

USER'S MANUAL

Out-of-Band (OOB) Management Module



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Prefaces

Revision

Revision	Description	Date
1.0	Manual Released	2025/7/14

Disclaimer

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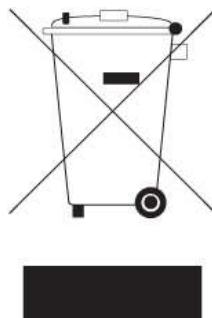
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Environmental Protection Announcement

Do not dispose this electronic device into the trash while discarding. Please recycle to minimize pollution and ensure environment protection.



Safety Precautions

Before installing and using the equipment, please read the following precautions:

- Always unplug power sources before servicing or cleaning.
- Avoid the dusty, humidity and temperature extremes.
- Do not place heavy objects on the equipment.
- The storage temperature shall be above -40°C and below 85°C.
- Replace only with the same or equivalent type of components recommended by the manufacturer.
- If one of the following situation arises, get the equipment checked by service personnel:
 - The power cord or plug is damaged.
 - Liquid has penetrated into the equipment.
 - The equipment has been exposed to moisture.
 - The equipment does not work well or it cannot work according to the user's manual.
 - The equipment has been dropped and damaged.
 - The equipment has obvious signs of breakage.

Technical Support and Assistance

1. Visit the Premio Inc website at www.premioinc.com where you can find the latest information about the product.
2. Contact your distributor, our technical support team or sales representative for technical support if you need additional assistance. Please have following information ready before you call:
 - Model name and serial number
 - Description of your peripheral attachments
 - Description of your software (operating system, version, application software, etc.)
 - A complete description of the problem
 - The exact wording of any error messages

Conventions Used in this Manual



WARNING

This indication alerts operators to an operation that, if not strictly observed, may result in severe injury.



CAUTION

This indication alerts operators to an operation that, if not strictly observed, may result in safety hazards to personnel or damage to equipment.



NOTE

This indication provides additional information to complete a task easily.

Chapter 1

Product Introductions

1.1 Overview

In today's connected world, maintaining seamless operations at the edge is more critical than ever. Out-of-Band (OOB) Remote Management technology ensures continuous monitoring and management of your systems, even during unforeseen disruptions. Whether it's for edge AI, IoT applications, or industrial automation, our solutions provide the reliability and control you need to prevent costly downtimes in 24/7 mission critical computing.

1.2 Specification

Specifications	
MCU	Nuvoton NUC980DR63YC
SDRAM	Built-in 64MB DDR2 SDRAM Memory (16KB data cache)
I/O	
LAN	1x RJ45 (10/100 Mbps)
Others	
On-board LED	<div>LED Indicator Light</div> <ul style="list-style-type: none">LED1: Power LED (Color: Blue)LED2: MCU Activated LED (Color: Green)LED3: Allxon Service Activated LED (Color: Yellow)
DIP Switch	<div>4x2 DIP Switch for General Setting</div> <ul style="list-style-type: none">USB or SPI Flash SwitchingWi-Fi or Debug Switching
Environments	
Operating Temp.	-40°C to 85°C
Storage Temp.	-40°C to 85°C
Relative Humidity	10% to 95% (non-condensing)
Protection	1.5KV
Standards & Certifications	UL, CE, FCC

