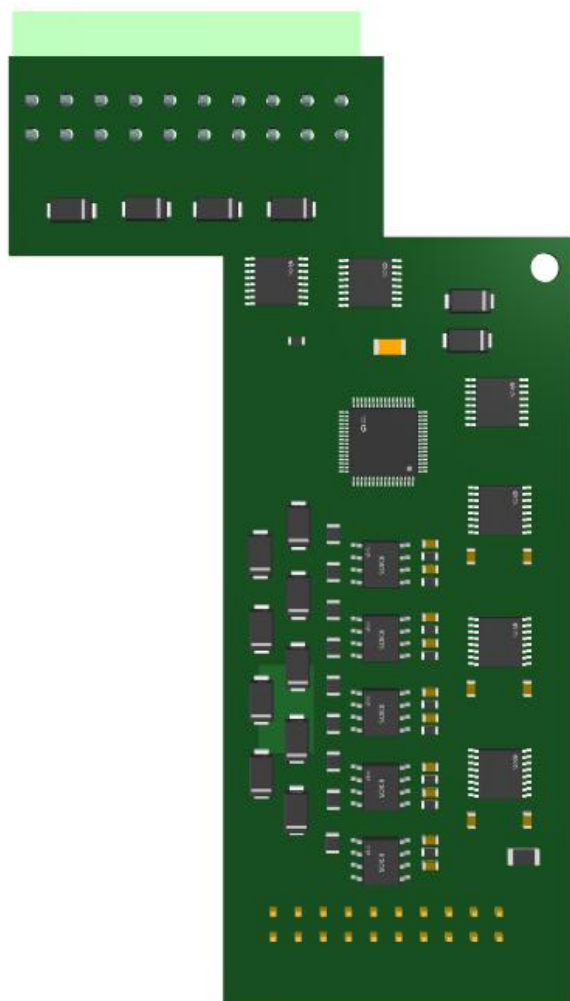


X Series I/O Modules

2CH CAN BUS Module X11



X11 User Manual

Version: V1.0

Date: 2025-4-9

Shenzhen Beilai Technology Co.,Ltd

Website: <https://www.bliiot.com>

Preface

Thanks for choosing BLIIOT X series I/O modules. These operating instructions contain all the information you need for operation of X series I/O modules.

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Disclaimer

This document is designed for assisting user to better understand the device. As the described device is under continuous improvement, this manual may be updated or revised from time to time without prior notice. Please follow the instructions in the manual. Any damages caused by wrong operation will be beyond warranty.

Revision History

Revision Date	Version	Description	Owner
2025/4/9	V1.0	Initial Release	PH

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1 Introduction

1.1 Overview

X11 is an industrial-grade CAN BUS communication expansion module specifically designed for the ARMxy series ARM embedded computers. The module features electrical isolation, overvoltage protection, ESD protection, fault protection, and overcurrent protection circuit designs to ensure stability and reliability in complex industrial environments.

X11 provides 2 CAN bus communication channels, significantly expanding the I/O capabilities of the ARMxy series embedded computers.

The two CAN channels support baud rates up to 1000 Kbps and 5000 Kbps, operating reliably even in harsh environments.

1.2 Technical Specifications

Name	Parameter	Description
Power Supply	Operating Power	Internal Voltage
	Working Voltage	12V-24V
	Power Consumption	0.5W
CAN	Channel	2 Channels
	Transmission Mode	CAN BUS
	Maximum Baud Rate	Nominal Bit Rate: 1000Kbps Data Bit Rate: 5000Kbps
	Flow Control	Not supported
	Impedance	45KΩ
	Measured Distance and Operating Baud Rate	200 meters (baud rate = 500 Kbps)
	Multi-Node Communication	Support
	Logic Level	Logic "1": 3.5V Logic "0": 1.2V
	Maximum Output Current per Channel	100mA (26°C)
	Isolation Protection	2KVrms (built-in)
	Communication Cable Requirements	Shielded twisted pair cable
Certifications	EMC	IEC 61000-4-2 (ESD) Level 3

