

MXE-5500 Series

6th Generation Intel® Core™ i7/i5/i3 Processor-Based Fanless Embedded Computer

Features

- 6th Gen Intel® Core™ i7/i5/i3 Processors and QM170 chipset
- Single-side I/O with two hot-swappable SATA drive bays for easy maintenance
- 1x DVI-I, 2x DisplayPort, 4x USB 2.0, 4x USB 3.0, 4x GbE ports, 6x COM ports, and 8x isolated DI/O
- Rich Storage Options, 2x 2.5" SATA III (6.0 Gb/s) bay, 1x M.2 2280 slot, 1x CFAST socket
- Versatile connection via 2x mPCIe slot and 2 x USIM slot
- Rugged construction delivering fanless -20°C to 60 (70)°C operability (w/industrial SSD)
- Built-in ADLINK SEMA 3.0 management solution



Introduction

ADLINK's new Matrix MXE-5500 series of rugged quad-core fanless computers features the 6th generation Intel® Core™ i7/i5/i3 processors, delivering outstanding performance with robust construction.

The MXE-5500 series accommodates rich I/O capabilities in a compact system size, with two DisplayPort, one DVI-I (supporting both DVI and VGA signals), four GbE by Intel network interface controllers, four each USB 2.0 and USB 3.0, eight isolated DI/O, and six COM ports, four of which are BIOS-configurable among RS-232/422/485. In addition, with dual hot-swappable 2.5" SATA drive bays, one CFAST port and one M.2.2280, providing versatile storage options to a wide range of applications. Dual mini PCIe slots and USIM sockets empower the MXE-5500 as a communications hub for a variety of wireless connections, such as BT 4.0/WiFi and 3G.

Leveraging proprietary mechanical engineering, the MXE-5500 series continues to offer all the popular features of the popular Matrix E series, including cable-free construction, wide operating temperature ranges, and 5 Grms vibration resistance, having undergone, like all ADLINK Matrix devices, rigorous testing for operational verification.

Combining superior processor performance, wireless capability, and rich, scalable I/O in a compact and robust package, the ADLINK MXE-5500 is an ideal choice for a wide range of applications supporting intelligent transportation, in-vehicle multimedia & surveillance and factory automation applications.

Software Support

- Windows® 10 / 7 / Embedded Standard 7
- Linux **

Ordering Information

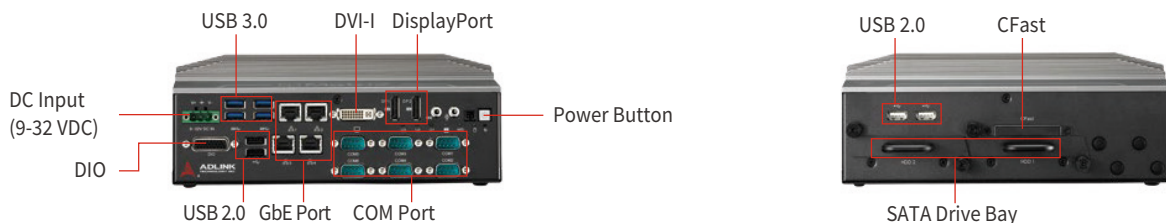
- **MXE-5501**
Intel® Core™ i7-6820EQ fanless embedded computer
- **MXE-5502**
Intel® Core™ i5-6440EQ fanless embedded computer
- **MXE-5503**
Intel® Core™ i3-6100E fanless embedded computer

Optional Accessories

- **8/16/32 GB DDR4 Upgrade**
Upgrade to 8/16/32 GB DDR4 memory
- **64/128/256 GB SSD Option**
Factory-installed 64/128/256 GB MLC industrial grade SSD
- **160 W AC-DC Adapter**
160 W industrial grade AC-DC adapter
- **Wireless Kit Option**
3G/WiFi/BT/GPS wireless kit
- **Extended Temperature Option***
Optional screening to extend operating temperature of MXE-5501 to -20 to 60°C (-4 to 140°F) and MXE-5502/5503 to
•20 to 70°C (-4 to 158°F).

MXE-5500 Series

Product Illustration



Specifications

Model Name	MXE-5501	MXE-5502	MXE-5503
System Core			
Processor	Intel® Core™ i7-6820EQ	Intel® Core™ i5-6440EQ	Intel® Core™ i3-6100E
Memory	DDR4 2133 4 GB (up to 32 GB)		
Graphic Output			
Display Port	2x DisplayPort (4096 x 2304)		
DVI/VGA	1x DVI-I		
I/O Interface			
Ethernet	4x Intel® GbE ports		
Serial Ports	6x COM (2x RS-232 + 4x RS-232/422/485)		
USB	4x USB 2.0 + 4x USB 3.0		
DIO	Isolated 8 DI + 8 DO		
Audio	Mic-in / Line-out		
Expansion			
Mini PCIe	2x PCIe mini card slot		
USIM	2x USIM slot		
Manageability			
WDT	Watch Dog Timer support		
SEMA	SEMA support with BMC		
Power Supply			
DC Input	9-32VDC		
AC Input	Optional 160 W AC/DC adapter		
Storage Device			
SATA Storage	2x 2.5" SATA Drive Bays		
CompactFlash	1x CFAST socket		
Internal Storage Slot	1x M.2 2280		
Mechanical			
Dimensions	230 (W) x 205 (D) x 90 (H) mm (9" x 8" x 3.54")		
Weight	4 kg (8.81 lbs)		
Mounting	Wall-mount kit		
Environmental			
Operating Temperature*	Standard: 0°C to 50°C Extended option: -20°C to 60°C for MXE-5501; -20°C to 70°C for MXE-5502/5503 (w/Ind. SSD or CFAST)		
Storage Temperature	-40°C to 85°C (-40°F to 185°F)		
Humidity	approx. ~95% @40°C (non-condensing)		
Vibration	Operating 5Grms, 5-500 Hz, 3 axes w/ SSD; Operating 0.5Grms, 5-500 Hz, 3 axes w/ HDD		
ESD	Contact +/-4KV, Air +/-8KV		
Shock	Operating 100G, half sine 11 ms duration w/ SSD; Operating 20G, half sine 11ms w/ HDD		
EMC	CE & FCC Class A		
Safety	CE/LVD, UL[by CB]		

*Extending operating temperature is optional and requires use of an industrial solid-state drive storage device or CFAST card. **Other Linux Distribution support by request