MXE-210 Series

Intel Atom® Processor E3900 Family-Based Ultra Compact Embedded Platform

Features

- Equipped with Intel Atom® x7-E3950/x5-E3930 processors
- Compact fanless design: 140(W) x 110(D) x 58(H) mm
- Rich I/O & expansion:
  - 1x DisplayPort, 2x USB 2.0, 2x USB 3.0, 2x GbE ports, 2x COM ports (RS-232/422/485)
  - 2x mPCIe slots, 1x USIM slot, 1 x mSATA, 1x Micro SD slot
- Optional
  - 1 x 2.5 " SATA SSD by storage kit or isolated 8x DI/ 8x DO
- eSIM support (by project)
- Built-in ADLINK SEMA management solution
- Railway EN50121 compliance



Introduction

ADLINK's new Matrix MXE-210 series of ultra compact embedded platforms, based on the Intel Atom® x5-E3930/x7-E3950 Processor, delivers optimum I/O design for maximum connectivity.

With two GbE LAN ports, two COM ports, two USB 2.0 and two USB 3.0 host ports, and dual mPCIe slots and USIM socket support communication with connections via Wi-Fi, BT, 3G, LoRa(SX1276), and 4G LTE, the MXE-210 series enables seamless interconnection,ensuring interoperability between systems. Matrix's proven rugged construction assures operation in harsh environments with operating shock tolerance up to 100 G and extended operating temperatures of -40°C to 85°C(*) available.

The MXE-210 series presents an intelligent, robust embedded system supporting wide application development and easy service deployment, for outstanding performance in Intelligent Transportation, Facility Management, Industrial Automation, and Internet of Things (IoT) applications.



DIN Rail support



Wall Mounting support (Optional)

Software Support

- **Windows® 10 IoT Enterprise 64Bit**
- **Ubuntu Linux 16.04 LTS 64Bit**
- **Wind River® Pulsar™ Linux LTS 17 (Support by request)**
- **Debian 8.5 64Bit**

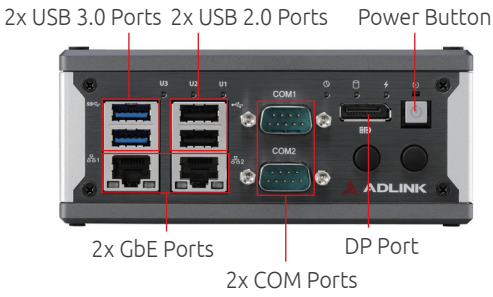
Ordering Information

- **MXE-211/M2G**
  Intel Atom® x7-E3950, 2GB RAM
- **MXE-212/M2G**
  Intel Atom® x5-E3930, 2GB RAM
- **MXE-211-ET/M2G**
  Intel Atom® x7-E3950, 2GB ET RAM, -20-70°C
- **MXE-212-ET/M2G**
  Intel Atom® x5-E3930, 2GB ET RAM, -20-70°C
- **MXE-212-WT/M2G/ETT**
  Intel Atom® x5-E3930, 2GB WT RAM, ETTS -40-85°C performed
- **MXE-211-S/M2G | MXE-212-S/M2G**
  Intel Atom® x7-E3950/x5-E3930, 2GB RAM, 2.5" SATA kit

Optional Accessories

- **mSATA/ Micro SD**
- **2.5" SATA HDD/SSD Kit (P/N: 91-95223-0010)**
  Extend 1x 2.5" SATA via a cable and a bracket inside MXE-210
- **Wireless Kit**
  WiFi/BT/3G/4G LTE/LoRa wireless kit (w/ Antenna)
- **40/90W AC Adapter**
  40W ind. grade AC-DC adapter
  90W ind. grade AC-DC adapter (when 2x mPCIe w/ full loading)
- **Wall mount kit (P/N: 91-95221-0010)**

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000





Model Name	MXE-211	MXE-212
System Core		
Processor	Intel Atom® x7-E3950 (quad-core)	Intel Atom® x5-E3930 (dual-core)
Base Freq.	1.6 GHz	1.3 GHz
Burst Freq.	2.0 GHz	1.8 GHz
Video	1x DisplayPort 1.2 (Support DP++)	
Memory	1x DDR3L 1600MHz SODIMM 2 GB (up to 8GB)	
I/O Interface		
Ethernet	2x Intel® I210IT	
Serial Port	2x RS-232/422/485	
DI/O	1.5kV isolated 8x DI + 8x DO (Optional, shared location w/ 2.5" SATA)	
USB	2x USB 2.0 + 2x USB 3.0	
Audio	Mic-in, Line-out (Optional)	
Expansion		
Mini PCIe	2 x full-size	
USIM	1	
eSIM	1 (by request)	
Manageability		
WDT	Watch Dog Timer support by SEMA	
SEMA	SEMA 3.5 support with BMC	
Power Supply		
DC Input	6-36 V_{DC}	
AC Input	Optional 40/90W AC-DC adaptor	
Storage Device		
mSATA	1x full-size	
2.5" SATA	1 (only for MXE-210-S)	
Micro SD	1	
Mechanical		
Dimensions	140 (W) x 110 (D) x 58 (H) mm (5.5" x 4.3" x 2.3")	
Weight	0.95 Kg (2.06 lbs)	
Mounting	DIN rail (optional: wall mount)	
Other		
Device-Level Security	TPM2.0, Intel Boot Guard, UEFI Secure Boot	
Environmental		
Operating Temperature	• Standard: 0°C to 50°C (32°F to 122°F) • Extended: -20°C to 70°C (-4°F to 158°F) w/ ind. SSD	• Standard: 0°C to 50°C (32°F to 122°F) • Extended: -20°C to 70°C (-4°F to 158°F) w/ ind. SSD • Wide: -40°C to 85°C (-40°F to 185°F) w/ ind. SSD and ETTS performed, RF/Function mPCIe are excluded
Storage Temperature	-40°C to 85°C (-40°F to 185°F)	
Humidity	approx. 95% @ 40°C (Non-condensing)	
Vibration	Operating: 5 Grms, 5-500 Hz, 3 axes w/ SSD	
ESD	Contact +/-4 KV, Air +/-8 KV	
Shock	Operating: 100 G, half sine 11 ms duration w/ SSD	
EMC	CE and FCC Class B (EN61000-6-4/-2), compliance with EN50121	
Safety	UL, CB	

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

All products and company name listed are trademarks or trade names of their respective companies.
Updated Jun. 21, 2019. ©2019 ADLINK Technology, Inc. All Rights Reserved.
All specifications are subject to change without further notice.