MXE-100i Series

Intel® Quark™ Processor-Based IoT Gateway

Features

- Intel® Quark™ SoC X1021
- Extremely compact: 120 mm (W) x 100 mm (D) x 55 mm (H)
- Rich I/O:
  - 3x USB 2.0, 2x 10/100 LAN ports
  - 2x mPCIe slots, 1x USIM slot
  - 2x COM ports, 1x SDIO
  - 3x user defined LED
- Built-in ADLINK SEMA Cloud utility
- Optional DIN-rail / wall mounting
- Full support for Intel® Gateway Solutions for the Internet of Things (IoT)



Introduction

ADLINK's new Matrix MXE-100i IoT gateway, supporting Intel® Gateway Solutions for the Internet of Things (IoT), provides an extremely compact IoT gateway. Based on the Intel® Quark™ SoC X1021, and integrating Wind River® Intelligent Device Platform XT and McAfee Embedded Control, the MXE-100i, combined with ADLINK's embedded SEMA cloud solution, delivers the manageability and security critical to IoT-based operation.

With the implementation of ADLINK's proprietary SEMA Cloud solution, the MXE-100i maximizes manageability and security for a world of applications, delivering efficient remote monitoring of system activity and health in real time, system control over a robust secured channel, and complete, fully manageable utilization of system resources.

2 High-Speed LAN, two COM, three USB 2.0 host and SDIO, dual mini PCIe slots and USIM socket supporting communication with connections such as, WiFi, BT and 3G optimizes connectivity and saves system power as well. The MXE-100i enables seamless interconnection, ensuring interoperability between systems. Matrix's proven rugged construction assures operation in harsh environments with operating vibration up to 5Grms, shock tolerance up to 100 G and an extended operating temperature range of -20°C to 70°C option. All told, the MXE-100i presents an intelligent, robust embedded system supporting wide application development and easy service deployment,presenting outstanding performance in Internet of Things, Intelligent Transportation, Facility Management, and Industrial Automation applications.

Software Support

- **OS Information**
  Wind River® IDP XT 2.0

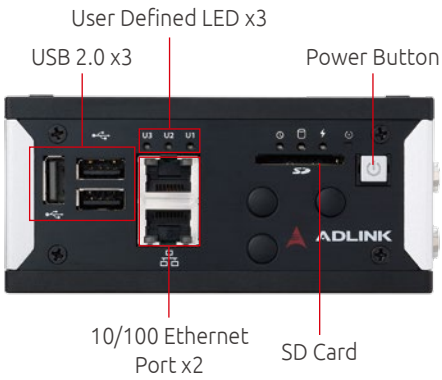
Ordering Information

- **MXE-101i**
  Intel® Quark™ X1021 IoT gateway

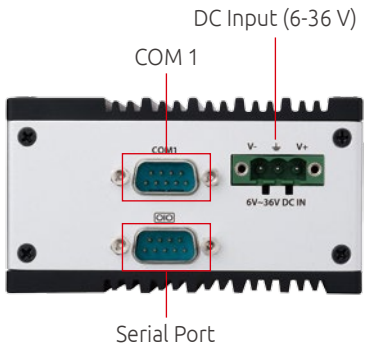
Optional Accessories

- **8/16 GB SD Option**
  Factory installed 8/16 GB MLC type industrial grade SD (-20°C t o 85°C) (-4˚F to 185˚F)
- **80 W AC Adapter**
  80 W industrial grade AC-DC adapter (-20°C to 70°C) (-4˚F to 158˚F)
- **Wireless Module Option**
  WiFi/BT/3G wireless modules
- **Extended Temperature Option***
  Optional screening service extends operating temperatures to -20°C to 70°C (-4˚F to 158˚F)

Product Illustration



Front view of MXE-100i



Right side view of MXE-100i

Specifications

Model Name	MXE-101i
System Core	
Processor	Intel® Quark™ SoC X1021
Memory	DDR3 800 1 GB
I/O Interface	
Ethernet	2x 10/100 LAN
Serial Ports	2x COM (1x RS232 + 1x RS232/422/485)**
USB	3x USB 2.0 host port
Expansion	
Mini PCIe	2x PCIe Mini Card slots
USIM	1x USIM slot
Manageability	
WDT	Watch Dog Timer support
SEMA	SEMA support with BMC
Power Supply	
DC Input	$6\text{-}36V_{DC}$
AC Input	Optional 80 W AC-DC adapter
Storage Device	
SD	1x SD card slot (up to 16 GB SDHC)
CompactFlash	1x CFast socket
Mechanical	
Dimensions	120 (W) x 100 (D) x 55 (H) mm (4.68" x 3.9" x 2.17")
Construction	Full aluminum alloy
Weight	650 g (1.43 lbs)
Mounting	DIN-RAIL/Wall mount
Environmental	
Operating Temperature*	Standard: 0°C to 50°C (32°F to 122°F) Extended temperature option*: -20°C to 70°C (-4°F to 158°F) w/ industrial grade SD
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Humidity	~95% @40°C (non-condensing)
Vibration	Operating 5 Grms, 5-500 Hz, 3 axes w/ SD
Shock	Operating 100 G, half sine 11 ms duration w/ SD
ESD	Contact +/-4KV, Air +/-8KV
EMC	CE & FCC Class A
Safety	UL by CB

*Extending the operating temperature is optional and requires use of industrial grade storage.
** RS-232 supports Tx, Rx,CTS, and RTS signal only.

ADLINK

www.adlinktech.com

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MXE-100i with Antenna



The MXE-100i is easily installed in popular mounting configurations, including DIN rail and wall mounting.