# Intel x IEI TANK AloT Development Kit

#### Features

- 6th Gen Intel® Core™ processor platform with Intel® Q170 chipset, chipset and DDR4 memory
- Dual independent display with high resolution support
- Rich high-speed I/O interfaces on one side for easy installation
- On-board internal power connector for providing power to add-on cards
- Great flexibility for hardware expansion





#### Smart Choice for Inference System With AI

Artificial Intelligence, AI, is changing our lives from the past to the future. It enables machine intelligent by using a variety of training models to simulate and infer the status or appearance of object. For example, the inference system with video analysis model can perform face and car plate analysis for safety and convenience purposes.

TANK AloT Dev. Kit features rich I/O and dual PCIe by 16 slots with by 8 signal for add-on card installation such as PoE (IPCEI-4POE) card or acceleration card (Mustang-F100-A10 & Mustang-V100-RX8) to enhance function and performance for various applications.



#### **Numerous Face Analysis**

Face analysis with AI has explosive growth in various domains. It not only infers features of human like gender, age and facial expression, but also identifies identity, which can greatly reduce labor costs and provide services via big data in retail, finance and medicine.



### Numerous Car Plate Analysis

Efficient road tolling and parking reduces fraud related to non-payment, makes charging effective, and reduces required manpower to process. Car plate analysis can be deployed on highways for electronic toll collection, and can be implemented as a method of cataloguing the movements of traffic. In addition, society's security can therefore be enhanced by establishing databases of suspicious cars in a more efficient way.



## Machine Vision

Information technology adds intelligence to factories from design to the end of the process. Today's technologies automate the collection, storage and retrieval of data from across multiple factories and factory sub-systems to make the data available for analysis.

### **Specifications**

Specifica		
Model Name		TANK AloT Dev. Kit
Chassis	Color	Black C + Silver
	Dimensions (WxHxD) (mm)	121.5 x 255.2 x 205 mm (4.7" x 10" x 8")
	System Fan	Fanless
	Chassis Construction	Extruded aluminum alloys
	Weight (Net/Gross)	4.2 kg (9.26 lbs)/ 6.3 kg (13.89 lbs)
Motherboard	CPU	Intel® Core™ i7-6700TE 2.4 GHz (up to 3.4GHz, quad-core, TDP=35W) Intel® Core™ i5-6500TE 2.3 GHz (up to 3.3GHz, quad-core, TDP=35W)
	Chipset	Intel® Q170
	System Memory	2 x 260-pin DDR4 SO-DIMM, 8 GB pre-installed (system max: 32GB)
Storage	Hard Drive	2 x 2.5" SATA 6Gb/s HDD/SSD bay, RAID 0/1 support (1x 2.5" 1TB HDD pre-installed)
	USB 3.0	4
	USB 2.0	4
I/O Interfaces	Ethernet	2 x RJ-45 LAN1: Intel® I219LM PCIe controller with Intel® vPro™ support LAN2 (iRIS): Intel® I210 PCIe controller
	COM Port	4 x RS-232 (2 x RJ-45, 2 x DB-9 w/2.5KV isolation protection) 2 x RS-232/422/485 (DB-9)
	Digital I/O	8-bit digital I/O, 4-bit input / 4-bit output
	Display	1 x VGA 1 x HDMI/DP 1 x iDP (optional)
	Resolution	VGA: Up to 1920 x 1200@60Hz HDMI/DP: Up to 4096×2304@24Hz / 4096×2304@60Hz
	Audio	1 x Line-out, 1 x Mic-in
	ТРМ	1x Infineon TPM 2.0 Module
	Backplane	2 x PCle x8
Expansions	PCIe Mini	1 x Half-size PCIe Mini slot 1 x Full-size PCIe Mini slot (supports mSATA, colay with SATA)
Power	Power Input	DC Jack: 9 V~36 V DC Terminal Block: 9 V~36 V DC
	Power Consumption	19 V@3.68 A (Intel® Core™ i7-6700TE with 8 GB memory)
	Internal Power output	5V@3A or 12V@3A
Reliability	Mounting	Wall mount
	Operating Temperature	i7-6700TE -20°C ~ 45°C with air flow (SSD), 10% ~ 95%, non-condensing i5-6500TE -20°C ~ 60°C with air flow (SSD), 10% ~ 95%, non-condensing
	Operating Vibration	MIL-STD-810G 514.6 C-1 (with SSD)
	Safety/EMC	CE/FCC/RoHS
os	Supported OS	Microsoft® Windows® 8 Embedded, Microsoft® Windows® Embedded Standard 7 E, Microsoft® Windows® 10 IoT Enterprise, Linux Ubuntu 16.04

# **Ordering Information**

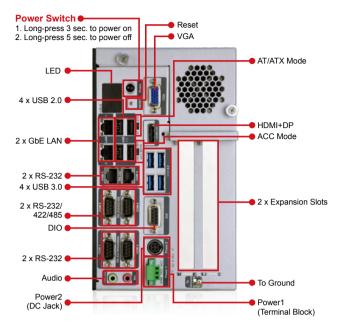
Part No.	Description
TANK-870Al-i7/8G/2A-R10	Ruggedized Fanless embedded system with Intel® Core i7-6700TE 2.4GHz, (up to 3.4 GHz, Quad Core, TDP 35W), 8 GB DDR4 pre-installed memory, 2 x PCIe by 8 expansion, 2.5" 1TB HDD , TPM 2.0 , 9~36V DC, 120W AC DC power adaptor , RoHS
TANK-870AI-i5/8G/2A-R10	Ruggedized Fanless embedded system with Intel® Core i5-6500TE 2.3GHz, (Up to 3.3 GHz, Quad Core, TDP 35W), 8 GB DDR4 pre-installed memory, 2 x PCIe by 8 expansion, 2.5" 1TB HDD , TPM 2.0 , 9~36V DC, 120W AC DC power adaptor , RoHS

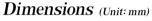
# Packing List

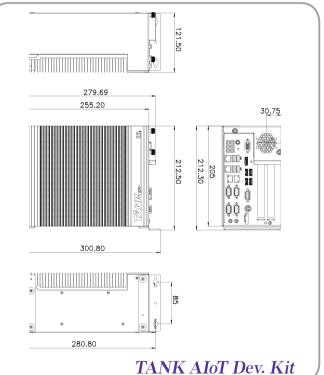
1 x Chassis Screw

1 x Mounting Bracket

### Fully Integrated I/O







#### **Options**

Part No.	Description
IPCIE-4POE-R10	PCI Express Power over ethernet card, 4-port 1000 Base(T), 802.3af compliant, RoHS
19Z00-000605-00-RS	Fan, +12V DC, 4-pin, 40 mm x 40 mm x10 mm, 6500RPM, RoHS
63040-010150-400-RS	Adapter Power; FSP; FSP150M-ABA; 9NA1505201; Active PFC; Vin: 90 ~ 264VAC; 150W; Dim: 85 x 170 x 42.5mm; Plug=6.5mm; Cable=1200mm; MEDICAL; Vout: 19VDC; Din 4Pin/lock; CCL; RoHS
72213100-5010000-000-RS	2.5" HDD;WD;Caviar Blue;WD10SPZX;SATA3.0(6Gb/ s, 600MB/s);1TB;128MB;5400 RPM;NoAssign;NoAssign;;CCL;RoHS

1 x Power Cord

1 x 120W Adapter

1 x QSG