Chapter 2

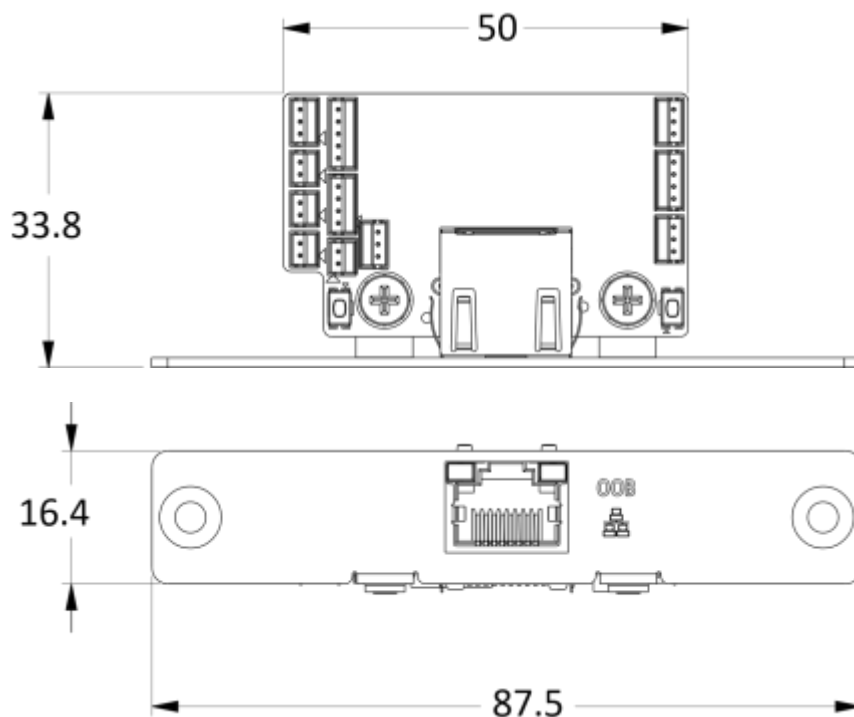
Mechanical Specifications

2.1 Hardware Overview

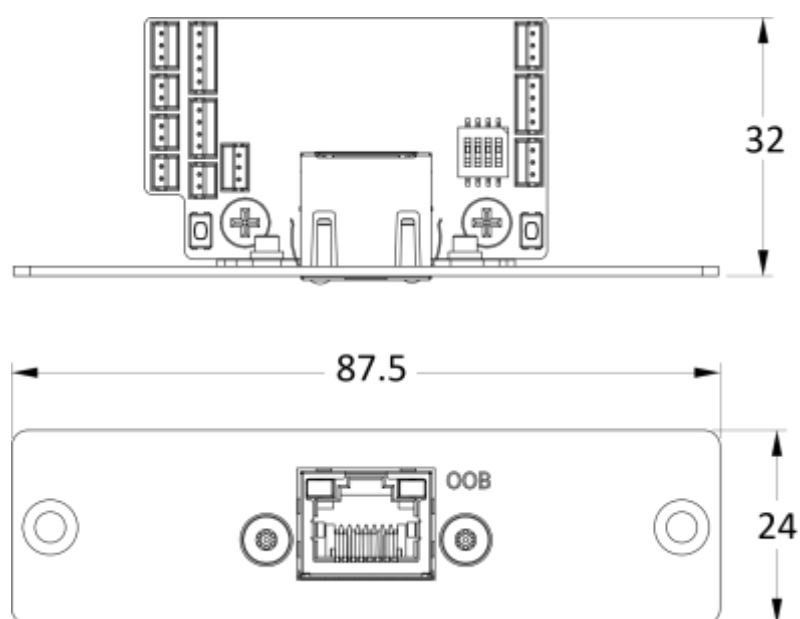
2.1.1 Mechanical Dimension

(mm)

