AAEON BOXER-6639M 6th/7th Intel Core Vision System 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
- 802.3at GbE PoE x 4 (Max. 80W in total)
- 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 12~36V Input
- 34-bit Digital Input and Output

Description

The BOXER-6639M unifies a comprehensive portfolio of different applications via a single machine vision platform, which will optimize and integrate factory automation, product line management and automotive control applications in a compact, embedded vison system.

Designed to streamline industrial automation processes such as factory control and product lifecycle management, the BOXER-6639M is a reliable, flexible and low-maintenance choice for machine vision architecture, and is designed for swift deployment. CPU, DRAM and minicards are all easily accessible and installable, and the BOXER-6639M provides a wide range of expansion options, most notably 4 PoE (Power Over Ethernet) slots, which provide simultaneous internet and power connection of up to 80 watts, and up to 7 LAN ports.
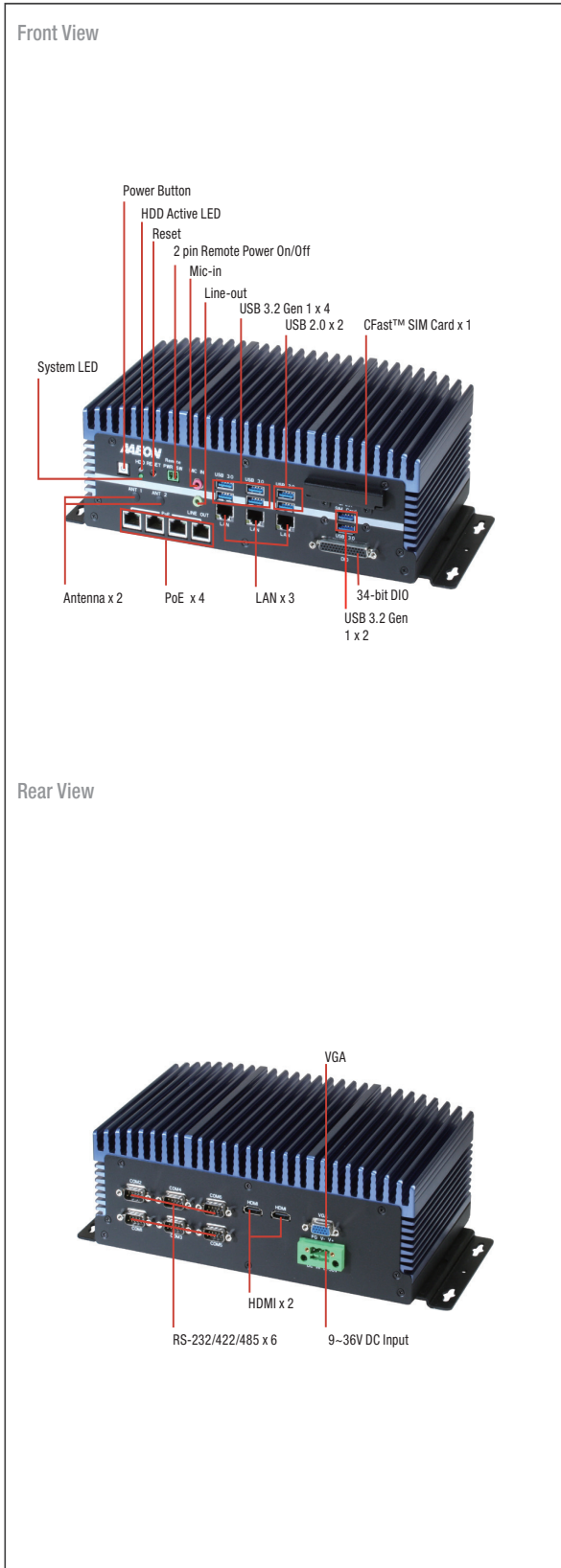
Engineered for longevity and resilience, the BOXER-6639M is a durable and highly scalable ruggedized computer applicable for extreme environments such as factories. It operates within a temperature spectrum of -20-~55°C, and offers a voltage range of 12-36V DC input, providing a controlled environment for installed components and supporting systems. Software-wise, it is BIOS selectable, so that the user can modify their software profile to alternate between RS- 232/422/485.

Storage choices include two 2.5" Drive Bays and a CFast™ socket, whilst system memory comprises two DDR4 1866/2133 SODIMM slots, with a maximum capability of 32GB. Multiple I/O connections are featured, with 6 RS-232/422/485 slots, 3 RJ-45 for GbE LAN, 4 PoE slots (802.3at, max. 80W in total), and a DB-44 hub for 34-bit digital I/O (5V). In addition, the BOXER-6639M can support up to three independent displays by virtue of two 4K HDMI slots, along with a VGA expansion slot.

03 ▸ BOXER-6639M

Vision System Fanless Embedded Box PC with 6th/ 7th Generation Intel® Core™ Desktop Processor and PoE

Vision System BOX PC Solutions

Front View

- System LED
- Power Button
- HDD Active LED
- Reset
- 2 pin Remote Power On/Off
- Mic-in
- Line-out
- USB 3.2 Gen 1 x 4
- USB 2.0 x 2
- CFast™ SIM Card x 1
- Antenna x 2
- PoE x 4
- LAN x 3
- 34-bit DIO
- USB 3.2 Gen 1 x 2

Rear View

- VGA
- HDMI x 2
- RS-232/422/485 x 6
- 9~36V DC Input

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**
- **802.3at GbE PoE x 4 (Max. 80W in total)**
- **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 12~36V Input**
- **34-bit Digital Input and Output**

