



# AAEON BOXER-6839-A3-1010 6th/7th Gen Intel Core Fanless Embedded Box PC

#### **Key Features:**

- Extreme Computing Power & Graphic Display Capability
- Desktop Grade Socket Type Processor with Longevity Support
- DDR4 ECC or Non-ECC SODIMM, Up to 32GB
- VGA + HDMI x 2 Triple Display, HDMI 4K Display
- PCIe [x4] & PCI Expansion
- USB 3.2 Gen 1 x 6
- Industrial-grade Intel GbE LAN x 3
- Supports BIOS Selectable RS-232/422/485 x 6
- Easy Access Design
- Wide Range DC 9~36V Input
- 34-bit Digital Input and Output



## Description

With a specially designed interface that supports PCle x4, the BOXER-6839 seamlessly integrates various Industrial cameras such as GigaLAN / PoE/ USB 3.0 / CameraLink / CoaXpress. The AAEON Vision System Embedded Fanless BOXER has been tested with most industrial cameras and vision control software, adhering to stringent industry standards, and is compatible with multiple cameras on a connected platform. Powered by the powerful Intel 7th Gen. desktop CPU and Intel I210 LAN chip, the BOXER-6839 will expedite the assembly process, facilitate effective deployment in smart-factory lines, and enhance system performance at an affordable price.

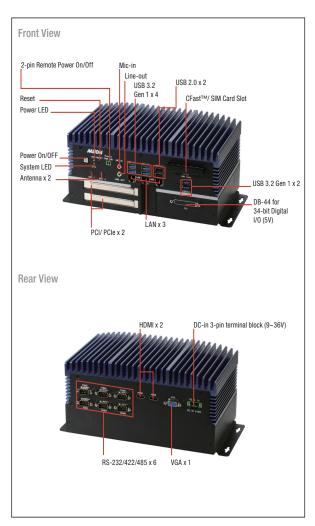
Unlike former designs, the BOXER-6839 features a lid cover to facilitate easier accessibility. It features a CPU socket which supports swappable CPUs, offering higher customization and mobility options, and provides a triple independent display which will greatly enhance factory product management. Additionally, it offers support for 6 COM RS485 ports, well above the current market average.

Designed to consolidate existing camera systems, AAEON's BOXER-6839 series supports various camera interfaces, providing seamless integration without having to connect through other transponders. The BOXER-6839 provides longevity support and a customizable mechanical design for CPU flexibility to meet the ever-changing needs of both the client and the landscape of Industry 4.0. With a native capacity of 3 GigaLAN ports, as well as a 6 USB 3.0 sockets, and 34-bit programmable digital I/O, it can also be adapted for a wide range of industrial manufacturing processes, lowering lead time and enhancing efficiency and accuracy. The rugged chassis design is ideal for smart control systems, machine vision inspection, digital signage, surveillance and machine makers.



# **BOXER-6839**

Expandable Fanless Embedded Box PC with 6th/7th Generation Intel® Core™ Desktop Processor and PCle [x4] & PCl Expansion



#### **Specifications**

System	
CPU	7th Generation Intel® Core™ Processor family: Intel® Core™ 15-7700T, 2.9 GHz Intel® Core™ 15-7500T, 2.8 GHz Intel® Core™ 13-7101TE, 3.4 GHz Intel® Pentium® G4500T, 3.0 GHz Intel® Pentium® G4500T, 2.9 GHz Intel® Celeron® G3930T, 2.7 GHz 6th Generation Intel® Core™ Processor family: Intel® Core™ 15-6700TE, 2.4 GHz Intel® Core™ 15-6700TE, 2.3 GHz Intel® Core™ 13-6100TE, 2.7 GHz Intel® Pentium® G4500T, 3.0 GHz Intel® Pentium® G4500T, 2.9 GHz Intel® Pentium® G4500T, 2.9 GHz Intel® Celeron® G3900T, 2.6 GHz
Chipset	Intel® Q170
System Memory	DDR4 1866/2133 SODIMM slot x 2, up to 32GB
Display Interface	HDMI, VGA
Storage Device	CFast™, HDD/SSD
Ethernet	Intel® I210, 10/100/1000 Base-TX x 3