EBIO-OOB

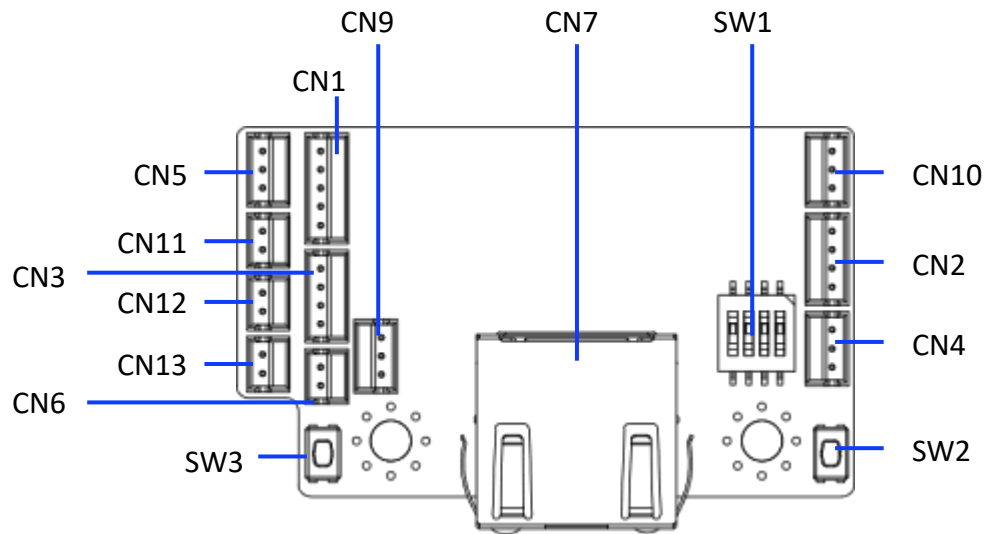


EBIO-OOB-J (JCO Series)

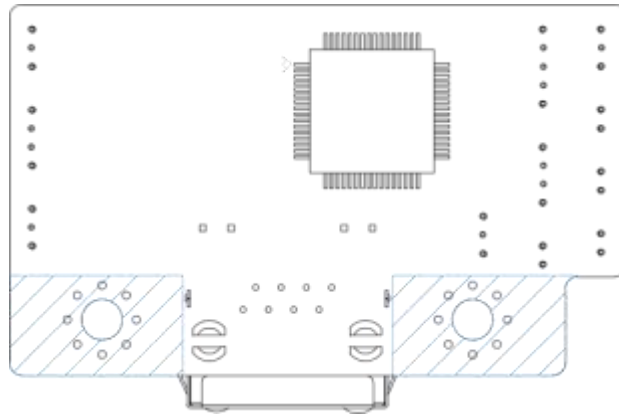


2.1.2 Mechanical Layout

Top Side



Bottom Side



2.1.3 Connector Location / Definition

Connector Location	Definition	Connector Location	Definition
CN5	Buzzer Connector	CN9	MCU Debug Connector
CN11	NVMe Recovery Connector	CN7	10/100 Mbps LAN Port
CN12	Reserved Pin Connector	SW1	General Setting DIP Switch
CN13	Case Open Connector	CN10	Auto Link Connector
CN1	OOB Connector	CN2	USB Connector
CN3	I2C Connector	CN4	Pass Through TTL Connector
CN6	Case Open Connector	SW2	OOB Config Restore Tact Switch
SW3	OOB Reset Tact Switch		

Chapter 3

OOB Management Services Setup

3. OOB Management Services Setup

This section provides a complete guide for activating and configuring the Out-of-Band (OOB) management services on your device. Both In-Band and Out-of-Band (OOB) functions can be used together to achieve full remote access and control.

3.1 Setup Process Overview

3.1.1 First Things to Prepare

- **Allxon Portal Account**

Visit [Allxon Website](#) to register an Allxon Portal account.

- **Internet Connection**

Ensure that both the OOB RJ45 port and the computer's LAN port are connected to the internet. Make sure the network connection is stable.

