MXE-230 Series

User's Manual

Ultra-compact Rugged Edge Computers with Intel® Alder Lake & Amston Lake CPU



Manual Rev.:	0.6 Preliminary
Revision Date:	March 25, 2025
Part Number:	50M-41055-1000

Leading EDGE COMPUTING

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

Preface

Copyright

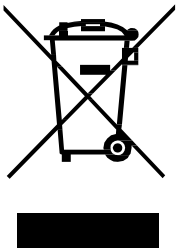
Copyright © 2025 ADLINK Technology, Inc. This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic, or other means in any form without prior written permission of the manufacturer.

Disclaimer

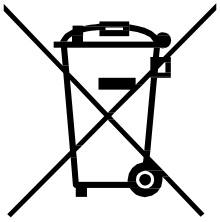
The information in this document is subject to change without prior notice in order to improve reliability, design, and function and does not represent a commitment on the part of the manufacturer. In no event will the manufacturer be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use the product or documentation, even if advised of the possibility of such damages.

Environmental Responsibility

ADLINK is committed to fulfill its social responsibility to global environmental preservation through compliance with the European Union's Restriction of Hazardous Substances (RoHS) directive and Waste Electrical and Electronic Equipment (WEEE) directive. Environmental protection is a top priority for ADLINK. We have enforced measures to ensure that our products, manufacturing processes, components, and raw materials have as little impact on the environment as possible. When products are at their end of life, our customers are encouraged to dispose of them in accordance with the product disposal and/or recovery programs prescribed by their nation or company.



Battery Labels (for products with battery)









California Proposition 65 Warning



WARNING: This product can expose you to chemicals including acrylamide, arsenic, benzene, cadmium, Tris(1,3-dichloro-2-propyl)phosphate (TDCPP), 1,4-Dioxane, formaldehyde, lead, DEHP, styrene, DINP, BBP, PVC, and vinyl materials, which are known to the State of California to cause cancer, and acrylamide, benzene, cadmium, lead, mercury, phthalates, toluene, DEHP, DIDP, DnHP, DBP, BBP, PVC, and vinyl materials, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Trademarks

Product names mentioned herein are used for identification purposes only and may be trademarks and/or registered trademarks of their respective companies.

Revision History

Revision	Description	Date	By
0.1	Preliminary release	2024-07-14	AL
0.2	BIOS setup added	2024-08-28	AL
0.3	Specification's I/O interface updated	2024-09-05	AL
0.4	Introduction and specification updated	2024-09-11	AL
0.5	Specifications and Appendix A added	2025-03-13	AL
0.6	Product image and mechanical layout updated	2025-03-25	AL

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

Table of Contents

Preface ii
List of Figures v
List of Tables v
1. Introduction 1
1.1 Packing List 1
1.2 Optional Accessories 1
1.3 Features 1
2. Specifications 3
2.1 Core System 3
2.2 I/O Interface 3
2.3 Graphics 3
2.4 Audio 3
2.5 Power Consumption 3
2.6 Environmental 4
2.7 Certification 4
2.8 Form Factor 4
2.9 Operating Systems 4
2.10 Product SKU 4
2.11 Functional Block Diagram 5
3. Quick Installation 7
3.1 Installing M.2 Expansion Modules 7
3.2 Wall Mounting 9
3.3 Installing DIN Rail 9
3.4 Integrating SATA SSD 10
4. Mechanical Layouts 11
5. Mechanical Dimensions 13
6. Connectors and Jumpers 17
6.1 Front Panel IO Connectors 17
6.2 Internal IO Connectors 19
7. BIOS Settings 21
7.1 Main Structure 21
7.2 Main Menu 22
7.3 Advanced Menu 22
7.4 Chipset 26
7.5 Security 27
7.6 Boot 27
7.7 Save & Exit 29
8. Appendix A – DIO Application for 4/6COM 31
8.1 DIO Specifications 31
8.2 DIO PIN Definitions 31

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

8.3 DIO Setup 32
9. Appendix B – DIO Application for 4LAN 33
Safety Instructions 35
Getting Services 36

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

List of Figures

Figure 1: Functional block diagram 5
Figure 2: Onboard connector locations (Top).....11
Figure 3: Mechanical dimensions (Top) 13
Figure 4: Mechanical dimensions (Front).....13
Figure 5: Mechanical dimensions (Right side) 14
Figure 6: Mechanical dimensions (Left side).....14
Figure 7: Isolated digital output circuits 29
Figure 8: Digital output sample application 29
Figure 9: Digital input circuits 30

List of Tables

Table 1: Onboard connector descriptions 11

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

This page intentionally left blank.

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

1. Introduction

ADLINK's new Matrix MXE-230 Series compact embedded industrial platform, based on the Intel® Alder Lake-N N97 series processor, delivers the most reliable I/O design for maximum connectivity. Featuring a full aluminum alloy enclosure with industry-class construction, it is the embedded system of choice for industrial automation and applications demanding reliability in harsh environments.

The MXE-230 Series includes 1 HDMI, 1 DisplayPort, 4 USB ports, 2 gigabit LAN ports, 2 3-in-1 RS-232/422/485 serial ports, and a built-in TPM 2.0 module. Additional value and convenience are provided through a modular design with three independent slots for flexible system integration and expansion.

Users have the option to add a variety of different communication modules, including Wi-Fi, 4G/LTE, GPS expansion modules, and M.2 2280 M-key storage. Matrix's proven rugged construction assures operation in harsh environments with operating shock tolerance of up to 30 G, 3 Grms vibration resistance, and optionally available extended operating temperature ranges.

1.1 Packing List

- MXE-230 computer unit
- Wall mount bracket
- Screws for DIN rail, wall mount, and storage
- Quick Start Guide

1.2 Optional Accessories

- 120W AC to DC power adapter 31-62163-1000-A0

Latest revisions of the datasheet, user's manual, BIOS, drivers, and board support packages, can be downloaded from the product webpage on the ADLINK web site: www.adlinktech.com

1.3 Features

Dimension	165 (W) x 120 (D) x 62 (H) mm
CPU	Intel® Alder Lake-N series processor & Amston Lake series processor
Motherboard	ALDINK MXE-230
DRAM	Up to 16GB DDR5 4800MHz
Display	1x HDMI 1x DisplayPort (up to 4K 60Hz)
COM	2x 3-in-1 * RS-232/422/485
USB	1x USB 3.0 Gen2 (1A) 3x USB 2.0
Ethernet	2x GbE (Intel® i210IT, supporting 1Gbps/ 100Mbps / 10Mbps)
Expansion Slot	1x M.2 B-Key, 1x M.2 E-Key, 1x M.2 M-Key
Audio	High-Definition Audio. Line-in, Line-out, and Mic-in
Button	Power button, reset button

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

This page intentionally left blank.

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

2. Specifications

2.1 Core System

CPU	Intel® Alder Lake-N series processor & Amston Lake sereise processor
Memory	Up to 16GB DDR5 4800MHz

2.2 I/O Interface

Expansion Slot	M.2 Key-M supports NVMe SSDs at PCIe Gen3 x2 speed (2280 size). M.2 Key-B supports 3042 size cards , featuring USB3.0+USB2.0 interfaces (no PCIe support). M.2 Key-E supports 2230 size cards.
SATA	1x SATA 6Gb/s ports w/ 5V SATA power
USB	1x USB 3.0 Gen2 (1A) 3x USB 2.0
COM	2x RS-232/422/485
TPM	TPM 2.0

2.3 Graphics

Interfaces	1x DP 1x HDMI

2.4 Audio

Audio Codec	Realtek ALC888S
Interfaces	1x line-in, 1x line-out, MIC-in through 40pin box header

2.5 Power Consumption

Power off	3.9W	In shutdown mode with DC input and only USB keyboard/mouse.
System Idle	12.3W	Under Windows Desktop with no application programs executed.
Processor full load	30.1W	Under Windows with 100% CPU utilization and 2D/3D graphics load.
System full load	30.3W	Under Windows with 100% CPU utilization and simultaneous access toall I/O devices.
Recommended minimum powersupply	40W	With consideration of voltage de-ratingunder high environmental temperature.

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

2.6 Environmental

Power Supply	12V-24V DC Jack connector	
Temperature	**Operating Temperature**	-20 to 60° C (-4 to 140° F)
	Storage (Non-Operating) Temperature	-40°C to 85°C (-4°F to 185°F – AC adapter supports up to 50°C only)
Humidity	**Operating Humidity**	10% - 85% (non-condensing)
	Storage (Non-Operating) Humidity	10% - 95% (non-condensing)

2.7 Certification

EMC	CE and FCC Class B
Safety	CB, UL/cUL

2.8 Form Factor

System	165 (W) x 120 (D) x 62 (H) mm

2.9 Operating Systems

Standard Support	Windows 10 IoT Enterprise LTSC 21H2 (64-bit) Ubuntu 22.04

2.10 Product SKU

Model	MXE-230	
SKU1	MXE-231	MXE-231/4LAN
LAN Ports	2	4
DIO		
Dimensions	165 x 120 x 62 mm	165 x 120 x 75 mm

Model	MXE-230	
SKU2	MXE- 231/4COM	MXE-231/6COM
Serial Ports	2x RS-232/422/485 2x RS-232/422/485 (Isolation 2.5KV)	2x RS-232/422/485 2x RS-232/422/485 (Isolation 2.5KV) 2x RS-232
DIO	8DI (Isolation 2.5KV) 8DO (Isolation 2.5KV)	
Dimensions	165 x 120 x 75 mm	

