BOXER-6840-CFL

High Computing Power Embedded Controller with Intel®
9th/8th Generation processor

BRESSNER
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Features

- Intel® Coffee Lake-S LGA 1151 desktop CPU
- DDR4 2,666MHz SODIMM up to 128 GB
- Intel® C246 chipset
- 3x RJ-45 + 6x USB 3.2 + 2x HDMI ports
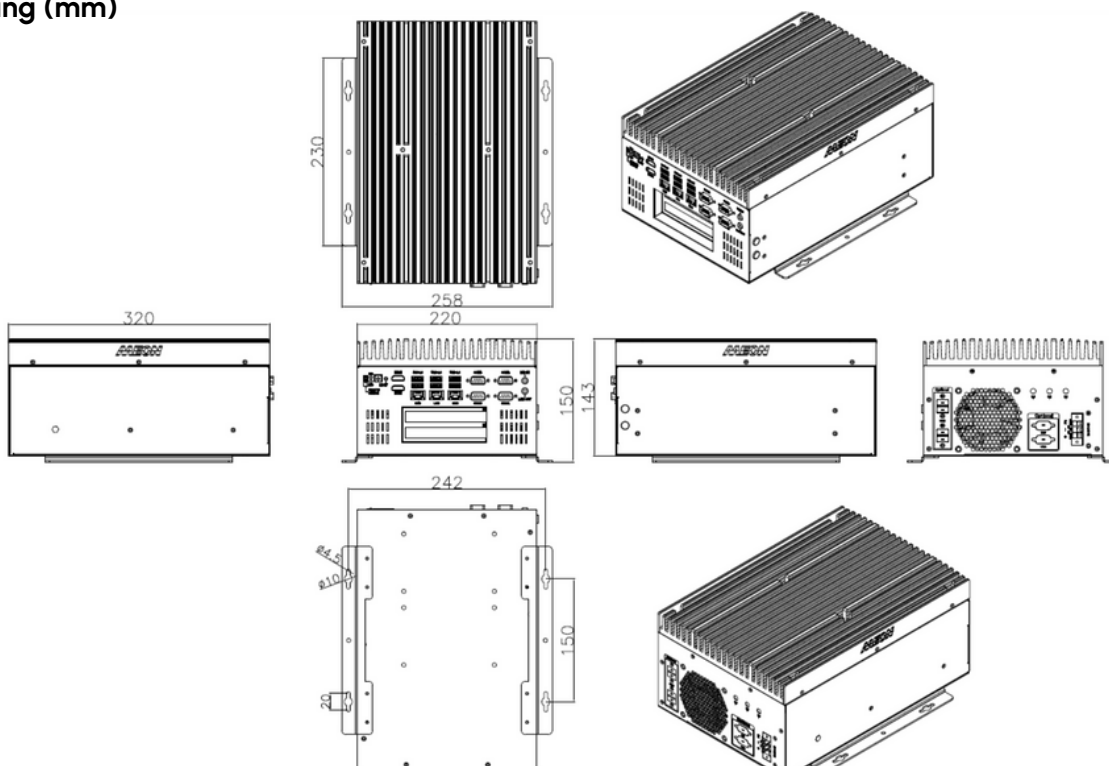- Supports PCIe x16 + PCIe x4 slots

BOXER-6840-CFL – Powerful Embedded PC with Intel® 8th/9th Generation Processors

The BOXER-6840-CFL brings the impressive performance of Intel® Core™ processors from the 8th and 9th generations to industrial embedded applications. This system is designed to meet the highest demands and stands out with its innovative thermal design. Furthermore, it ensures uninterrupted performance even under extreme conditions ranging from -20°C to 60°C. With support for processors with a Thermal Design Power (TDP) of up to 71W and an impressive memory capacity of up to 128GB, the BOXER-6840-CFL sets new standards in industrial computing power.

