI	Cluster #4 — Cluster #8	I2S
C2C	PPU — Core Management	GPIO
Parallel	MCU Subsystem — Vision Subsystem	UART / JTAG

Data Interconnect

HAILO
Empowering Intelligence