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

2.11 Functional Block Diagram

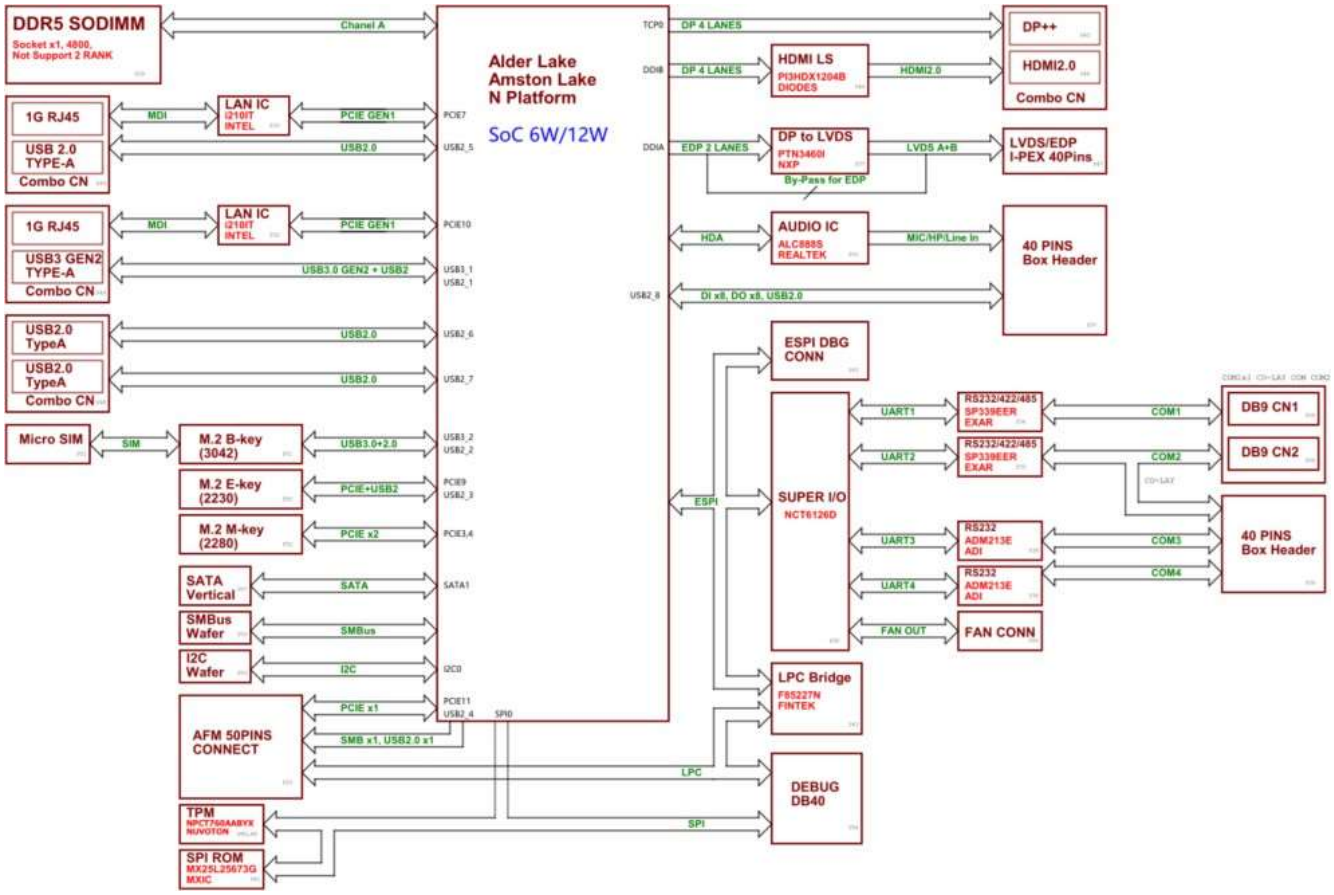


Figure 1: Functional block diagram

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

This page intentionally left blank.

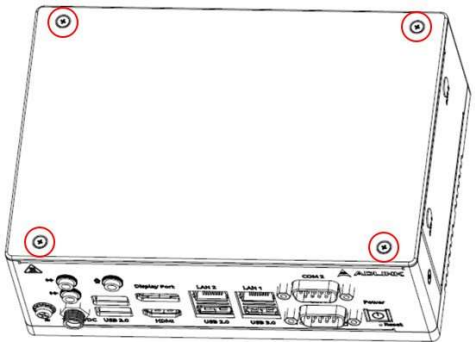
Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

3. Quick Installation

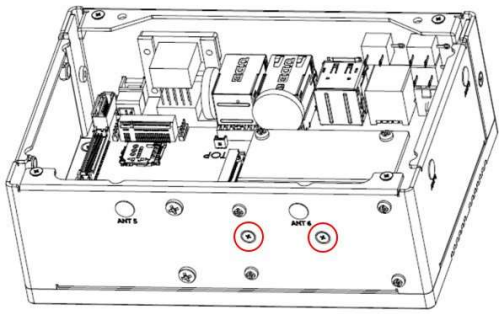
This chapter covers the installation of M.2 expansion modules, wall mounting, and Din Rail, and also the integration of SATA SSDs for the ADLINK MXE-230.

3.1 Installing M.2 Expansion Modules

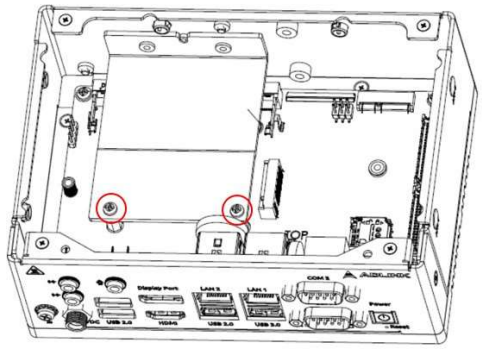
1. Remove the top side screw*4.



2. Remove the screw*2 on the rear.

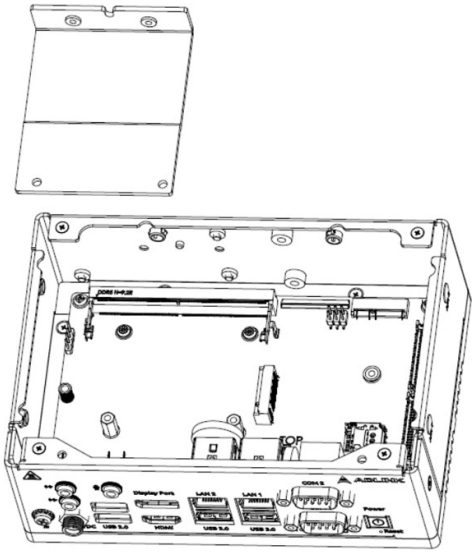


3. Remove the screw*2 of the heat sink for M.2 module.

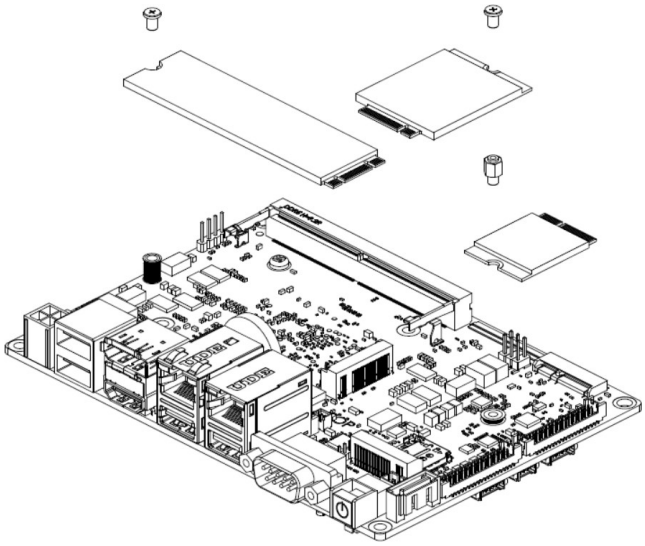


Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

4. Remove the heat sink (Caution: Don’t break the thermal pad on the heat sink).

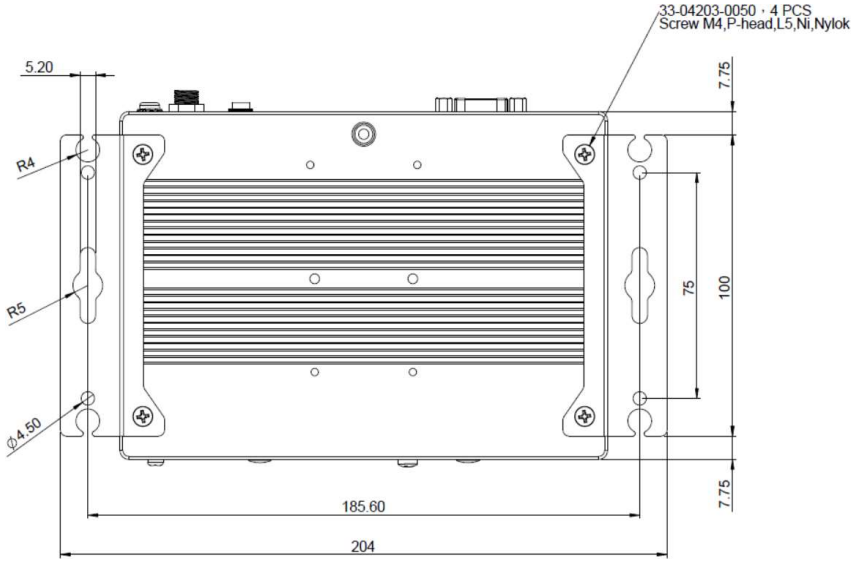


5. Install the M.2 module and reattach the heatsink, and seal it using the top cover



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

3.2 Wall Mounting

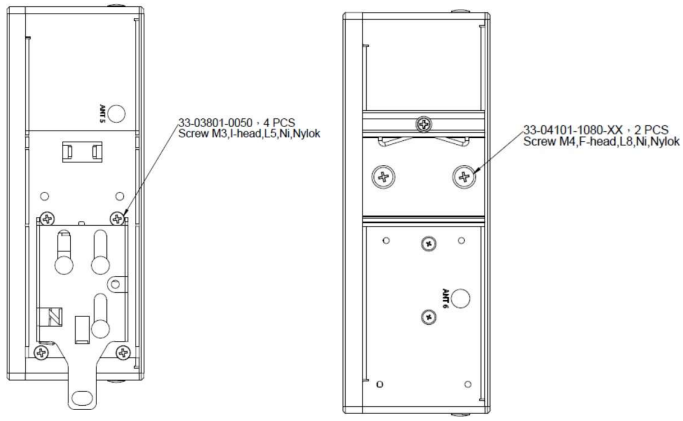


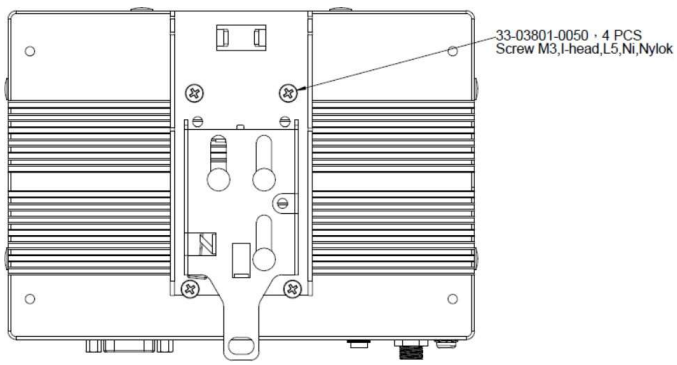
Note: [1] While the configuration shown may indicate otherwise, due to the presence of antenna ports, for safety reasons, the device should ONLY be wall-mounted with the front and rear panels on the sides, NEVER on the top or underside.

