

ATC 8010-7B

Intel® Core™ 8th Gen. CPU + Intel® Movidius™ Myriad™ X MA2485 VPU
Powerful Intelligent Platform for AGU and ANPR/AFR



Main Features

- Intel® Core™ 8th Gen. i7-8700T, 2.4GHz, 6 Core
- Intel® Movidius™ Myriad™ X MA2485 MXM VPU module supported
- 8 x Independent Intel® I210-IT 10/100/1000 PoE 802.3af/at
- ultraONE+ for 10-Meter video + audio output
- 2 x External SSD and 2 x mSATA for RAID 0, 1, 5, 10
- 2 x WWAN module and 3 x SIM socket with eSIM option
- Fanless design
- 3 x mini-PCIe and 1 x M.2
- CE/FCC/E mark

Product Overview

ATC 8010-7B, fanless design and powerful Artificial Intelligent (AI) platform with low power consumption, is specially designed for the applications, such as ANPR, AFR and highly-demanding on graphic performance. Its updated Intel® Coffee Lake desktop 35W CPU, and Intel® Movidius™ Myriad™ X MA2485 MXM VPU module guarantees the graphic performance, which satisfies with most of the Automated Intelligent (AI) requirement. 8-Port 802.3af/at PoE, offers wide bandwidth and precise control to the analysis of big video data. Besides, ultraONE+ technology commits the transmission of video and audio, up to 10 meters distance. 1 x HDMI and 1 x VGA let users monitor the immediate video without any delay and blind spot. RAID 0, 1, 5, 10 guarantees the safety of video data in the 2 x external SSD, and 2 x mSATA.

Specifications

CPU

- Intel® Core™ 8th Gen. i7-8700T processors, 2.4GHz, 35W, 6 core

Chipset

- Intel® Q370 platform controller hub

Memory

- 2-Channel 260-pin DDR4 SO-DIMM sockets up to 32GB/channel (64GB for two channels), default 4GB + 4GB industrial grade memory

VPU (AIBooster-X8-MXM MXM Module)

- Eight Intel® Movidius™ Myriad™ X MA2485 VPU
- Per MA2485 VPU
 - Up to 1 TOPS
 - 16 programmable 128-bit VLIW vector processors
 - CPUs 2 x 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

Storage

- 2 x 2.5" SATA 3.0 external SSD
- 2 x mSATA

Expansion

- 1 x Full size mini-PCIe socket (USB 2.0, PCIe 3.0, SATA 3.0)
- 1 x Full size mini-PCIe socket (USB 2.0), optional M.2 key B (3042)
- 1 x Full size mini-PCIe socket (USB 2.0, PCIe 3.0, SATA 3.0 (option))
- 1 x M.2 key B 3042, (USB 2.0, USB 3.1)

GNSS and On-board Sensor

- 1 x Default U-blox NEO-M8N GNSS module for GPS/Glonass/QZSS/Galileo/Beidou. Optional modules with dead reckoning available
- Built-in G Sensor
- TPM 2.0 (Option)
- Watchdog timer: Programmable 1~255 sec

