MXE-1400 Series

Intel Atom® E3845 SoC Fanless Embedded Computer

Features

- Quad-Core Intel Atom® E3845 processors
- Single side I/O with easy access SATA drive bay
- Built-in ADLINK SEMA management solution
- Rugged construction delivering fanless -40 to 70°C operability (w/industrial CFast & SSD) *
- Rich I/O :
  - DVI-I+DisplayPort, 6x USB 2.0, 1x USB 3.0, 3x GbE, 6x COM, 16x isolated DI/O
  - 1x SATA-II (3.0 Gb/s) port, 2x mPCIe

Introduction

ADLINK's new Matrix MXE-1400 series of rugged quad-core fanless computers, feature the latest generation of Intel Atom® E3845 processors, delivering outstanding performance with minimum power consumption.

The MXE-1400 series accommodates rich I/O interfaces in a compact system size, including DisplayPort, DVI-I (with both DVI and VGA signals), three GbE by Intel network interface controllers, six USB 2.0, one USB 3.0 with dedicated bandwidth, 8 isolated DI/O, and six COM ports, four of which are BIOS-configurable among RS-232/422 and 485 with auto flow. In addition, with a 2.5" SATA drive bay and CFast port, easy, versatile connection to a wide range of applications is enabled. Dual mini PCIe slots and USIM socket empower the MXE-1400 as a communications hub for a variety of wireless connections, such as BT/WiFi and 3G.

Leveraging proprietary mechanical engineering, the MXE-1400 series continues to offer all the popular features of the 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-1400 is an ideal choice for a wide range of applications supporting intelligent transportation, in-vehicle multimedia, and surveillance and factory automation applications.

Software Support

- **OS Support**
  Windows® 7 professional / Embedded
  Win10 IoT Enterprise 64bit
  Linux Ubuntu 12.04 LTS/ 14.04 LTS/ 16.04 LTS
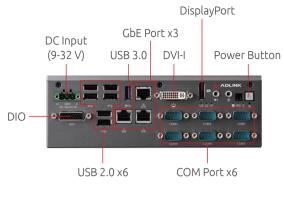 Fedora 20 x64/ 20 x86

Ordering Information

- **MXE-1401**
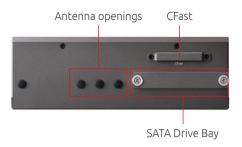 Intel® Atom™ E3845 Fanless Embedded Computer

Optional Accessories

- **500 GB HDD**
  Factory-installed 500 GB SATA hard disk drive
  (0˚C to 50˚C, 32˚F to 122˚F)
- **32/64 GB SSD Option**
  Factory-installed 32/64 GB MLC SATA solid-state drive
  (0˚C to 70˚C, 32˚F to 158˚F)
- **Wireless Module Option**
  WiFi/BT/3G wireless modules kit
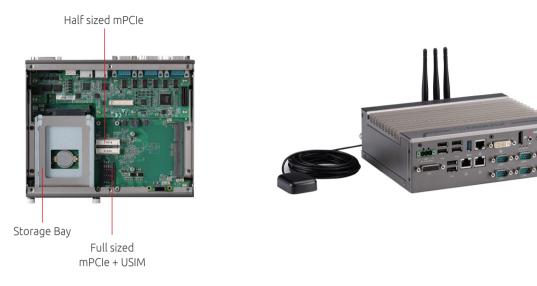
Product Illustration

MXE-1400 Series Front Panel

MXE-1400 Series Back Panel

Specifications

Model Name	MXE-1401
System Core	
Processor	Quad-Core Intel® Atom™ SoC processor E3845
Memory	DDR3L1600 2 GB (up to 8 GB)
Graphic Output	
Display Port	1x DisplayPort
DVI / VGA	1x DVI-I
I/O Interface	
Ethernet	3x GbE (Intel® I211)
Serial	6x COM (2x RS-232 + 4x RS-232/422/485)
USB	6x USB 2.0 + 1x USB 3.0 + 1 internal USB 2.0 dongle
DI/O	Isolated 8 DI + 8 DO
Audio	Mic-in / Line-out
Expansion	
Mini PCIe	2x PCIe mini card slot (one full size, another half size)
USIM	1x USIM Slot
Manageability	
WDT	Watch Dog Timer supported
SEMA	SEMA support with BMC
Power Supply	
DC Input	9-32V_{DC}
AC Input	Optional 80 W AC/DC adapter
Storage Device	
SATA Storage	1x 2.5" SATA removable drive bay
CompactFlash	1x CFast™ socket
Mechanical	
Dimensions	210 (W) x 170 (D) x 70 (H) mm
Weight	2 kg (4.42 lbs)
Mounting	Wallmount kit
Environmental	
Operating Temperature*	Standard: 0°C to 50°C (32°F to 122°F) Extended temperature option*: -40°C to 70°C (-40°F to 158°F) (w/ industrial SODIMM & 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 +/- 6KV, Air +/- 10KV
Shock	Operating 100G, half sine 11 ms duration w/ SSD; Operating 20G, hafl sine 11ms w/ HDD
EMC	CE & FCC Class A
Safety	UL [by CB]

Half sized mPCIe

Storage Bay

Full sized
mPCIe + USIM

Rich I/O Enables Seamless Interconnection

MXE-1400 with Antenna

ADLINK
® **LEADING EDGE COMPUTING**