

MXE-5501

6th Generation Intel® Core™ i7 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/
- 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)
- Built-in ADLINK SEMA 3.0 management solution

Introduction

ADLINK's new Matrix MXE-5501 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-5501 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 M2.2280, providing versatile storage options to a wide range of applications. Dual mini PCIe slots and USIM sockets empower the MXE-5501 as a communications hub for a variety of wireless connections, such as BT 4.0/WiFi and 3G.

Leveraging proprietary mechanical engineering, the MXE-5501 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-5501 is an ideal choice for a wide range of applications supporting intelligent transportation, in-vehicle multimedia & surveillance and factory automation applications



Optional GPS and 4G/LTE module 

Software Support

- Window 10 / 7 / Embedded Standard 7
- Linux



Specification

| Model Name | MXE-5501 |
|-----------------------|---|
| System Core | |
| Processor | Intel® Core™ i7-6820EQ 2.80GHz |
| Chipset | Intel® Core™ i7 Chipset |
| Video | 2x DisplayPort and 1 x DVI |
| Memory | DDR4 2133 4 GB (up to 32 GB) |
| I/O Interface | |
| Expansion Slot | 2x Mini PCIE Slots 2x USIM Slots |
| Ethernet | 4x Intel® GbE ports |
| Serial Ports | 6x COM (2x RS-232 + 4x RS-232/422/485) |
| DIO | Isolated 8 DI + 8 DO |
| USB | 4x USB 2.0 + 4x USB 3.0 |
| Power Supply | |
| DC Input | 9-32VDC |
| AC Input | Optional 160W AC-DC Adapter |
| Storage | |
| HDD | 2x 2.5" SATA Hot Swappable Drive Bays 1x CFast™ socket |
| Mechanical | |
| Dimensions | 230 (W) x 204 (D) x 90 (H) mm (9" x 8" x 3.54") |
| Construction | Full Aluminum Alloy |
| Weight | 4 kg (8.81 lbs) |
| Mounting | Wall mounting |
| Environmental | |
| Operating Temperature | Standard: 0°C to 50°C (32°F to 122°F) Extended Temperature Option -20 C° to 60° C (-4° F to 140° F) with Industrial SSD |
| 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/ SDD; Operating 20G, half sine 11ms w/ HDD |
| EMC | CE & FCC Class A, EN 50155 compliant |
| Safety | UL by CB |