3.1.2 Install the Allxon Agent

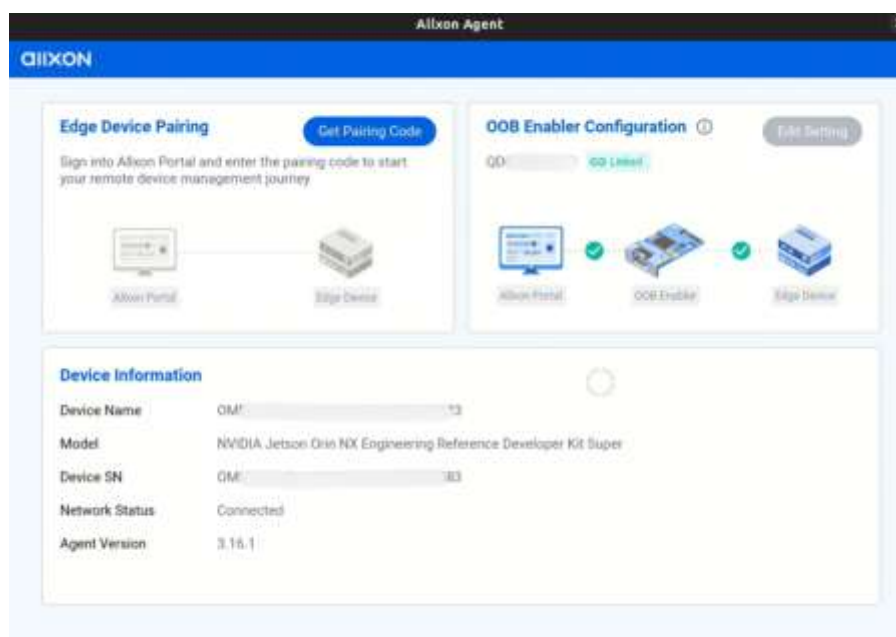
Begin by installing the Allxon Agent on Linux or Windows to link your device to the Allxon Portal. Please refer to the following link for detailed instructions:

[Install Allxon Agent via Command Prompt](#)

If your devices support auto-link communication, the OOB Enabler will automatically connect to them. You will see the following messages during the installation of the Allxon Agent, as shown in the picture below:

```
- Device enrolled. Device Serial Number: OM
> Auto-link with OOB Enabler
- Scanning OOB Enabler ...
exit
- Successfully auto-linked. OOB Enabler SN: QD
> Install Allxon Agent
- Downloading ...
- Installing ...
```

Once the Agent successfully installed and linked, you'll see this pop-up window as shown below:



Note:

If your devices don't support auto-link, you won't see the information mentioned above. In this case, you can follow the instructions below to manually link the OOB Enabler.

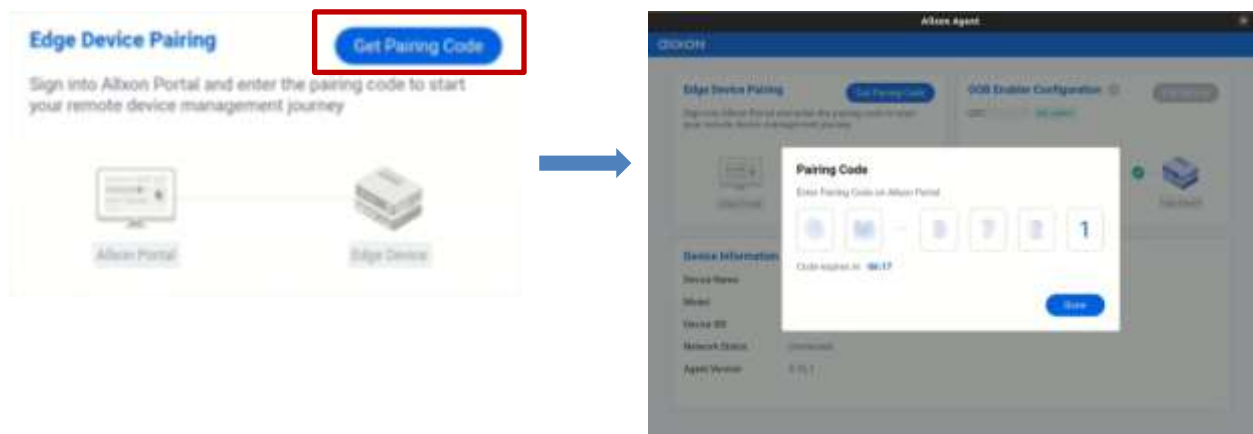
[Enable OOB Management on Device](#)