[2] Use the 2 M4 screws shipped with the controller to fix the 2 wall- mount brackets, also included, to the chassis, according to the spacing dimensions of the screw holes and brackets.

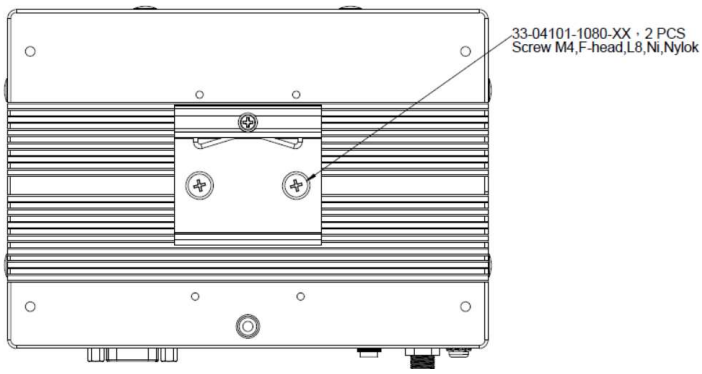
[3] The heat-generating components of the MXE-230, including the CPU and PCH, are located on the left side and contact the heatsink via thermal pads to dissipate heat. For optimal heat dissipation, ensure at least 2 inches (5 cm) of clearance underneath the MXE-230.

3.3 Installing DIN Rail

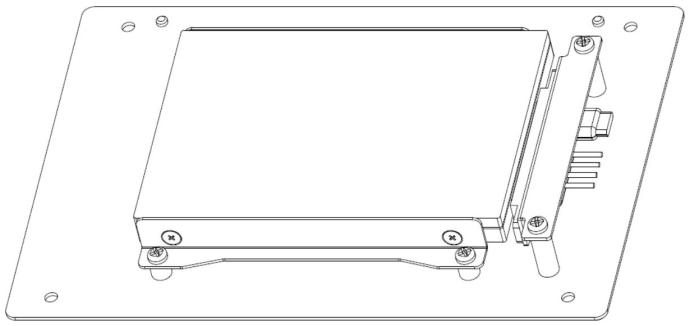


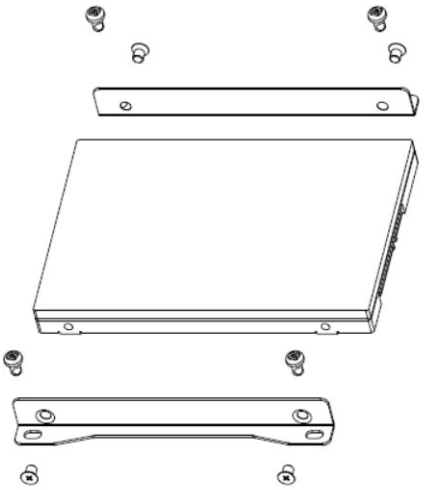


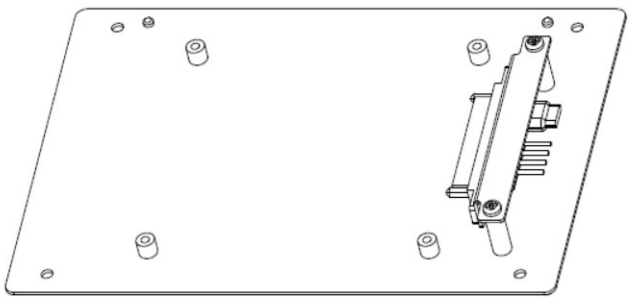
Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000



3.4 Integrating SATA SSD







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

4. Mechanical Layouts

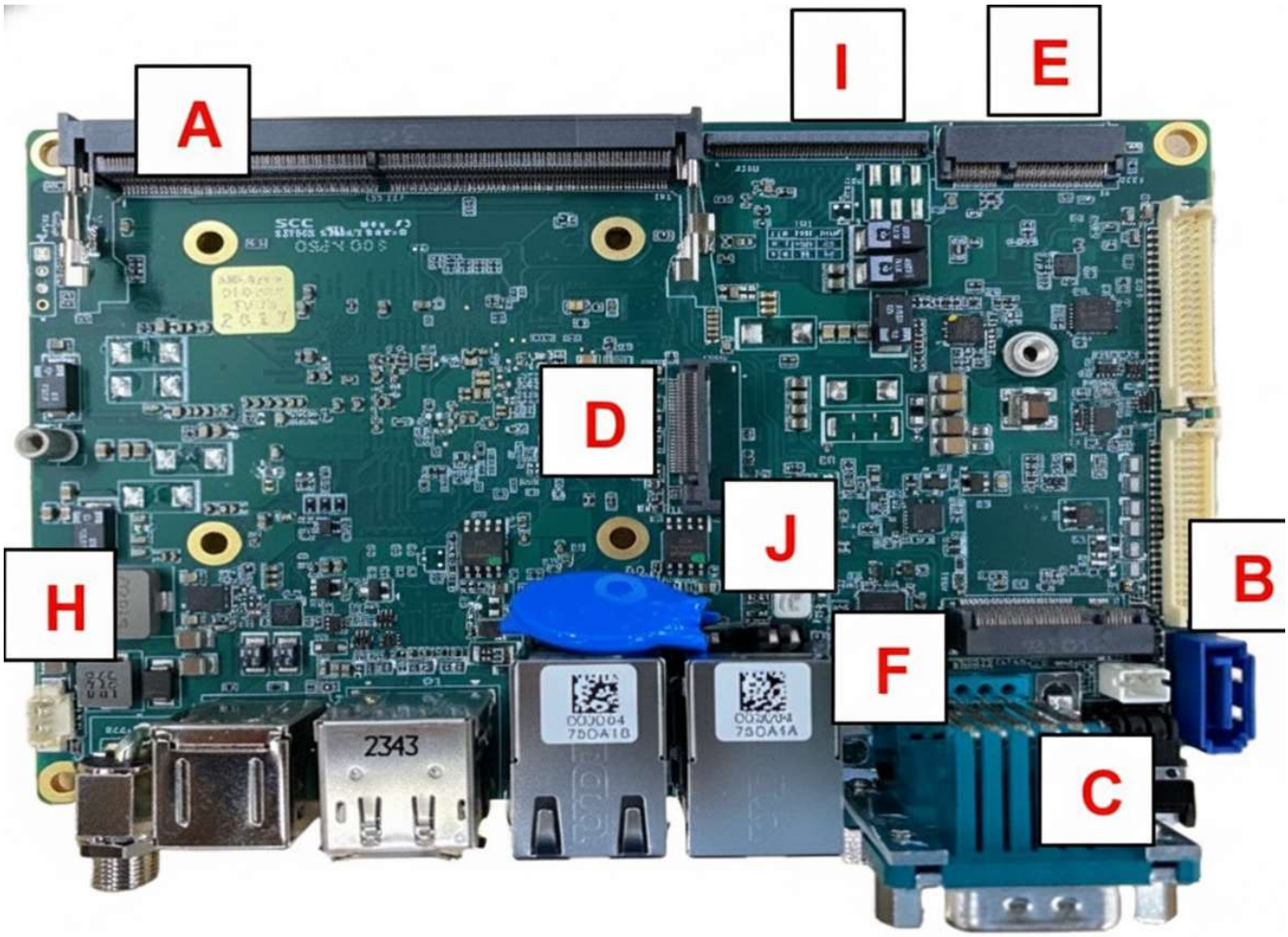


Figure 2: Onboard connector locations (Top)

Table 1: Onboard connector descriptions

Onboard Connectors	
Item	Description
A	DDR5 slot
B	SATA Port
C	SATA Power Wafer
D	M.2 M key connector
E	M.2 E key connector
F	M.2 B key connector
H	AFM expansion board power
I	AFM expansion board signal connector
J	RTC Battery Header

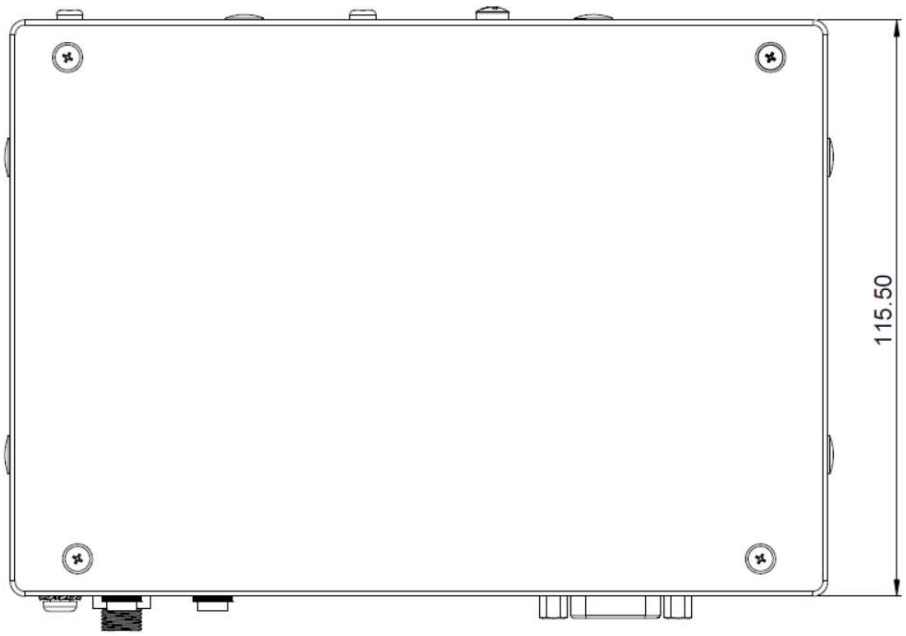
Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

This page intentionally left blank.

