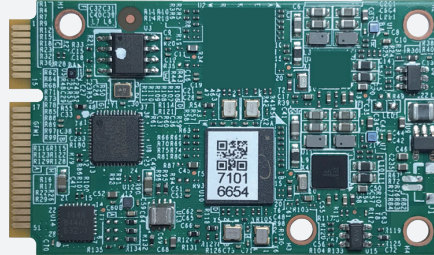


# AIBooster-X1

Intel® Movidius™ Myriad X VPU  
Deep Learning Accelerator Module



## Main Features

- Single Myriad X MA2485 VPU
- mini-PCIe form factor
- Total 4Gb LP-DDR4 SDRAM
- Support OpenVINO™ toolkit
- M/JPEG 4K at 60Hz encoder
- H.264/H.265 4K at 30Hz encoder
- Low power consumption

## Product Overview

AIBooster-X1 module integrated with Intel® Movidius™ VPU drive the demanding workloads of modern computer vision and AI applications at ultra-low power. The dedicated Neural Compute Engine in Myriad X delivers more performance per Watt, and it helps AIBooster-X1 achieves a perfect balance of power efficiency and high performance. Since AIBooster-X1 is also designed for power constrained environments, it provides the ideal solution for device makers seeking to deploy advanced AI mobile applications at the edge.

## Specifications

### VPU Engine

- Single Myriad X MA2485 VPU
- Per VPU with
  - Up to 1 TOPS
  - 16 programmable 128-bit VLIW vector processors
  - CPUs 2x LEON 4 cores (RISC; SPARC V8)
  - On-chip accelerators 20+ image/vision processing accelerator
  - Neural compute engine (DNN accelerator)
  - Neural network capability neural compute engine

### Memory

- Total 4Gb LP-DDR4 SDRAM on chips

### Encoder

- M/JPEG 4K at 60Hz encoder
- H.264/H.265 4K at 30Hz encoder

### Form Factor

- mini-PCIe

### OS Support

- Ubuntu 16.04.1/Kernel 4.10.0
- Ubuntu 16.04.3/Kernel 4.14.20
- Windows 10 Enterprise 64-bit

### Feature Support

- Intel® OpenVINO™ toolkit

### Supported Network Topology

- AlexNet, GoogleNet v1 & v2, Yolo Tiny\* V1 & V2, Yolo V2, MobileNet-SSD, VGG-d, ResNet-18, Faster-RCNN

### Dimensions

- 30 x 51 mm

### Power Consumption

- < 8 W

### Operating Temperature

- -30°C to 70°C

## Ordering Information

- **AIBooster-X1 (P/N: 88V000VPU00X0)**  
Intel® Movidius™ Myriad X VPU, mini-PCIe module (1 x MA2485)

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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