3.1.3 Register Device to Allxon Portal

1. Get Device Pairing Code

From the Allxon Agent, click **"Get Pairing Code"**

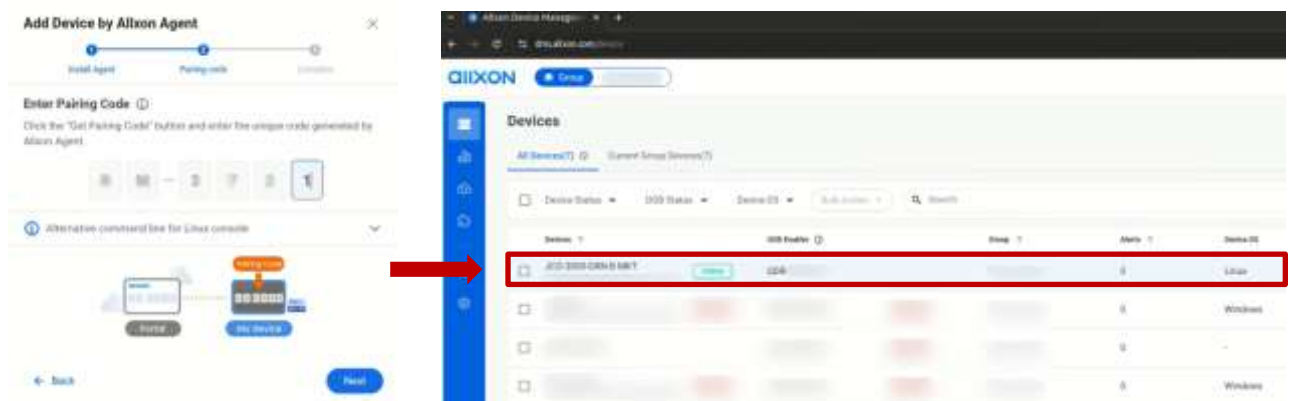
*Refer to the following webpage for detailed instructions: [Get Device Pairing Code](#)



2. Add Device to Allxon Portal

- Log in to your [Allxon Portal](#) account.
- Click **"Add Device by Allxon Agent"** and then enter the **Pairing Code**. It should appear like this when successfully registered.

Note: 3-month free trial will start once it's successfully paired and registered to Allxon Portal.

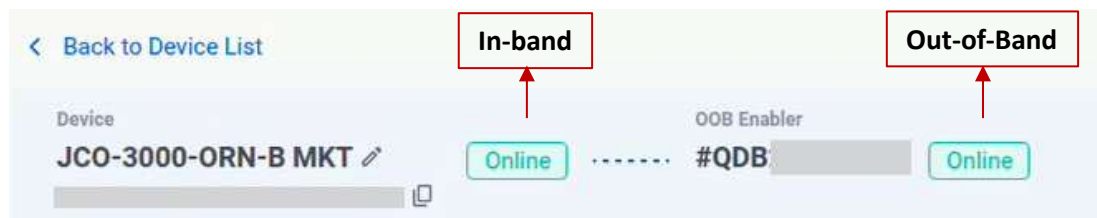


*Refer to the following webpage for detailed instructions: [Add Your Device on Allxon Portal](#)

3.2 How to Navigate Allxon Portal

To use both the Out-of-Band and In-Band features, ensure that the OOB LAN port and the computer's LAN port are connected to the internet.

Full guide on how to use the Out-of-Band and In-Band features on Allxon Portal:
[Allxon Cloud Portal Step-by-Step](#)



3.3 Configure Allxon swiftDR Power Management

The Allxon swiftDR suite offers advanced OOB power management for disaster recovery scenarios. After enabling OOB services, you can configure power cycling and recovery controls via the Allxon Portal.

- Full configuration steps available here:
[Allxon swiftDR for Power Cycling](#)

3.3 OOB Enabler Troubleshooting

3.3.1 Network Connectivity Requirements

To ensure proper operation of Allxon services, a stable and reliable internet connection is required.

In environments with restricted network policies or firewall settings:

- Verify that all required network ports and protocols are accessible.
- For full network configuration details, refer to:
[Allxon Service Port/Protocol and Whitelist Requirements](#)



OOB Serial Number and PIN are attached to the bottom of your computer's chassis and to the OOB module located inside the computer.