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

5. Mechanical Dimensions

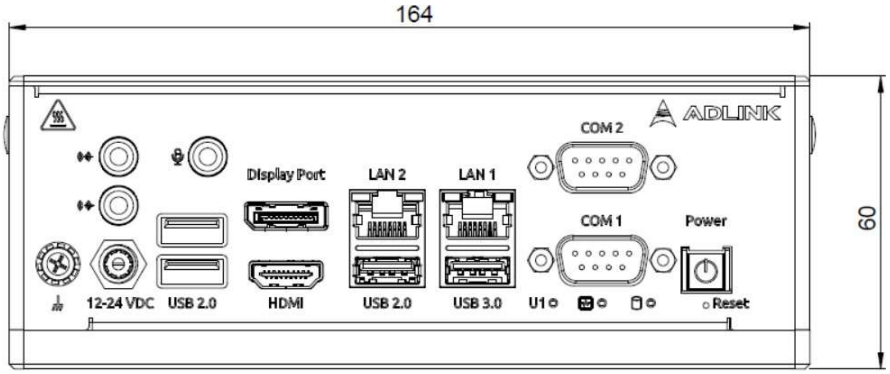
Top View



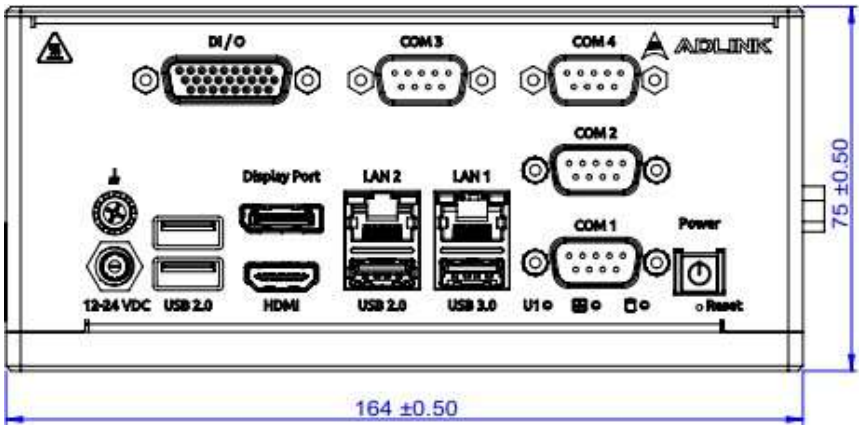
Dimensions: mm

Figure 3: Mechanical dimensions (Top)

Front View

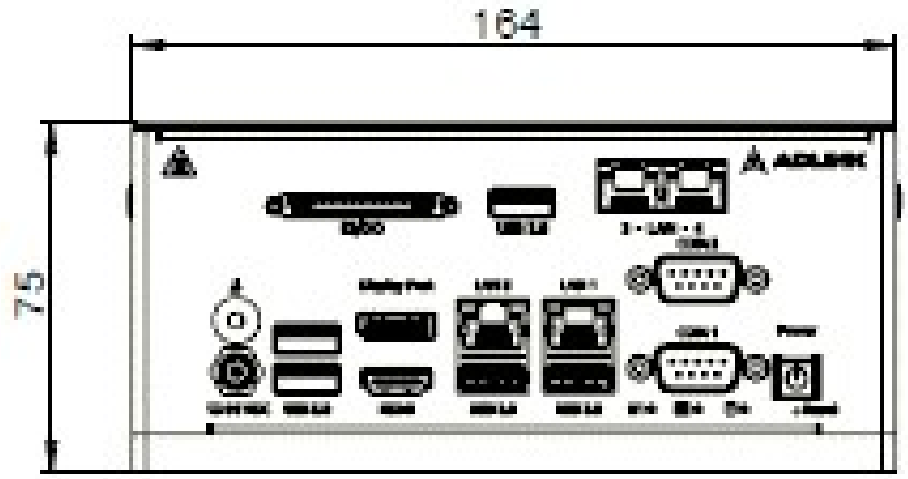


MXE-230 standard

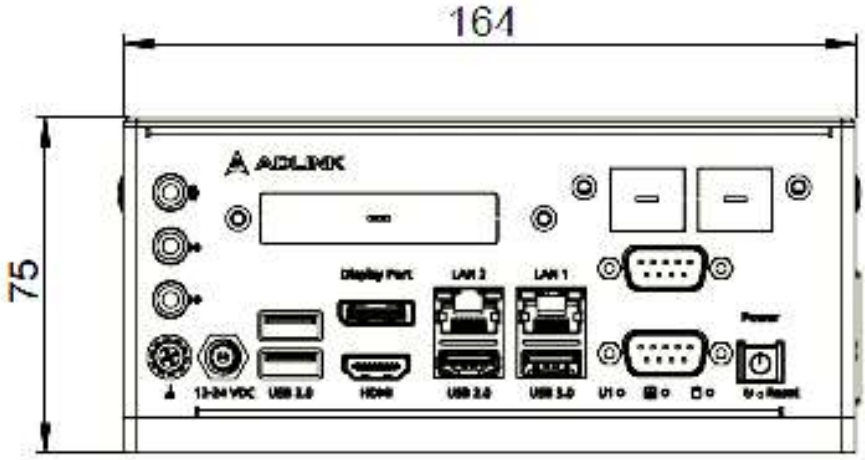


MXE-230 4COM/6COM

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



MXE-230 4LAN



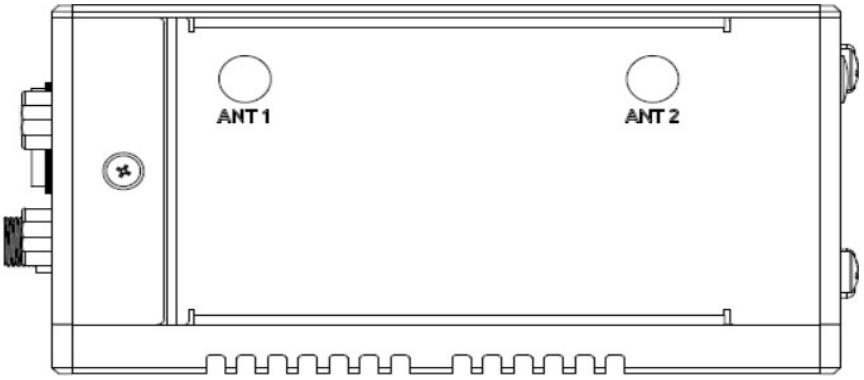
MXE-230F

Dimensions: mm

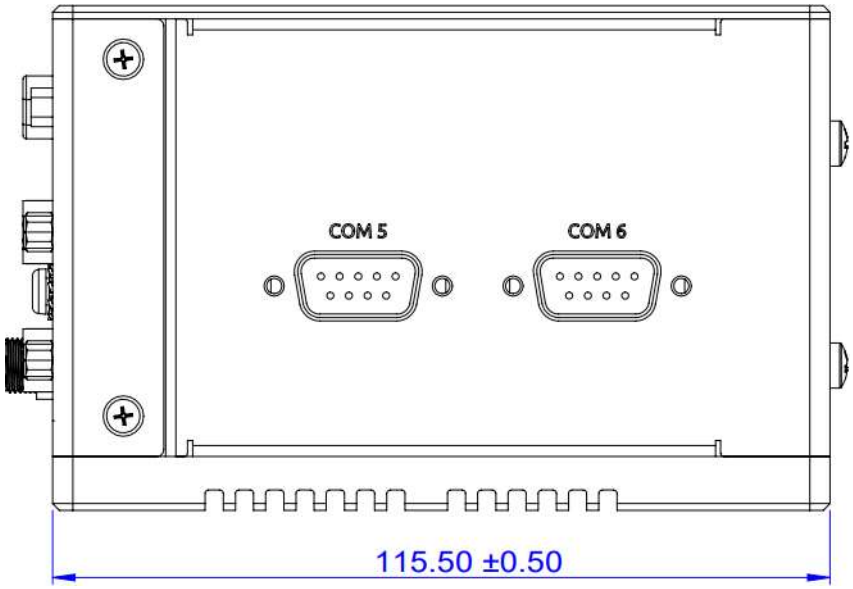
Figure 4: Mechanical dimensions (Front)

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

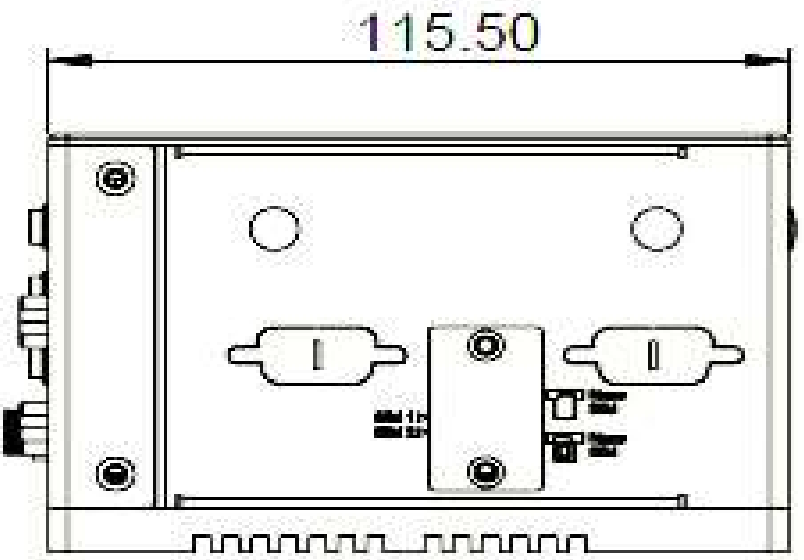
Right Side View



MXE-230 Standard & MXE-230 4LAN



MXE-230 6COM



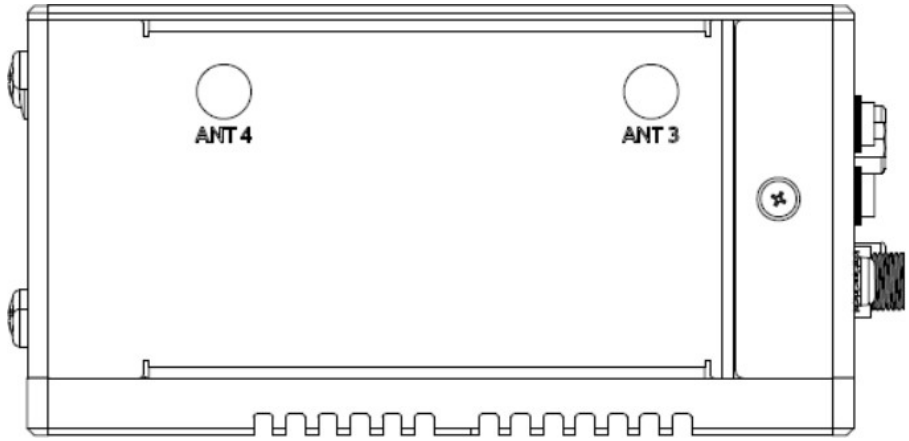
MXE-230F

Dimensions: mm

Figure 5: Mechanical dimensions (Right side)

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

Left Side View



Dimensions: mm

Figure 6: Mechanical dimensions (Left side)

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

6. Connectors and Jumpers

6.1 Front Panel IO Connectors

6.1.1 Power LEDs

The power button is a non-latched push button with a blue LED indicator. System is turned on when button is pressed, and the power LED lit. If the system hangs, pressing the button for 5 seconds powers down the system.

System status	Power LED
Turned on	Light On
Suspension (S3)	Blinking
Hibernation (S4)	Blinking
Power Off (S5)	Light Off

6.1.2 LAN LEDs

LED	LED Color	Status	Description
Active/Link	Yellow	OFF	Ethernet port is disconnected
		ON	Ethernet port is connected with noactivity
		Flashing	Ethernet port is connected andactive
Speed	Green/ Orange	OFF	100 Mbps
		Green	1G bps
		Yellow	2.5G bps

6.1.3 LED Status Indicators

There are three LEDs on the front panel, apart from the power LED, indicating the following operations.

