



# 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 PCIe 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.

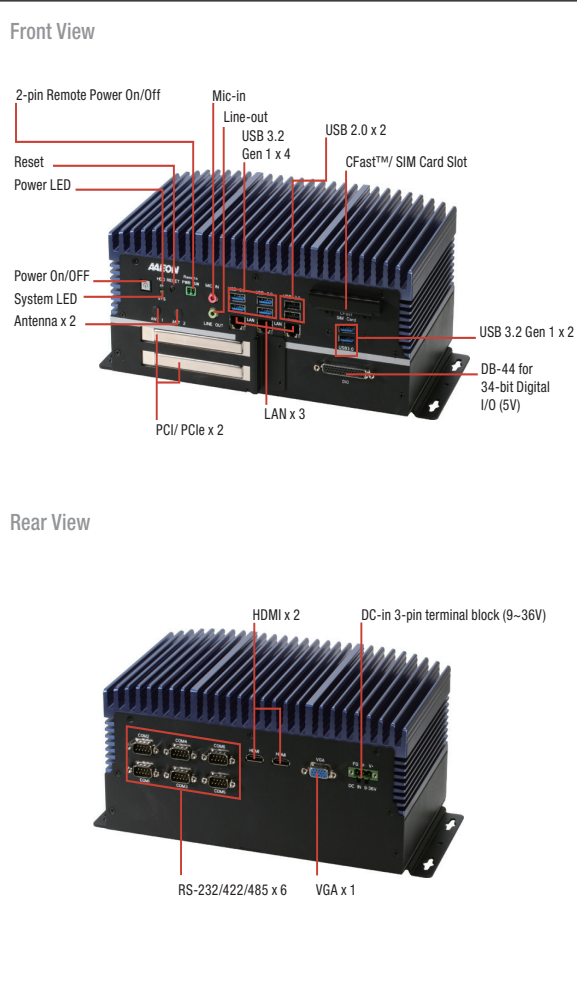
Unlike former designs, the BOXER-6839 features a lid cover to facilitate easier accessibility. It features a CPU socket which supports swappable CPUs, offering higher customization and mobility options, and provides a triple independent display which will greatly enhance factory product management. Additionally, 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 PCIe [x4] & PCI Expansion

Expandable Fanless BOX PC Solutions



## Features

- Extreme Computing Power & Graphic Display Capability
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- PCIe [x4] & PCI Expansion
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I/O	RS-232/422/485 x 6 USB Type A x 6 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 HDMI 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	<b>7th Generation Intel® Core™ Processor family:</b> Windows® 10 IOT (64bit) Ubuntu 16.04 above Fedora 25 above CentOS 7.3 above <b>6th Generation Intel® Core™ Processor family:</b> Windows® 10 IOT (64bit) Windows® 8.1 (64bit) Windows® embedded 8 standard (64bit) Windows® 7 (64bit/32bit) Windows® embedded standard 7 (32/64bit) Ubuntu 16.04 above Fedora 25 above CentOS 7.3 above
<b>Power Supply</b>	
Power Requirement	9 - 36V with 3-pin terminal block
<b>Mechanical</b>	
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)
<b>Environmental</b>	
Operating Temperature	-4°F ~ 131°F (-20°C ~ 55°C) (according to IEC68-2-14 with 0.5 m/s AirFlow; with 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 ~ 500Hz/ operation - SSD/CFast™ card 1 Grms/ 5 ~ 500Hz/ operation - HDD
Anti-Shock	—
Certification	CE/FCC class A

## Specifications

System	
CPU	<b>7th Generation Intel® Core™ Processor family:</b> Intel® Core™ i7-7700T, 2.9 GHz Intel® Core™ i5-7500T, 2.8 GHz Intel® Core™ i3-7101TE, 3.4 GHz Intel® Pentium® G4600T, 3.0 GHz Intel® Pentium® G4560T, 2.9 GHz Intel® Celeron® G3930T, 2.7 GHz <b>6th Generation Intel® Core™ Processor family:</b> Intel® Core™ i7-6700TE, 2.4 GHz Intel® Core™ i5-6500TE, 2.3 GHz Intel® Core™ i3-6100TE, 2.7 GHz Intel® Pentium® G4500T, 3.0 GHz Intel® Pentium® G4400T, 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

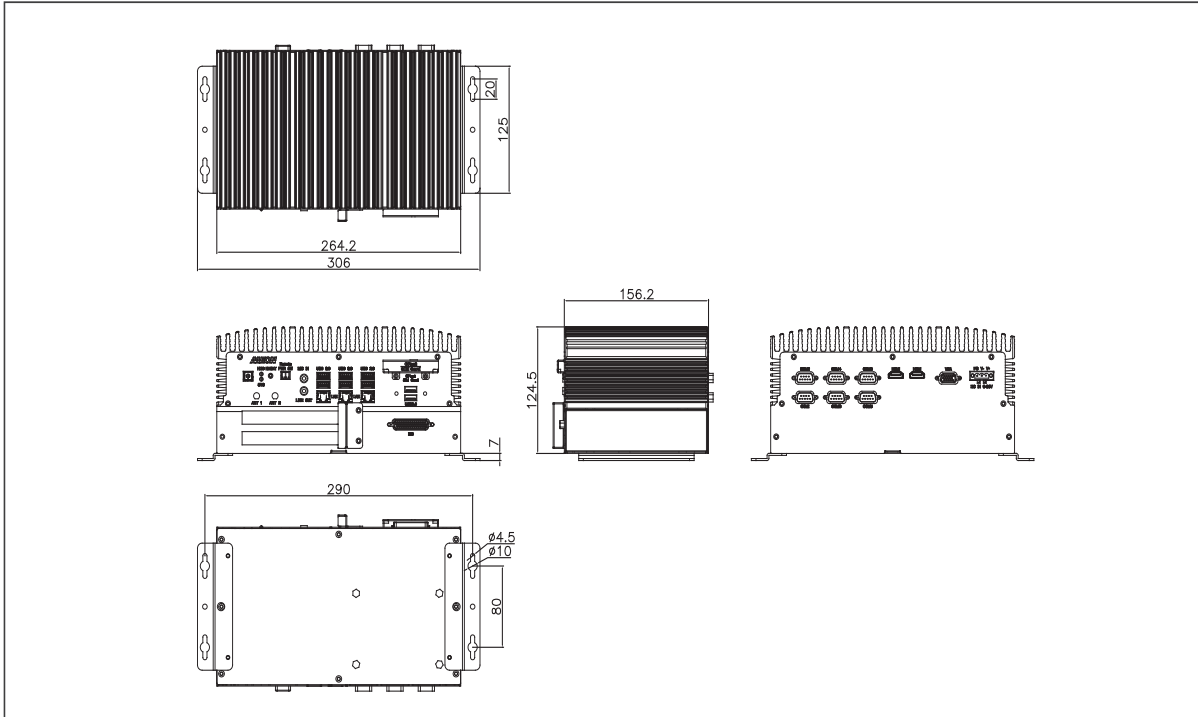
# BOXER-6839

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## Dimension

Unit: mm



## 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 M.2 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 M.2 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 M.2 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)

## 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.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660