MXE-1400V Series

Intel Atom® Processor E3845 SoC Fanless Embedded Computer for In-Vehicle

Features

- Quad-Core Intel Atom® Processor E3845 SoC
- Single side I/O with easy access SATA drive bay
- 12V/ 24V ignition power integrated
- Built-in ADLINK SEMA management solution
- Rugged construction delivering fanless -40 to 70°C operability
- 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), 2x mPCIe

Introduction

ADLINK's new Matrix MXE-1400V series of rugged quad-core fanless computers, feature the Intel Atom® Processor E3845 SoC, delivering good performance with minimum power consumption. For in-Vehicle application, MXE-1400V integrates 12V/24V ignition power to support delay on/off to meet the scenario.

The MXE-1400V 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-1400V as a communications hub for a variety of wireless connections, such as WiFi/ BT/ 3G/ 4G LTE, and LoRa.

Leveraging proprietary mechanical engineering, the MXE-1400V 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-1400V 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
  Linux Ubuntu 12.04 LTS/ 14.04 LTS/ 16.04 LTS
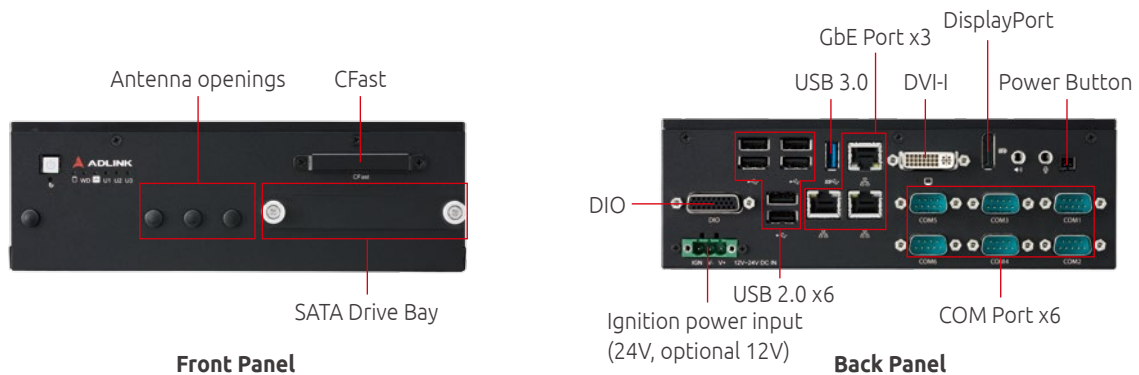 Fedora 20 x64/ 20 x86

Ordering Information

- **MXE-1401V**
  2GB SODIMM, 24V ignition power input
- **MXE-1401V/M4G**
  4GB SODIMM, 24V ignition power input
- **MXE-1401V/M8G**
  2pcs 4GB SODIMM, 24V ignition power input

Optional Accessories

- **HDD/ SSD/ CFast**
  Factory-installed and test
- **Wireless Kit Option**
  WiFi/ BT/ 3G/ 4G LTE/ LoRa wireless kit (w/ Antenna)

Product Illustration

Antenna openings   CFast

GbE Port x3   DisplayPort

USB 3.0   DVI-I   Power Button

DIO

Ignition power input
(24V, optional 12V)

USB 2.0 x6

COM Port x6

SATA Drive Bay

Front Panel

Back Panel

Specifications

Model Name	MXE-1401 V
System Core	
Processor	Quad-Core Intel Atom® Processor E3845 SoC (1.91 GHz)
Memory	DDR3L 1600 MHz 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	ALC269Q, Mic-in / Line-out
Expansion	
Mini PCIe	2 (1x full-size, 1x half-size)
USIM	1
Manageability	
WDT	V
SEMA	SEMA 2.5
Power Supply	
Ignition DC Input	24V (optional 12V)
Storage Device	
SATA Storage	1x 2.5" HDD/SSD removable drive bay
CompactFlash	1x CFast™
Mechanical	
Dimensions	210 (W) x 170 (D) x 70 (H) mm
Weight	2.3 kg (5.07 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 CFast/ 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 E-Mark (E13)
Safety	UL [by CB]

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