Specifications

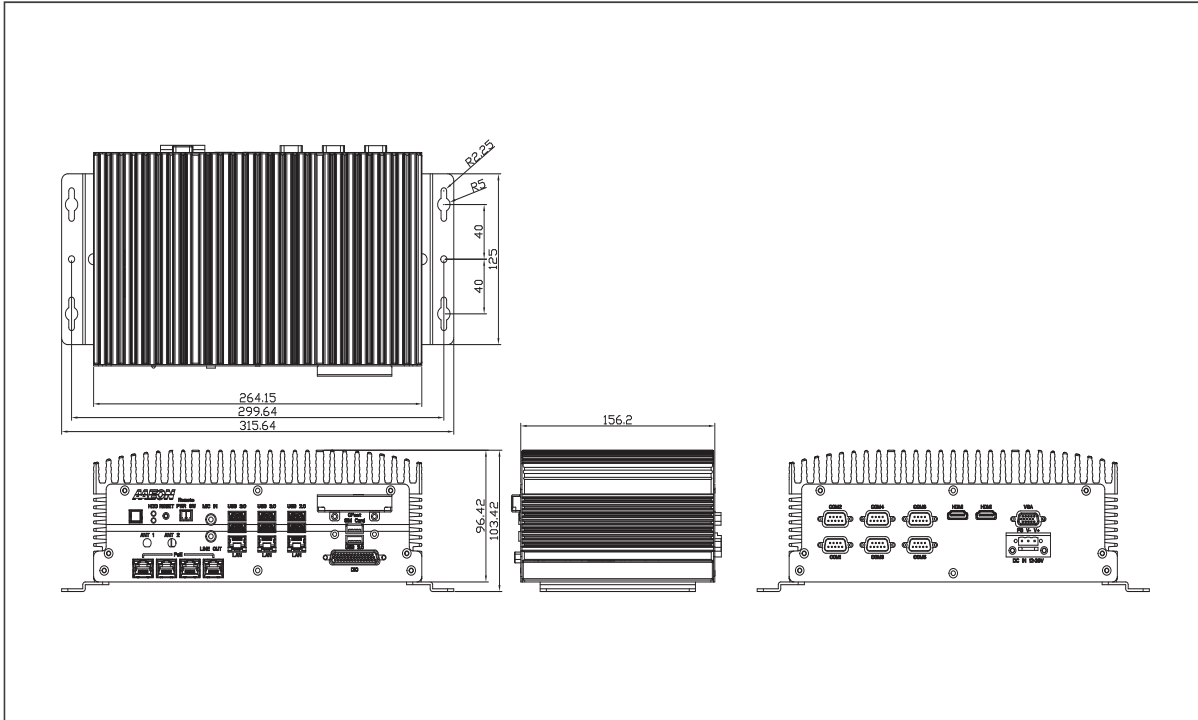| System	
CPU	**7th Generation Intel® Core™ Processor family:** Intel® Core™ i7-7700T, 2.9 GHz Intel® Core™ i5-7500T, 2.8 GHz Intel® Core™ i3-7101TE, 3.4 GHz Intel® Pentium® G4600T, 3.0 GHz Intel® Pentium® G4560T, 2.9 GHz Intel® Celeron® G3930T, 2.7 GHz **6th Generation Intel® Core™ Processor family:** 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
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, RJ-45 x 4 for PoE (802.3at, max. 80W in total) 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 (12~36V)
Expansion	Full-size Mini-Card x 1 (PCI-E + USB, w/ SIM slot) Full-size Mini-Card x 1 (PCI-E + USB, Optional for mSATA and SIM Slot)
Indicator	Power LED, HDD active LED
OS Support	**7th Generation Intel® Core™ Processor family:** Windows® 10 IOT (64bit), Ubuntu 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® 7 (32/64bit), Windows® Embedded Standard 7 (32/64bit), Ubuntu 16.04 above, Fedora 25 above, CentOS 7.3 above
Power Supply	
Power Requirement	12 - 36V with 3-pin terminal block
Mechanical	
Mounting	Wallmount
Dimensions (W x H x D)	10.4" x 3.8" x 6.1" (264.2mm x 96.4mm x 154.2mm)
Gross Weight	13.0 lb (5.9 kg)
Net Weight	8.8 lb (4.0 kg)
Environmental	
Operating Temperature	-13°F ~ 131°F (-25°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

Note: All specifications are subject to change without notice.

Dimension

Unit: mm

Ordering Information

Part Number	CPU	RAM	LAN	PoE	USB 3.2 Gen 1	USB 2.0	RS-232/422/485	Digital I/O	Audio	Storage	Display	Expansion	Mounting	Power	Operating Temp.
BOXER-6639M-A1-1010	—	—	3	4	6	2	6	34 bit	MIC-in x 1 Line-Out x 1	2.5" Drive Bay x 1 CFast™ x 1	VGA x 1 HDMI x 2	Full-size Minicard x 2	Wallmount	12~36V DC in	-13°F ~ 131°F (-25°C ~ 55°C)

Packing List

- Wallmount Bracket x 2
- Screw Package x 1
- Thermal Pad x 3
- Phoenix Connector x 2
- BOXER-6639M

Optional Accessories

- **1255302300**
  230W Power Adapter (for 2 or above PoE cameras)
- **125590120B**
  120W Power Adapter (for only 1 PoE camera)
- **1702031802**
  Power Cord (US Type)
- **1702031803**
  Power Cord (Europe)

- **170203180E**
  Power Cord (Japan)
- **9741324A00**
  WiFi/Bluetooth Module & Antenna
- **9741EG25G0**
  4G Module & Antenna (Global Band with SIM holder)

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

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

1309 Coffeen Ave
Ste 1200
Sheridan
WY 82801
USA

EMEA

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