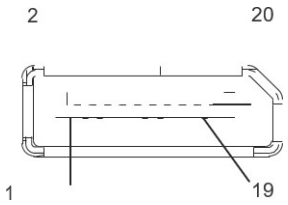
LED Indication	Location	Color	Description
Hard disk drive (HD)	LED1	Red	Blinking indicates that the SATA HDD and/or SSD are active.
Diagnostic (DG)	LED2	Red	Lighting continuously indicates that no physical storage is connected. Blinking indicates that no memory is installed on either SO-DIMM socket.
User-defined	LED3	Red	User-defined LED

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

6.1.4 DisplayPort

A single DisplayPort connector supporting DP 1.2 facilitates connectivity to VGA, DVI, HDMI, and DisplayPort monitors using adapter cables, supporting resolutions up to 4096 x 2160 at 60Hz.

Pin	Signal	Pin	Signal
1	ML_Lane0_P	11	GND
2	GND	12	ML_Lane3_N
3	ML_Lane0_N	13	Config1
4	ML_Lane1_P	14	Config2
5	GND	15	Aux_P
6	ML_Lane1_N	16	GND
7	ML_Lane2_P	17	Aux_N
8	GND	18	Hot Plug
9	ML_Lane2_N	19	Return
10	ML_Lane3_P	20	DP_PWR_+3.3V



6.1.5 USB

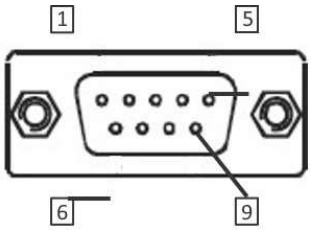
The USB 3.0 port supports Type A connection, compatible with SuperSpeed, Hi-Speed, full-speed and low-speed USB devices, with support for multiple boot devices, including USB flash, USB external HDD, and USB CD-ROM drivers, with boot priority and boot device configured in BIOS.

Note: When using USB CD-ROM via USB 3.0 port to re-install or repair the OS, cold boot should be utilized

6.1.6 DB9 COM Port Connector

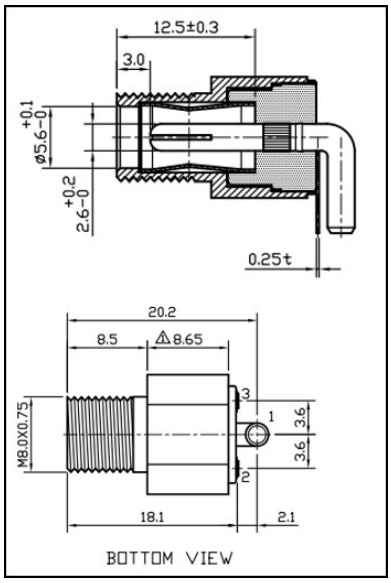
Through a D-sub 9-pin connector, COM1 or COM2 supports RS- 232, while the other selectively supporting RS-232/RS-422/RS-485mode by BIOS setting.

Pin	RS232	RS422	RS485
1	DCD#	TXD422-	485-
2	RXD	TXD422+	485+
3	TXD	RXD422+	N/C
4	DTR#	RXD422-	N/C
5	GND	N/C	N/C
6	DSR#	N/C	N/C
7	RTS#	N/C	N/C
8	CTS#	N/C	N/C
9	RI#	N/C	N/C



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

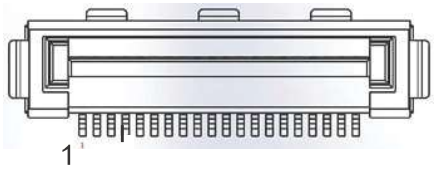
6.1.7 DC Power Supply Connector



6.2 Internal IO Connectors

6.2.1 SATA

Pin	Signal	Pin	Signal
1	GND	13	+5V
2	SOC_SATA_TX1_P_C	14	+5V
3	SOC_SATA_TX1_N_C	15	+5V
4	GND	16	NC
5	SOC_SATA_RX1_N_C	17	GND
6	SOC_SATA_RX1_P_C	18	GND
7	GND	19	GND
8	NC	20	GND
9	+3.3V	G1	GND
10	+3.3V	G2	GND
11	+3.3V	G3	GND
12	NC	G4	GND



6.2.2 M.2 M/E/B Keys

M.2 Key-M support NVMe SSD, only supports PCIE GEN3 x2 speed. 2280 size card.

M.2 Key-B connector support 3042 size card. Only support USB3.0+USB2.0 interface, no PCIE

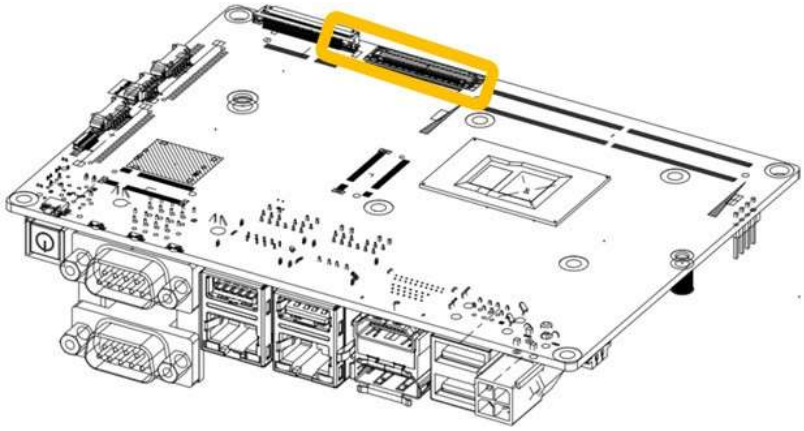
M.2 Key-E connector supports 2230 size card.

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

6.2.3 AFM Connector

AFM connector is designed for additional ADLINK function board, while the function board connector is tailored for ODM project to design their own function boards to meet specific customer requirements.

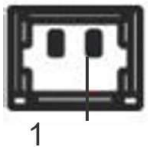
The AFM connector includes PCIE, USB2.0, SMBus, and LPC interface.



6.2.4 RTC Battery Header

Links to the BR 2032 3V coin battery pack for the system RTC function.

Pin	Signal
1	P_+3V3_VBAT
2	GND



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

7. BIOS Settings

7.1 Main Structure

This section presents the primary menus of the AMIBIOS® EFI BIOS setup utility. Use the following table as a quick reference for the contents of the BIOS Setup Utility. The subsections describe the submenus and options for each menu item.

To enter the BIOS Setup Utility:

- Press [Delete] or [Del] during POST (Power-On-Self-Test)

Main	**Advanced**	**Chipset**
Sets up the system time/date and displays the system information: System Date System Time	CPU Configuration Power Management Serial Console Redirection USB Configuration TPM 2.0 Configuration Onboard Devices Configuration Hardware Monitor BIOS Watchdog Timer Network Stake Configuration	Memory Configuration PCI Express Configuration SATA Configuration USB Configuration Security Configuration
Security	**Boot**	**Save & Exit**
Changes or clears the administrator/user password for the system Password Description User Password Secure Boot	Configures the boot settings and boot priority for available devices Boot Configuration Fixed Boot Order Priorities	Exits the BIOS Setup Utility while saving or discard the changes made Save Changes and Exit Discard Changes and Exit Save Changes and Reset Discard Changes and Reset Save Changes Discard Changes Restore Defaults Save as User Defaults Restore User Defaults Launch EFI Shell from filesystem device

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

7.2 Main Menu

Upon entering the BIOS Setup Utility, the Main Menu is displayed, providing read-only information about your system and also allows you to set the System Date and Time. Refer to the tables below for details of the submenus and settings.

Feature	Description
BIOS Information	
BIOS Vendor	American Megatrends Inc.
BIOS Version	1.02.10
Build Date	07/26/2024
MRC Version	0C.E0.89.30
GOP Version	21.0.1063
ME FW Version	16.50.10.1351
System Information	
Project Name	MXE-230
CPU Brand String	Intel(R) N97
CPU Frequency	2.00GHz
Total Memory	8192 MB (DDR5)
Memory Frequency	4800 MHz
PCH SKU	N Premium SKU
Access Level	Administrator

7.3 Advanced Menu

7.3.1 Advanced > CPU Configuration

Feature	Option	Description
ID		0xB06E0
Brand String		Intel(R) N97
Microcode Revision		15
L1 Data Cache		32 KB x 4
L1 Instruction Cache		64 KB x 4
L2 Cache		2048 KB
L3 Cache		6 MB
VMX		Supported
SMX/TXT		Not Supported
Active Efficient-cores	All, 3, 2, 1	The number of E-cores to enable in each processor package. Note: The number of Cores and E-cores is considered together. When both are {0,0}, Pcode will enable all cores.
Intel(R) SpeedStep(tm)	Disabled, Enabled	Allows support for more than two frequency ranges.
Turbo Mode	Disabled, Enabled	Enable/Disable processor Turbo Mode (requires EMTTM enabled too). AUTO means enabled.
Intel(R) Speed Shift Technology	Disabled, Enabled	Enable/Disable Intel(R) Speed Shift Technology support. Enabling will expose the CPPC v2 interface to allow for hardware-controlled P-states.
Intel (VMX) Virtualization Technology	Disabled, Enabled	When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.
VT-d	Enabled, Disabled	VT-d capability
C states	Disabled, Enabled	Enable/Disable CPU Power Management. Allows CPU to go to C states when it's not 100% utilized.

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

7.3.2 Advanced > Power Management

Feature	Option	Description
Enable Hibernation	Disabled, Enabled	Enables or disables the system's ability to Hibernate (OS/S4 Sleep State). This option may not be effective with some operating systems.
ACPI Sleep State	Suspend Disabled, S3 (Suspend to RAM)	Select the highest ACPI sleep state that the system will enter when the SUSPEND button is pressed.
State After G3	S0 State, S5 State	Specify to the state to which the system should return when power is reapplied after a power failure (G3 state).