		IEC 61000-4-4 (EFT) Level 3
		IEC 61000-4-5 (Surge) Level 3

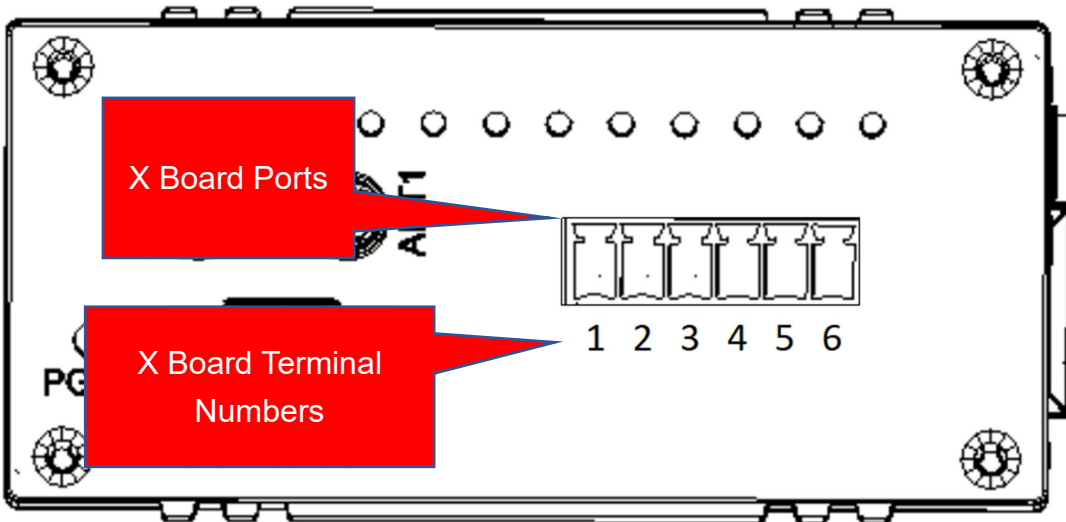
1.3 Model Selection

No.	Name	Model	Signal Type
1	2 channel CAN BUS module	X11	Differential signal

2 Wiring

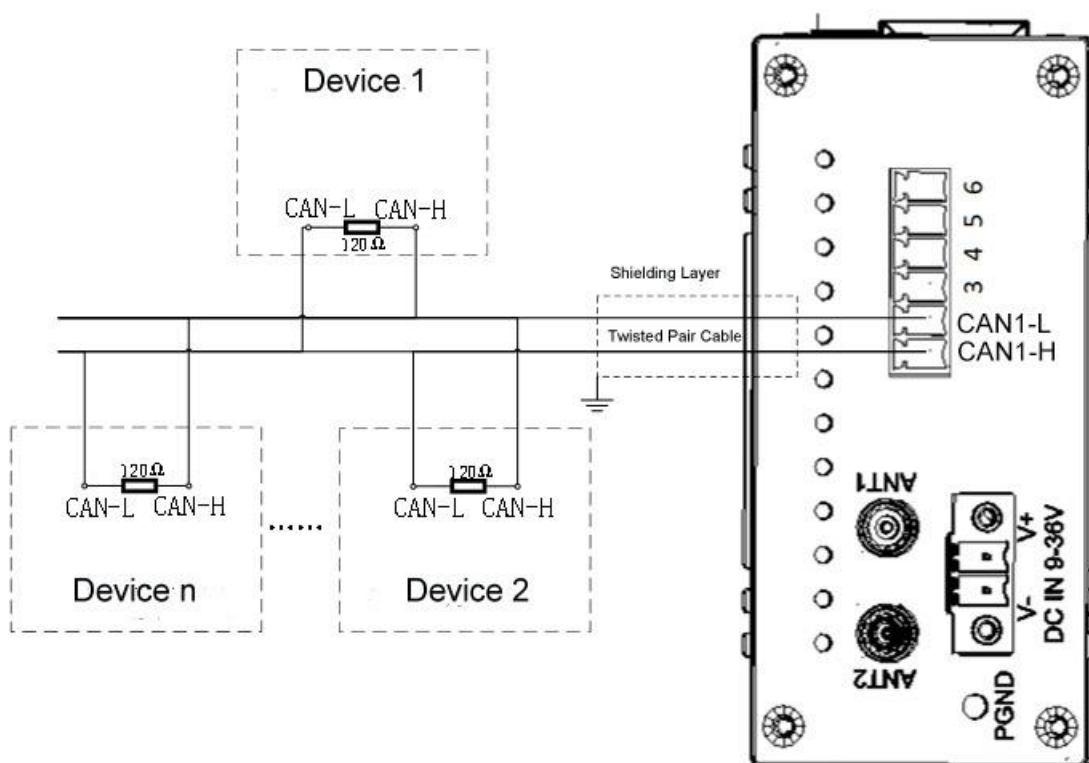
2.1 Terminal Definitions

Notice: Please refer to the product's label for the specific terminal numbering sequence.



Terminal NO.	Definition	Description	Terminal NO.	Definition	Description
1	Channel 1 - H	CAN1-H	4	Channel 0 - H	CAN0-H
2	Channel 1 - L	CAN1-L	5	Channel 0 - L	CAN0-L
3	GND	Ground Terminal	6	GND	Ground Terminal

2.2 Connection Example



3 Warranty Terms

- 1) This equipment will be repaired free of charge for any material or quality problems within one year from the date of purchase.
- 2) This one-year warranty does not cover any product failure caused by man-made damage, improper operation, etc

4 Technical Support

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