Power over Ethernet

- 8-Port LAN, independent I210-IT 10/100/1000 Mbps, PoE 802.3af/at, max. 60W

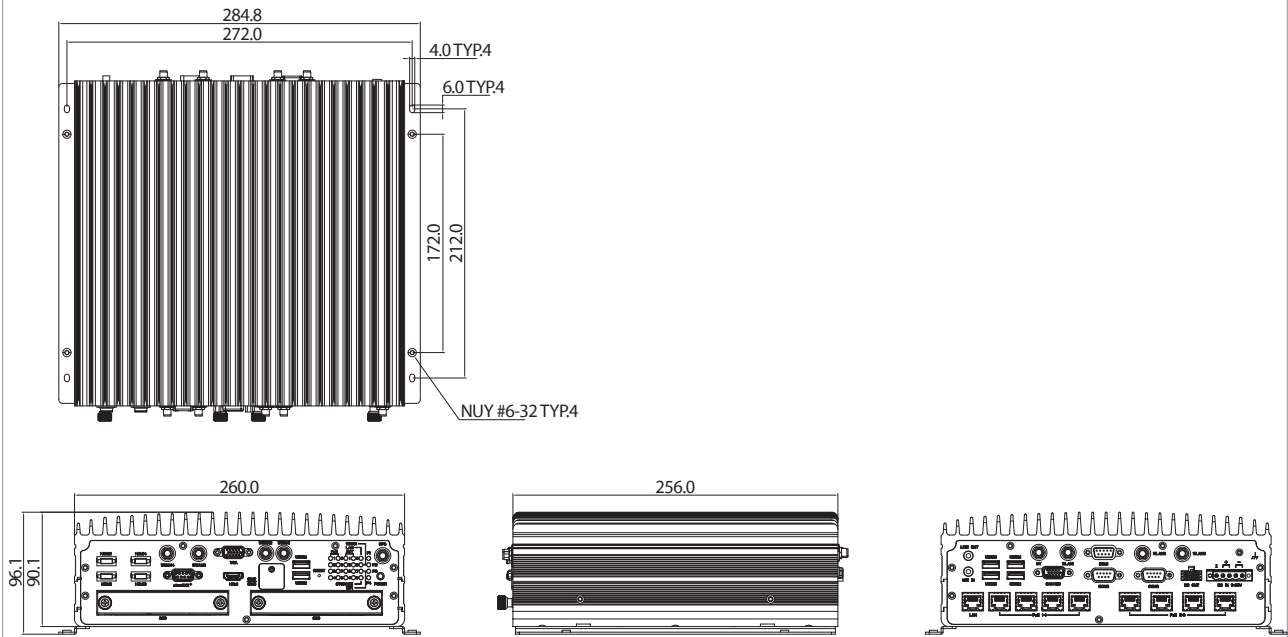
I/O Interface-Front

- 24 x LED indicators (including 4 x programmable LED)
- 1 x HDMI 1.4b from Intel CPU (max resolution: 4096 x 2160 at 30Hz)
- 1 x VGA (max resolution: 1920 x 1200@60Hz)
- 1 x ultraONE+ for 10M video + audio output + 24VDC output
- 2 x USB 3.1 type A (5V/1A)
- 2 x Externally accessible SIM sockets, 1 x internal SIM socket
- 2 x 2.5" removable SSD tray
- 1 x Reset button
- 1 x Power button
- 5 x SMA antenna

I/O Interface-Rear

- 8 x PoE 802.3af/at (max. 60W)
- 1 x LAN, I210-IT 10/100/1000 Mbps

Dimension Drawing



- 1 x 5-pin terminal block for 9V~36VDC
- 1 x Mic-in, 1 x Line-out
- 4 x 2 connector for 12VDC/2A output, power button, 2 x MDI
- 2 x DB9 for full RS232
- 1 x DB9 for full RS232/422/485 (RI, 5V/0.5A, 12V/0.5A)
- 1 x DB15
 - 1 x Isolated CANBus 2.0B
 - 1 x GPS DR
 - 4 x DI and 4 x DO
- 4 x SMA antenna
- 4 x USB 3.1 type A (5V/1A)

Power Management

- Selectable boot-up & shut-down voltage for low power protection by software
- Setting 8-level power on/off delay time by software
- Support S3/S4 suspend mode

Operating System

- Windows 10/Linux/YOCTO (by request)

Dimensions

- 260 x 256 x 90.1 (W x D x H) (mm)

Weight

- 6.3kg

Environment

- Operating temperatures: -30°C~60°C (w/ industrail SSD) with air flow
- Storage temperatures: -40°C~80°C
- Relative humidity: 90% (non-condensing)
- Vibration (random)
 - 2g@5~500 Hz (in operation, SSD)
- Vibration (SSD)
 - Operating: MIL-STD-810G, Method 514.6, Category 4, common carrier US highway truck vibration exposure
 - Storage: MIL-STD-810G, Method 514.6, Category 24, minimum integrity test
- Shock (SSD)
 - Operating: MIL-STD-810G, Method 516.6, Procedure I, functional shock=40g
 - Non-operating: MIL-STD-810G, Method 516.6, Procedure V, crash hazard shock test=75g

Certifications

- CE approval, FCC Class A, E13 mark

Ordering Information

• ATC 8010-7B (P/N: 10AT0801003X0)

Intel® Core™ 8th Gen. i7-8700T processors, AIBooster-M8-MXM, 8GB industrial grade memory, 8 x PoE 802.3af/at, 3 x mini-PCIe, 1 x M.2, 3 x SIM