High reliability and diverse connectivity options

The flexibility and expandability of this system make it an ideal solution for various applications. It features two Mini Card slots, M.2, PCIe x4, and a PCIe x16 slot. The slots are also suitable for actively cooling graphics cards with a length of up to 250mm and a TDP of 250W. Thus, the BOXER-6840-CFL offers numerous options for customization to meet individual requirements. Its comprehensive input and output functions allow connectivity to a variety of cameras, sensors, and controllers. These include over six USB 3.2 Gen1 ports, four COM ports, three Gigabit Ethernet ports, and optional 8-bit DIO. Thanks to its space-saving design, the system effortlessly fits into machine enclosures and can be deployed precisely where the highest performance is needed. The BOXER-6840-CFL redefines the standards for industrial computing solutions, enabling a reliable and powerful integration into any application environment.

Drawing (mm)

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Specifications	Product: BOXER-6840-CFL
SYSTEM	
CPU	Intel® Xeon® E-2124G Intel® Core™ i9-9900T Intel® Core™ i7-8700T Intel® Core™ i5-8500T Intel® Core™ i3-8100T Intel® Pentium® G5400T Intel® Celeron® G4900T Note: Support max. TPD 71W Processor
Chipset	C246, No H310 downward support
RAM	4x DDR4 SO-DIMM socket (double deck) Support max. 2666MHz up to 128GB Support un-buffered and ECC / non-ECC type SODIMM
Storage	2x 2.5" SATA Drive Bay (4 SATA Port w/ RAID Function) 1x Half-size Minicard for mSATA (optional) 1x M.2 2280 NVMe slot
Expansion	1x M.2 2280 M-key (PCIe x4) 1x Full-size Mini Card (PCIe + USB with 1 SIM slot) 1x Half-size Mini Card (PCIe +USB, optional with mSATA) 1x PCIe x4 1x PCIe x16
Operating System	Windows® 10 IoT Enterprise 64-bit, Linux Ubuntu 20.04.1 / Kernel 5.4
INTERFACE	
Ethernet	3x RJ-45 for Gigabit Ethernet LAN (2x Intel® i211-AT, 1x i219-LM)
USB	6x USB 3.2 Gen 1
COM	4x DB-9 for RS-232/422/485
Video	2x HDMI 1.4 Support Dual Independent Display, 4K Ultra HD displays
Audio	1x Mic-in 1x Line-Out
Power	1x 3-pin DC power input
Other	1x Power On/Off switch 1x Remote Power On/Off connector 1x Reset switch 3x SMA antenna holes
ENVIRONMENTAL	
Power Supply	10 ~ 12V DC with 3-pin terminal block
Remote Control & LED	1x System Power LED (green) 1x Storage Active LED (red)
Operating Temperature	-20° ~ 60°C, according to IEC68-2 with 0.5 m/s Airflow
Storage Temperature	45° ~ 80°C
Vibration / Shock Resistance	Vibration: SSD : Random, 1Grm, 5~500Hz Shock: SSD：50G @ wallmount, Half-sine, 11ms
Humidity	5 ~ 95% @ 40°C, non-condensing
Dimensions	220 (W) mm x 150 (H) mm x 320 (D)mm
Weight	8 kg (gross) 7 kg (net)
Mounting	Wallmount
Certifications	CE/FCC Class A, UKCA

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Optional accessories

SKU	Accessories
963X000008	Securing Bracket for Expansion Card
1255901209	120W Power Adapter
1255902400	240W Power Adapter
1255903300	330W Power Adapter
1255X00021	480W Power Adapter (DIN Rail)
1702031802	Power Cord (US type)
1702031803	Power Cord (European Type)
170203180E	Power Cord (Japanese Type)
9741324A00	WiFi Module & Antenna
9741EG25G0	4G Module & Antenna (for global)

Scope of delivery

- 2x Wall mount brackets
- 1x 3-pin DC-in power connector
- 1x Thermal pad package
- 1x Screw package
- 1x BOXER-6840-CFL