

Edge AI Gateway

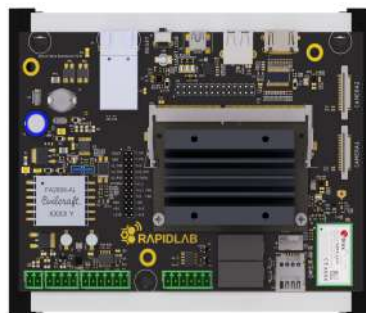
is an industrial gateway using the NVIDIA® Jetson Nano™ System on Module. It is designed to process sensor data locally in factories, production lines and other places where a lot of data has to be transformed. It allows running AI algorithms without Cloud infrastructure.

This approach reduces data transfer especially in locations without access to cable or Wi-Fi network. Local data processing also significantly reduces latency which is crucial in real-time applications or safety systems. Moreover, reducing latency to minimum means reducing data transfer costs.



Key features

- ◆ NVIDIA® Jetson Nano™ compatible baseboard
- ◆ Power over Ethernet (Class 3)
- ◆ Auxiliary isolated external supply input (9-60V DC)
- ◆ HDMI 2.0
- ◆ USB 2.0 Host port
- ◆ 2x MIPI CSI-2 (dual lanes) 15-position Camera Flex Connector (Raspberry Pi pinout)
- ◆ Gigabit Ethernet with PoE
- ◆ M.2 Key E connector for Wi-Fi/Bluetooth module (Intel 8265NGW compatible)
- ◆ GSM connectivity (u-blox SARA-U201 3G/HSPA, global coverage)
- ◆ 2x Isolated Digital Inputs (24V DC)
- ◆ 2x Relay Output (5A)
- ◆ RS-485/PROFIBUS-DP
- ◆ (optional) IO-Link interface
- ◆ (optional) CAN interface
- ◆ Debug UART over USB
- ◆ Mounted on DIN rail (165x130 mm)



Applications

Predictive Maintenance on Edge
Computer Vision Systems
Process Control

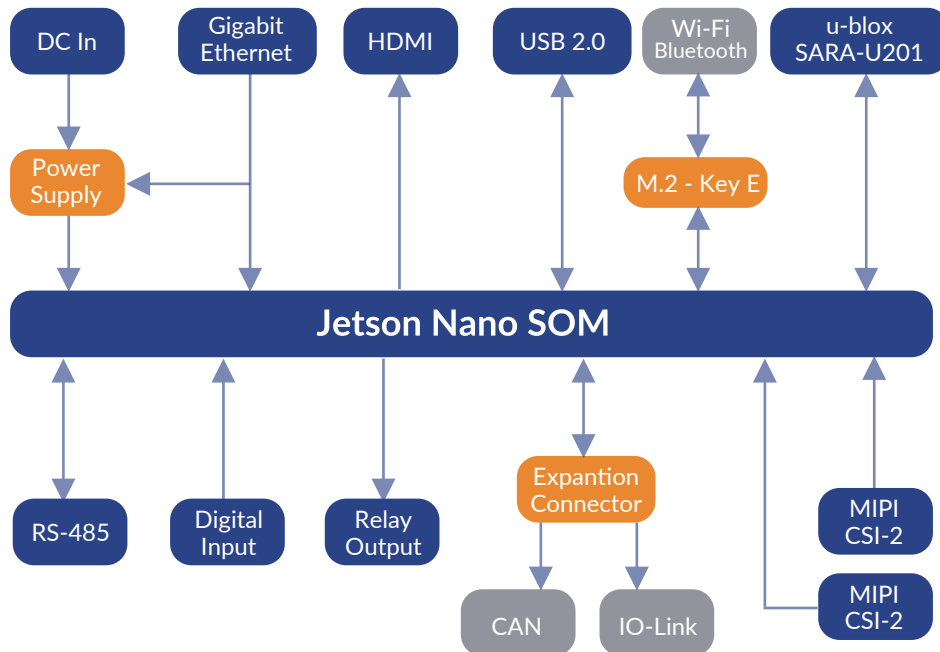
Distributed Computing Systems
Complex Process Monitoring
Local Data Analysis

Sensor Data Fusion

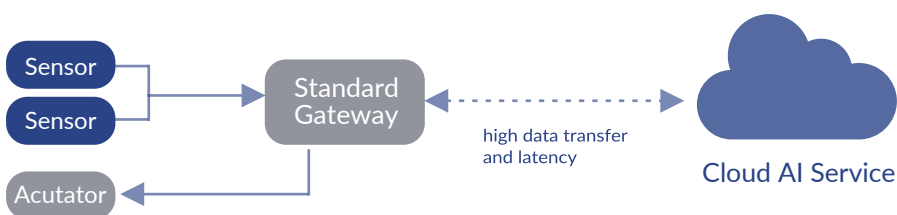
Contact us!
contact@rapidlab.io
 + 48 61 631 10 67

How it works

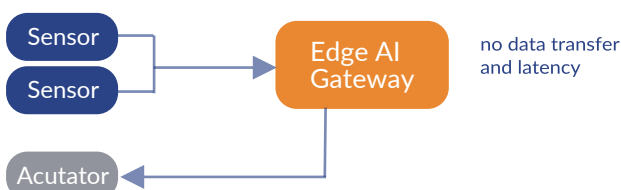
*Greyed out components and Wi-Fi are optional and not included in the gateway



Traditional gateway with AI in the Cloud requires transmitting large amount of data and introduces high latency depending on connection quality.



Edge AI Gateway doesn't need connection to the Cloud for data processing, thus reduces processing latency to minimum.



Contact us!
contact@rapidlab.io
 + 48 61 631 10 67