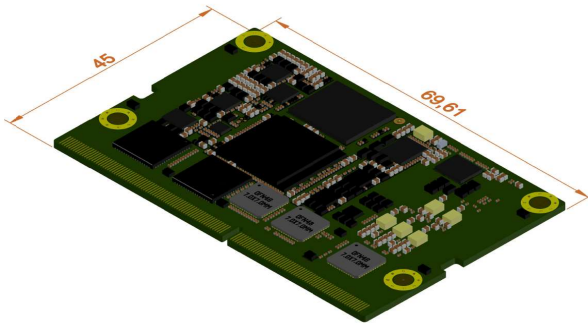# AI Computing Module
MoveOn_SODIMM_UMQ8550

Key Features

- Based on Qualcomm **QCS8550-1-AA** SOC
- Embedded NPU 48-TOPs in 4nm SoC
- LPDDR5 12GB, **UFS 3.1 128GB (Integrated)**
- **Ethernet_1G_PHY integrated**
- **PCIe-to-USB 3.0 Controller integrated**
- **DSI-to-HDMI Multimedia converter integrated**
- MIPI CSI2-2-Lane x 4EA※
- Support various interface
  - **PCIe Gen4 X2, Gen3 X2,**
  - **USB 3.1 x 3EA**
  - **4-Wire UART x 2EA, 2-Wire UART x 1EA**
  - **GPIO x 16EA**
- Support SNPE & QNN platform for AI processing
- OS : Linux Yocto (kernel ver_5.15)
- *SO-DIMM 260-pin formfactor*
  (Compatible Nvidia ORIN NX, Nano Series)

※ *MAX96712/96724 pipeline of CAMX platform is pre-configured to support up to 8Ch GMSL2 camera Interface on MoveOn SODIMM_Q SDK.*

Introduction

MoveOn_SODIMM_Q is designed with the latest Qualcomm® Snapdragon™ SoC as the main processor. Qualcomm® is designed on a 4nm process to deliver superior performance with minimal power consumption.
For various sensor sets and algorithm processing required in robotics systems, recognition and judgment can be processed quickly with a high-performance AP, a built-in NPU 48 Tops and a separate Camera Process Block allows for 4K120fps processing. Can support video processing and streaming services.

MoveOn_SODIMM_Q support the high-speed PCIe gen4, allows input from up to 8 camera sensors through GMSL2 interface, Also, the Linux ROS2.0 SDK is provided to enable flexible development and rapid application of autonomous driving applications, including deep learning based on high performance, high reliability, and various scalability for robotics.

MoveOn_SODIMM_Q is a dedicated AI Computing Platform for robotics systems and will be the optimal solution to reduce costs, facilitate development, shorten period, and minimize size.

Application

Robotics, C-ITS BOX, Camera AI BOX, Smart Factory