7.3.3 Advanced > Hardware Monitor

Feature	Option	Description
Board Temperature 1	N/A	
Board Temperature 2	N/A	
Board Fan Speed	N/A	
Fan1 Mode	Manual mode, SMART FAN IV, Auto Mode	Fan control mode select
Manual PWM	[Max-Value, Min-Value, Step-Value] = [0xFF, 0x00, 0x01]	Fan will work with this Manual PWM Value (0 to 255 for 0% to 100%)
Temperature 1	[Max-Value, Min-Value, Step-Value] = [0xFF, 0x00, 0x01]	The value of temperature1.
Percent of full FD/RPM 1	[Max-Value, Min-Value, Step-Value] = [0x64, 0x00, 0x01]	The percent of full Fan Duty/RPM when temperature is T1.
Temperature 2	[Max-Value, Min-Value, Step-Value] = [0xFF, 0x00, 0x01]	The value of temperature2.
Percent of full FD/RPM 2	[Max-Value, Min-Value, Step-Value] = [0x64, 0x00, 0x01]	The percent of full Fan Duty/RPM when temperature is T2.
Temperature 3	[Max-Value, Min-Value, Step-Value] = [0xFF, 0x00, 0x01]	The value of temperature3.
Percent of full FD/RPM 3	[Max-Value, Min-Value, Step-Value] = [0x64, 0x00, 0x01]	The percent of full Fan Duty/RPM when temperature is T3.
Temperature 4	[Max-Value, Min-Value, Step-Value] = [0xFF, 0x00, 0x01]	The value of temperature4.
Percent of full FD/RPM 4	[Max-Value, Min-Value, Step-Value] = [0x64, 0x00, 0x01]	The percent of full Fan Duty/RPM when temperature is T4.
Critical temperature	[Max-Value, Min-Value, Step-Value] = [0xFF, 0x00, 0x01]	Fan temperature critical value.
VCORE	N/A	
VIN0	N/A	
VIN1	N/A	
VIN2	N/A	
AVSB	N/A	
VBAT	N/A	

7.3.4 Advanced > BIOS Watchdog Timer

Feature	Option	Description
BIOS POST Watchdog	Disabled, Second Mode, Minute Mode	1. Disable: Disable Watchdog Timer; 2. Second Mode: Enable Watchdog Timer in second mode; 3. Minute Mode: Enable Watchdog Timer in minute mode.

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

7.3.5 Advanced > Onboard Device Configuration

Feature	Option	Description
> Serial Port 1 Configuration		
COM1 Mode Control	RS232, RS422, RS485	Select COM1 mode. RS232, RS422, RS485
> Serial Port 2 Configuration		
COM2 Mode Control	RS232, RS422, RS485	Select COM2 mode. RS232, RS422, RS485
> Serial Port 3 Configuration		
> Serial Port 4 Configuration		
COM1 TX termination	Enable, Disable	COM1 TX termination Enable/Disable
COM1 RX termination	Enable, Disable	COM1 RX termination Enable/Disable
COM2 TX termination	Enable, Disable	COM2 TX termination Enable/Disable
COM2 RX termination	Enable, Disable	COM2 RX termination Enable/Disable
LAN #1	Enabled, Disabled	Enable/Disable
LAN #2	Enabled, Disabled	Enable/Disable

7.3.6 Advanced > Serial Console Redirection

Feature	Option	Description
Console Redirection	Port Is Disabled	
Console Redirection	Disabled, Enabled	Console Redirection Enable or Disable.

7.3.6.1 Advanced > Serial Console Redirection > Serial Console Redirection Settings

Feature	Option	Description
Terminal Type	VT100, VT100Plus, VT-UTF8, ANSI	Emulation: ANSI: Extended ASCII char set. VT100: ASCII char set. VT100Plus: Extends VT100 to support color, function keys, etc. VT-UTF8: Uses UTF8 encoding to map Unicode chars onto 1 or more bytes.
Bits per second	9600, 19200, 38400, 57600, 115200	Selects serial port transmission speed. The speed must be matched on the other side. Long or noisy lines may require lower speeds.
Data Bits	7, 8	Data Bits
Parity	None, Even, Odd, Mark, Space	A parity bit can be sent with the data bits to detect some transmission errors. Even: The parity bit is 0 if the num of 1's in the data bits is even. Odd: The parity bit is 0 if num of 1's in the data bits is odd. Mark: The parity bit is always 1. Space: The parity bit is always 0. Mark and Space Parity do not the error-detection feature.
Stop Bits	1, 2	Stop bits indicate the end of a serial data packet. (A start bit indicates the beginning). The standard setting is 1 stop bit butcommunication with slow devices may require more than 1 stop bit.
Flow Control	None, Hardware RTS/CTS	Flow control can prevent data loss due to the buffer overflow. When sending data, if the receiving buffers are full, a 'stop' signal can be sent to stop the data flow. Once the buffers are empty, a 'start' signal can be sent to re-start the flow. Hardware flow control uses two wires to send start/stop
VT-UTF8 Combo Key Support	Disabled, Enabled	Enable VT-UTF8 Combination Key Support for ANSI/VT100 terminals
Recorder Mode	Disabled, Enabled	With this mode enabled only text will be sent. This is to capture Terminal data.
Resolution 100x31	Disabled, Enabled	Enables or disables extended terminal resolution
Putty KeyPad	VT100, LINUX, XTERMR6, SCO, ESCN, VT400	Select FunctionKey and KeyPad on Putty.

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

7.3.7 Advanced > TPM 2.0 Configuration

Feature	Option	Description
Firmware Version:		600.18
Vendor:		NTC
Security Device Support	Disable, Enable	Enables or Disables BIOS support for security device. O.S. will not show Security Device. TCG EFI protocol and INT1A interface will not be available.
Active PCR banks		
Available PCR banks		
SHA256 PCR Bank	Enable, Disable	Enable or Disable SHA256 PCR Bank
SHA384 PCR Bank	Enable, Disable	Enable or Disable SHA384 PCR Bank
SHA_256 PCR Bank	Enable, Disable	Enable or Disable SHA_256 PCR Bank
Pending operation	None, TPM Clear	Schedule an Operation for the Security Device. NOTE: Your Computer will reboot during the restart to change the state of the Security Device.
Platform Hierarchy	Disabled, Enabled	Enable or Disable Platform Hierarchy
Storage Hierarchy	Disabled, Enabled	Enable or Disable Storage Hierarchy
Endorsement Hierarchy	Disabled, Enabled	Enable or Disable Endorsement Hierarchy
Physical Presence Spec Version	1.2, 1.3	Select to Tell O.S. to support PPI Spec Version 1.2 or 1.3. Note some HCK tests might not support 1.3.
TPM 2.0 Interface Type	CRB,TIS	Select the Communication Interface to TPM 20 Device
Device Select	Auto,TPM 1.2,TPM 2.0	TPM 1.2 will restrict support to TPM 1.2 devices, TPM 2.0 will restrict support to TPM 2.0 devices, Auto will support both with the default set to TPM 2.0 devices if not found, TPM 1.2 devices will be enumerated

7.3.8 Advanced > Network Stack Configuration

Feature	Option	Description
Network Stack	Enable, Disable	Enable/Disable UEFI Network Stack
IPv4 PXE Support	Enable, Disable	Enable/Disable IPv4 PXE boot support. If disabled, IPv4 PXE boot support will not be available
IPv4 HTTP Support	Enable, Disable	Enable/Disable IPv4 HTTP boot support. If disabled, IPv4 HTTP boot support will not be available
IPv6 PXE Support	Enable, Disable	Enable/Disable IPv6 PXE boot support. If disabled, IPv6 PXE boot support will not be available
IPv6 HTTP Support	Enable, Disable	Enable/Disable IPv6 HTTP boot support. If disabled, IPv6 HTTP boot support will not be available
PXE boot wait time	0	Press the ESC key in a few seconds to abort the PXE boot. Use either +/- or numeric keys to adjust the value.
Media detect count	1	The number of times the presence of media will be checked. Use either +/- or numeric keys to set the value.

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

7.4 Chipset

7.4.1 Chipset > Memory Configuration

Feature	Description
Memory RC Version	0.0.4.74
Memory Frequency	4800 MHz
tCL-tRCD-tRP-tRAS	40-39-39-77
MC 0 Ch 0 DIMM 0	Populated & Enabled
Size	8192 MB (DDR5)
Number of Ranks	1
Manufacturer	Transcend

7.4.2 Chipset > PCI Express Configuration

Feature	Option	Description
PCI Express Root Port 3 ,4, 7, 9, 10, 11	Disabled, Enabled	Controls the PCI Express Root Port.
PCIe Speed*	Auto, Gen1, Gen2, Gen3	Configures PCIe Speed
Detect Non-Compliance Device*	Disabled, Enabled	Detects Non-Compliance PCI Express Device. If enabled, it will take more time at POST time.

7.4.3 Chipset > SATA Configuration

Feature	Option	Description
SATA Controller(s)	Enabled, Disabled	Enable/Disable SATA Device.
Serial ATA Port 1	Empty	
Software Preserve	Unknown	
Port 1	Disabled, Enabled	Enable or Disable SATA Port

7.4.4 Chipset > USB Configuration

Feature	Option	Description
USB Port Disable Override	Disabled, Select Per-Pin	Selectively Enable/Disable the corresponding USB port from reporting a device connections to the controller.
USB SS Physical Connector #0	Disabled, Enabled	Enable/Disable this USB Physical Connector (physical port). Once disabled, any USB devices plugged into the connector will not be detected by BIOS or OS.
USB HS Physical Connector #0	Disabled, Enabled	Enable/Disable this USB Physical Connector (physical port). Once disabled, any USB devices plugged into the connector will not be detected by BIOS or OS.
USB HS Physical Connector #3	Disabled, Enabled	Enable/Disable this USB Physical Connector (physical port). Once disabled, any USB devices plugged into the connector will not be detected by BIOS or OS.
USB HS Physical Connector #4	Disabled, Enabled	Enable/Disable this USB Physical Connector (physical port). Once disabled, any USB devices plugged into the connector will not be detected by BIOS or OS.
USB HS Physical Connector #5	Disabled, Enabled	Enable/Disable this USB Physical Connector (physical port). Once disabled, any USB devices plugged into the connector will not be detected by BIOS or OS.
USB HS Physical Connector #6	Disabled, Enabled	Enable/Disable this USB Physical Connector (physical port). Once disabled, any USB devices plugged into the connector will not be detected by BIOS or OS.
USB HS Physical Connector #7	Disabled, Enabled	Enable/Disable this USB Physical Connector (physical port). Once disabled, any USB devices plugged into the connector will not be detected by BIOS or OS.

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

7.4.5 Chipset > Security Configuration

Feature	Option	Description
BIOS Lock	Disabled, Enabled	Enable/Disable the PCH BIOS Lock Enable feature. Required to be enabled to ensure SMM protection of flash.