#### **Features**

- Extreme Computing Power & Graphic Display Capability
- Desktop Grade Socket Type Processor with Longevity Support
- DDR4 ECC or Non-ECC SODIMM, Up to 32GB
- VGA + HDMI x 2 Triple Display, HDMI 4K Display
- PCle [x4] & PCl Expansion
- USB 3.2 Gen 1 x 6
- Industrial-grade Intel® GbE LAN x 3
- Supports BIOS Selectable RS-232/422/485 x 6
- Easy Access Design
- Wide Range DC 9~36V Input
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1/0	RS-232/422/485 x 6 USB Type A x 6 for USB 3.2 Gen 1 USB Type A x 2 for USB 3.2 Gen 1 USB Type A x 2 for USB 2.0 RJ-45 x 3 for GBE LAN DB-44 for 34-bit Digital I/O (5V) CFast*** slot x 1 SIM card slot x 1 Power On/Off Button x 1 2 pin Remote power on/off Reset switch Mic-in x 1 Line-out x 1 Antenna opening x 2 SYS LED indicator x 1 HDD LED indicator x 1 DB-15 x 1 for VGA HDDII v1.3 x 2 DC-in 3-pin terminal block (9~36V)							
Expansion	Full-size Mini-Card x 2 PCIe [x4] x 1 & PCIe [x1] x 1 (for A1) PCIe [x4] x 1 & PCI x 1 (for A2) PCI x 2 (for A3)							
Indicator	Power LED HDD active LED							
OS Support	7th Generation Intel® Core™ Processor family: Windows® 10 IOT (64bit) Ubantu 16.04 above Fedora 25 above CentOS 7.3 above 6th Generation Intel® Core™ Processor family: Windows® 10 IOT (64bit) Windows® 8.1 (64bit) Windows® embedded 8 standard (64bit) Windows® embedded 8 standard (64bit) Windows® embedded standard 7 (32/64bit) Ubantu 16.04 above Fedora 25 above CentOS 7.3 above							
Power Supply								
Power Requirement	9 - 36V with 3-pin terminal block							
Mechanical								
Mounting	Wallmount							
Dimensions (W x H x D)	10.40" x 4.90" x 6.15" (264.2mm x 124.5mm x 156.2mm)							
Gross Weight	13.2 lb (6.0 kg)							
Net Weight	9.9 lb (4.5 kg)							
Environmental								
Operating Temperature	$\sim$ 131°F (-20°C $\sim$ 55°C) (according to IEC68-2-14 with 0.5 m/s AirFlow; industrial devices)							
Storage Temperature	-49°F ~ 176°F (-45°C ~ 80°C)							
Storage Humidity	5~95% @ 40°C, non-condensing							
Anti-Vibration	5 Grms/ 5 $\sim$ 500Hz/ operation $-$ SSD/CFast <sup>TM</sup> card 1 Grms/ 5 $\sim$ 500Hz/ operation $-$ HDD							
Anti-Shock	_							
Certification	CE/FCC class A							

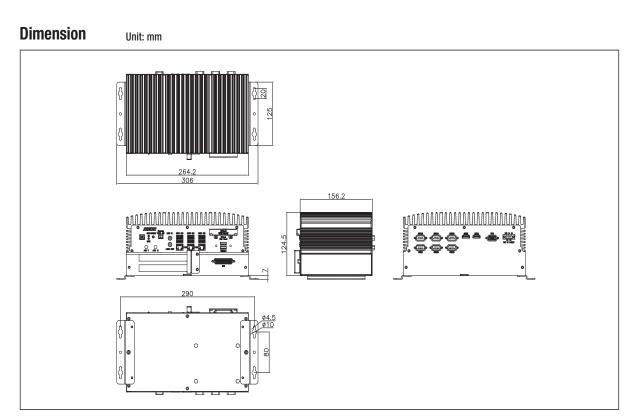
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Note: All specifications are subject to change without notice.



# **BOXER-6839**



#### **Ordering Information**

Part Number	CPU	RAM	LAN	USB 3.2 Gen 1	USB 2.0	RS-232/422/485	Digital I/O	Audio	Storage	Display	Expansion	Mounting	Power	Operating Temp.
BOXER-6839-A1-1010	-	_	3	6	2	6	34 bit	MIC-in x 1 Line-Out x 1	2.5" Drive Bay x 2 CFast™ x 1	VGA x 1 HDMI x 2	PCIE[x4] + PCIE[x1] Full-size Minicard x 2	Wallmount	9~36V DC In	-4°F ~ 131°F (-20°C ~ 55°C)
BOXER-6839-A2-1010	-	_	3	6	2	6	34 bit	MIC-in x 1 Line-Out x 1	2.5" Drive Bay x 2 CFast™ x 1	VGA x 1 HDMI x 2	PCIE[x4] + PCI Full-size Minicard x 2	Wallmount	9~36V DC In	-4°F ~ 131°F (-20°C ~ 55°C)
BOXER-6839-A3-1010	_	_	3	6	2	6	34 bit	MIC-in x 1 Line-Out x 1	2.5" Drive Bay x 2 CFast™ x 1	VGA x 1 HDMI x 2	PCI x 2 Full-size Minicard x 2	Wallmount	9~36V DC In	-4°F ~ 131°F (-20°C ~ 55°C)

#### **Packing List**

- Wallmount Bracket x 2
- Screw Package x 1
- Thermal Pad x 3
- Phoenix Power Connector x 1
- BOXER-6839

#### **Optional Accessories**

- 125590120B Power Adapter
- 1702031802 Power Cord (US Type)
- 1702031803 Power Cord (Europe)
- 170203180E Power Cord (Japan)
- 9741159H00 WiFi/Bluetooth Module & Antenna
- 9741EC25E0 4G Module & Antenna (For Europe)
- 9741EC25A0 4G Module & Antenna (For USA-AT&T)
- 9741EC25V0 4G Module & Antenna (For USA-Verizon)

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## Images





### **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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