7.5 Security

Feature	Option	Description
Administrator Password		Set Administrator Password
User Password		Set User Password
► Secure Boot Menu		Secure Boot Configuration

7.6 Boot

7.6.1 Boot > Boot Configuration

Feature	Option	Description
Setup Prompt Timeout	[Max-Value, Min-Value, Step-Value] = [0x0008, 0x0001, 0x0001]	Number of seconds to wait for setup activation key. The maximum value is 8
Bootup NumLock State	On, Off	Select the keyboard NumLock state
Quiet Boot	Disabled, Enabled	Enables or disables Quiet Boot option
Fast Boot	Disabled, Enabled	Enables or disables booting with initialization of a minimal set of devices required to launch active the boot option. The setting has no effect on BBS boot options.

7.6.2 Boot > Fixed Boot Order Priorities

Feature	Option	Description
Boot Option #1	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key:UEFI: SanDisk, Partition 1, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #2	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key:UEFI: SanDisk, Partition 1, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #3	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key:UEFI: SanDisk, Partition 1, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #4	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key:UEFI: SanDisk, Partition 1, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #5	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key:UEFI: SanDisk, Partition 1, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #6	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key:UEFI: SanDisk, Partition 1, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order

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

Boot Option #7	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key:UEFI: SanDisk, Partition 1, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #8	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key:UEFI: SanDisk, Partition 1, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #9	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key:UEFI: SanDisk, Partition 1, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #10	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key:UEFI: SanDisk, Partition 1, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #1*	Hard Disk, Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #2*	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #3*	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #4*	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #5*	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #6*	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #7*	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #8*	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #9*	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order
Boot Option #10*	Hard Disk, NVME, CD/DVD, SD, USB Hard Disk, USB CD/DVD, USB Key, USB Floppy, USB Lan, Network, Disabled	Sets the system boot order

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

7.7 Save & Exit

Feature	Option	Description
Save Changes and Exit		Exit the system setup after saving the changes.
Discard Changes and Exit		Exit the system setup without saving any changes.
Save Changes and Reset		Reset the system after saving the changes.
Discard Changes and Reset		Reset the system without saving any changes.
Save Changes		Save the changes made to any of the setup options.
Discard Changes		Discard the changes made to any of the setup options.
Restore Defaults		Restore/Load default values for all the setup options.
Save as User Defaults		Save the changes made as User Defaults.
Restore User Defaults		Restore the User Defaults to all the setup options.
Launch EFI Shell from filesystem device		Attempts to launch EFI Shell application (Shell.efi) from one of the available filesystem devices.

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

This page intentionally left blank.

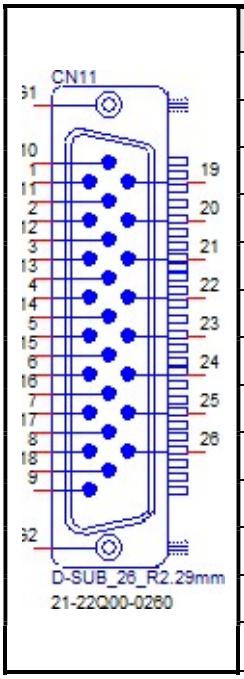
Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Appendix A – DIO Application (For MXE-230 4/6COM SKU)

A.1 DIO Specifications

8xDI, 8x DO
DI: Logic 0: 10~30V Logic 1: 0-1V, 2.5kVdc isolation by photocoupler DO: supply voltage 5-30V, sink current 500mA 2.5kv isolation

A.2 DIO PIN Definitions



Pin	Signal	Pin	Signal
1	DI0_L	14	CN_DI4_H
2	DI1_L	15	CN_DI5_H
3	DI2_L	16	CN_DI6_H
4	DI3_L	17	CN_DI7_H
5	DI45_L	18	GND
6	GND	19	DO0
7	DI67_L	20	DO1
8	P_+VDIO_EXT	21	DO2
9	P_+5V0_DIO_CN	22	DO3
10	CN_DI0_H	23	DO4
11	CN_DI1_H	24	DO5
12	CN_DI2_H	25	DO6
13	CN_DI3_H	26	DO7

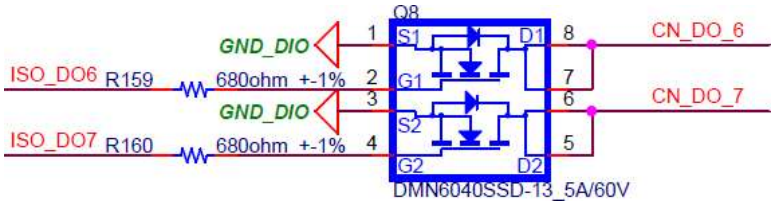


Figure 7: Isolated digital output circuits

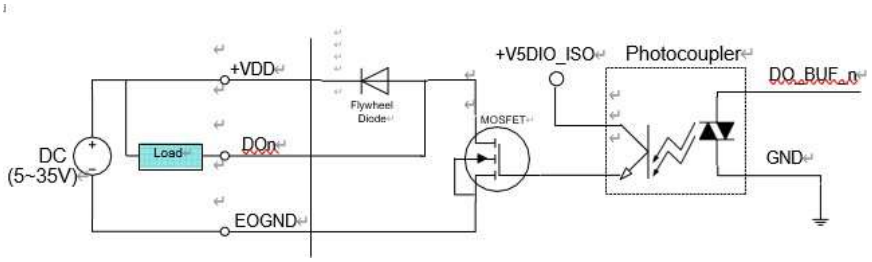


Figure 8: Digital output sample application

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

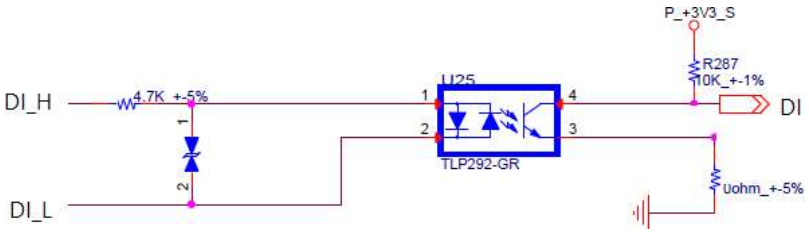


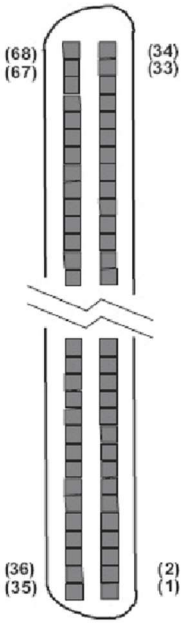
Figure 9: Digital input circuits

A.3 DIO Setup

1. Download the DIO tool package from the ADLINK MXE-230 product website.
2. Install the MXE_SMBus_Driver.msi.
3. Go to DIO_ConsoleAPP_Bin.
4. Run DIO_ConsoleAPP.exe in admin mode.
5. Go to StartDio_Bin.
6. Run StartDIO.exe in admin mode.

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

Appendix B – DIO Application (For MXE-230 4LAN)



Pin	Signal	Pin	Signal	Pin	Signal
1	+VDD	24	DI1_L	47	EOGND
2	EOGND	25	DI0_H	48	DO10
3	DO7	26	DI0_L	49	EOGND
4	EOGND	27	DI11	50	DO9
5	DO6	28	ISO_COM	51	EOGND
6	EOGND	29	DI10	52	DO8
7	DO5	30	ISO_COM	53	DI7_H
8	EOGND	31	DI9	54	DI7_L
9	DO4	32	ISO_COM	55	DI6_H
10	EOGND	33	DI8	56	DI6_L
11	DO3	34	ISO_COM	57	DI5_H
12	EOGND	35	+VDD	58	DI5_L
13	DO2	36	+V5DIO_CN_ISO	59	DI4_H
14	EOGND	37	EOGND	60	DI4_L
15	DO1	38	DO15	61	DI15
16	EOGND	39	EOGND	62	ISO_COM
17	DO0	40	DO14	63	DI14
18	EOGND	41	EOGND	64	ISO_COM
19	DI3_H	42	DO13	65	DI13
20	DI3_L	43	EOGND	66	ISO_COM
21	DI2_H	44	DO12	67	DI12
22	DI2_L	45	EOGND	68	ISO_COM
23	DI1_H	46	DO11		

Table 1 : Digital I/O Connector Pin Signals

DI	DIn_H	High input of isolated differential DI channel (n=0 to 7)
	DIn_L	Low input of isolated differential DI channel (n=0 to 7)
	DIn	Input of isolated DI channel (n=8 to 15)
	ISO_COM	Common ground of isolated DI channel 8 to 15
DO	DOn	Output of isolated DO channel (n=0 to 15)
	EOGND	Ground return path of isolated DO channel 0 to 15 and +V5DIO_CN_ISO
	+VDD	Power input signal for flywheel diode of isolated DO channel 0 to 15
	+V5DIO_CN_ISO	Isolated 5V DC power, maximum output 180mA

Table 2: Digital I/O Connector Pin Legend

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

Isolated Digital Input Circuits

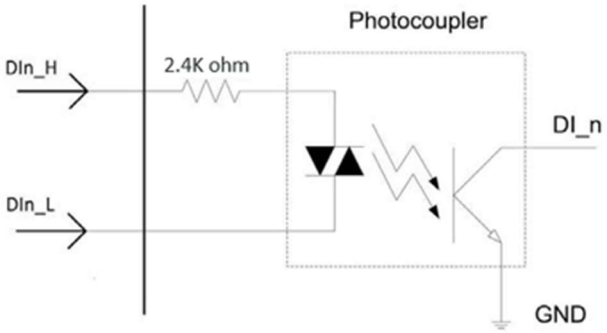
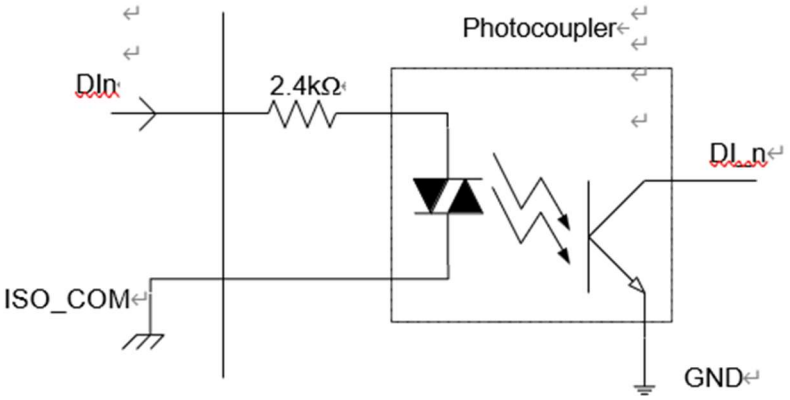


Figure 1 Isolated Digital Input Circuit



Isolated Digital Output Circuits

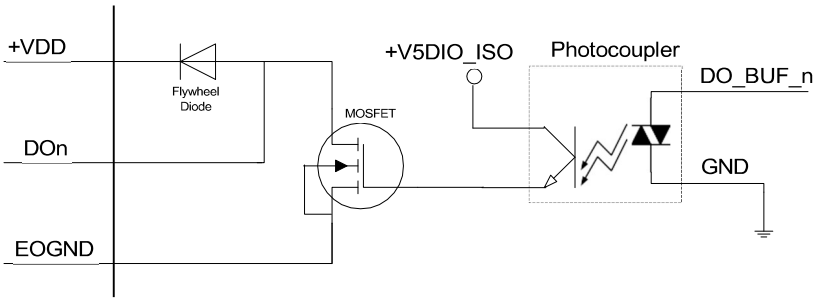
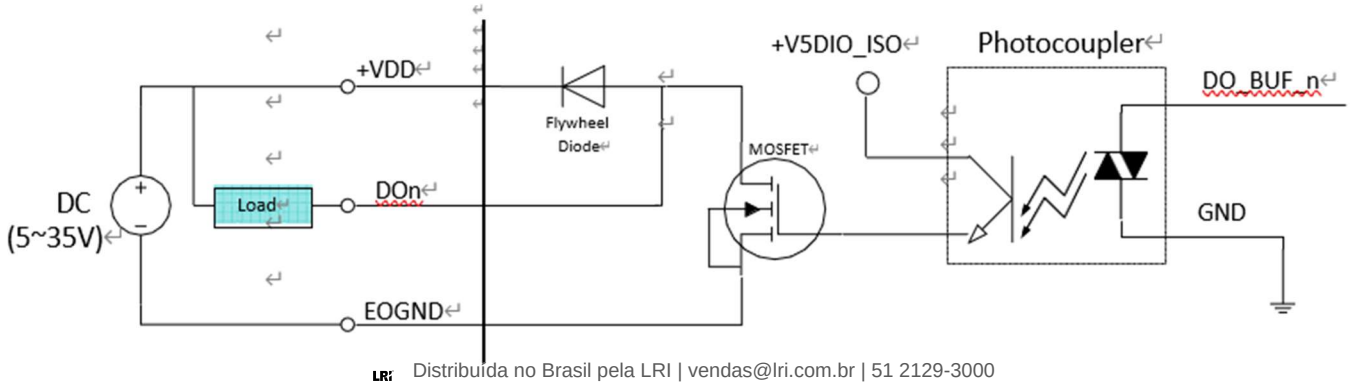


Figure 2 : Isolated Digital Output Circuits



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

Please download the Matrix DI/O API library files and a demo program from http://www.adlinktech.com.

To use the DI/O function library for MXE-230 in your C++ project, please:

1. Include the **header file matrix_dio.h.**
2. Link with the **static import library matrix_dio64.lib.**
3. Deploy the **runtime dynamic link library matrix_dio64.dll**.

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

Safety Instructions

For user safety, please read and follow all instructions, Warnings, Cautions, and Notes marked in this manual and on the associated device before handling/operating the device, to avoid injury or damage.

S'il vous plaît prêter attention stricte à tous les avertissements et mises en garde figurant sur l'appareil , pour éviter des blessures ou des dommages.

- Read these safety instructions carefully.
- Keep the User's Manual for future reference.
- Read the Specifications section of this manual for detailed information on the recommended operating environment.
- When installing/mounting or uninstalling/removing device; or when removal of a chassis cover is required for user servicing (See "Getting Started"):
  [> Turn off power and unplug any power cords/cables.
  [> Reinstall all chassis covers before restoring power.
- To avoid electrical shock and/or damage to device:
  [> Keep device away from water or liquid sources.
  [> Keep device away from high heat or humidity.
  [> Keep device properly ventilated (do not block or cover ventilation openings).
  [> Always use recommended voltage and power source settings.
  [> Always install and operate device near an easily accessible electrical outlet.
  [> Secure the power cord (do not place any object on/over the power cord) and connect it to a socket-outlet with earthing connection.
  [> Only install/attach and operate device on stable surfaces and/or recommended mountings.
- If the device will not be used for long periods of time, turn off and unplug from its power source.
- Never attempt to repair the device, which should only be serviced by qualified technical personnel using suitable tools.
- A Lithium-type battery may be provided for uninterrupted backup or emergency power.



Risk of explosion if battery is replaced with one of an incorrect type; please dispose of used batteries appropriately.

Risque d'explosion si la pile est remplacée par une autre de type incorrect. Veuillez jeter les piles usagées de façon appropriée.

- The device must be serviced by authorized technicians when:
  [> The power cord or plug is damaged.
  [> Liquid has entered the device interior.
  [> The device has been exposed to high humidity and/or moisture.
  [> The device is not functioning or does not function according to the User's Manual.
  [> The device has been dropped and/or damaged and/or shows obvious signs of breakage.
- Disconnect the power supply cord before loosening the thumbscrews and always fasten the thumbscrews with a screwdriver before starting the system up.

  [> The equipment is not intended to be installed or used in a home, school, or public area accessible to the general population.

  [> The knurled thumb screws with slotted heads for each Node module should be tightened with a tool after both initial installation and subsequent use.
- It is recommended that the device be installed only in a server room or computer room where access is:
  [> Restricted to qualified service personnel or users familiar with restrictions applied to the location, reasons therefore, and any precautions required.
  [> Only afforded by the use of a tool or lock and key, or other means of security, and controlled by the authority responsible for the location.
- Please use an approved power source certified by IEC or UL. If you need an adapter, optional accessories, or further assistance, please contact ADLINK for more information.

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



BURN HAZARD
Touching this surface could result in bodily injury. To reduce risk, allow the surface to cool before touching.

RISQUE DE BRÛLURES
Ne touchez pas cette surface, cela pourrait entraîner des blessures. Pour éviter tout danger, laissez la surface refroidir avant de la toucher.

- Lisez attentivement ces consignes de sécurité
- *Conservez le manuel de l'utilisateur pour pouvoir le consulter ultérieurement*
- *Lisez la section Spécifications de ce manuel pour des informations détaillées sur l'environnement d'exploitation recommandé*
- Lors de l'installation/montage ou de la désinstallation/retrait de l'appareil ; ou lorsque le retrait d'un boîtier est nécessaire pour l'entretien par l'utilisateur (voir Mise en route) :
  - Éteignez l'alimentation et débranchez tous les cordons/câbles d'alimentation.
  - Réinstallez tous les panneaux du boîtier avant de remettre l'alimentation sous tension.
- *Pour éviter les chocs électriques et/ou d'endommager l'appareil :*

  - *Tenez l'appareil à l'écart de toute source d'eau ou de liquide*
  - *Tenez l'appareil à l'écart d'une forte chaleur ou d'une humidité élevée*
  - *Maintenez l'appareil correctement ventilé (n'obstruer ou ne couvrez pas les ouvertures de ventilation)*
  - *Utilisez toujours les réglages de tension et de source d'alimentation recommandés*
  - *Installez et utilisez toujours l'appareil près d'une prise de courant facilement accessible*
  - Fixez le cordon d'alimentation (ne placez aucun objet sur/au-dessus du cordon d'alimentation) et connectez-le à une prise de courant avec mise à la terre
- N'essayez jamais de réparer l'appareil, qui doit être réparé uniquement par du personnel technique qualifié *et utilisant des outils appropriés.*
  - *Lors de l'installation/montage ou de la désinstallation/retrait d'un périphérique, ou lorsque le retrait d'un couvercle de châssis est requis pour l'entretien par l'utilisateur :*
  - *Coupez l'alimentation et débranchez tous les cordons/câbles d'alimentation.*
- *Réinstallez tous les capots du châssis avant de rétablir l'alimentation. Installez/fixez et utilisez l'appareil uniquement sur des surfaces stables et/ou des supports recommandés.*
- *Si l'appareil n'est pas utilisé pendant une longue période, éteignez-le et débranchez-le de sa source d'alimentation.*
- *Une batterie de type lithium peut être fournie pour une alimentation de secours ou de secours ininterrompue.*

  - *L'appareil doit être réparé par des techniciens agréés lorsque :*
  - *Le cordon d'alimentation ou la fiche est endommagé.*
  - *Du liquide est entré dans l'appareil. € L'appareil a été exposé à une humidité élevée et/ou à l'humidité.*
  - *L'appareil ne fonctionne pas ou ne fonctionne pas conformément au manuel de l'utilisateur.*

- *L'appareil est tombé et/ou a été endommagé et/ou présente des signes évidents de casse.*
- *Débranchez le cordon d'alimentation avant de desserrer les vis moletées et fixez toujours les vis moletées avec un tournevis avant de démarrer le système.*
  - *L'équipement n'est pas destiné à être installé ou utilisé dans une maison, une école ou une zone publique accessible au grand public.*
  - *Les vis à molette avec têtes fendue pour chaque module Node doivent être serrées avec un outil après l'installation initiale et lors de l'utilisation suivante.*
- *Il est recommandé d'installer l'appareil uniquement dans une salle de serveurs ou une salle informatique dont l'accès est :*

  - *Réservé au personnel de service qualifié ou aux utilisateurs familiers avec les restrictions appliquées à l'emplacement, les raisons de celles-ci et les précautions requises.*
  - *Autorisé uniquement par l'utilisation d'un outil ou d'une serrure et d'une clé, ou d'autres moyens de sécurité, et contrôlé par l'autorité responsable du lieu.*

Veuillez utiliser une source d'alimentation approuvée et certifiée par la norme IEC ou UL. Si vous avez besoin d'un adaptateur, d'accessoires en option ou d'une assistance supplémentaire, veuillez contacter ADLINK pour plus d'informations.

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

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

Getting Services

Ask an Expert: https://www.adlinktech.com/en/Askanexpert

ADLINK Technology, Inc.
Address: No. 66, Huaya 1st Rd., Guishan District
Tauyuan City 333411, Taiwan
Tel: +886-3-216-5088
Fax: +886-3-328-5706
Email: service@adlinktech.com

Ampro ADLINK Technology, Inc.
Address: 6450 Via Del Oro, San Jose, CA 95119, USA
Tel: +1-408-360-0200
Toll Free: +1-800-966-5200 (USA only)
Fax: +1-408-600-1189
Email: info@adlinktech.com

ADLINK Technology (China) Co., Ltd.
Address: 300 Fang Chun Rd., Zhangjiang Hi-Tech Park, Pudong New Area
Shanghai, 201203 China
Tel: +86-21-5132-8988
Fax: +86-21-5132-3588
Email: market@adlinktech.com

ADLINK Technology GmbH
Address: Hans-Thoma-Strasse 8-10, 68163, Mannheim, Germany
Tel: +49-621-43214-0
Fax: +49-621 43214-30
Email: emea@adlinktech.com

Please visit the Contact page at www.adlinktech.com for information on how to contact the ADLINK regional office nearest you.

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