CH0X0 Evaluation Kit, Rev 1.0

Designed for CH010, CH020, CH040, and CH040MP



Property: public Web: www.hipnuc.com



© 2016-2023 Beijing Hipnuc Electronic Technology Co., Ltd. All rights reserved. Information contained in this document may change without notice

Document Revision History

Version	Date	Author	Note
V1.0	2023年9月4日	HiPNUC	Initial Release

CH0X0_EVK User Manua

- 1 Introduction
 - 1.1 Resources
 - 1.2 Basic Information
 - 1.3 Ordering Information
- 2 Electrical and Mechanical
 - 2.1 Dimension
 - 2.2 Interface
 - 2.2.1 Type-C
 - 2.2.2 UART1
 - 2.2.3 UART2
 - 2.2.4 DB9 Female Connector
 - 2.2.5 Expansion Interface 2.54mm Pin Header
- 3 Technical Support

1. Introduction

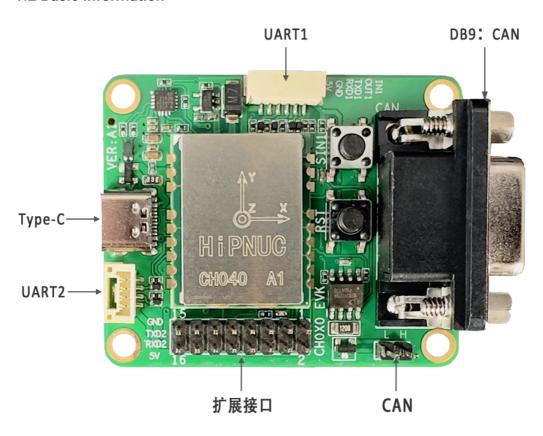
CH0X0_EVK is an evaluation kit specifically designed to interface with the CH0X0 series attitude sensors. It features a variety of interfaces and test circuits, making it convenient for users to quickly evaluate and test the product.

CH0X0 is intended solely for users' quick evaluation of the product and is not recommended for direct use in products.

1.1 Resources

- · Onboard USB to Serial Chip CP2102N
- Type-C、UART、Expansion interface
- IMU/VRU/AHRS Module (CH0X0)
- · Onboard CAN chip

1.2 Basic Information

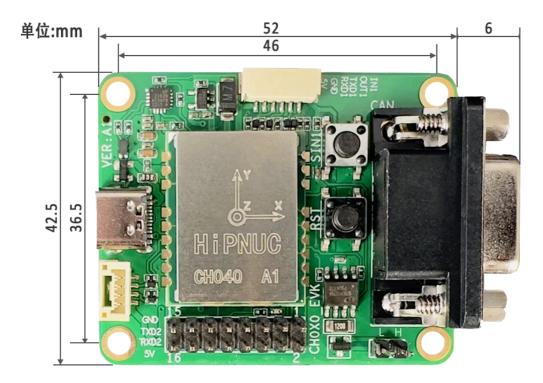


1.3 Ordering Information

名称	型号
Attitude Module + Evaluation Kit	CH010_EVK
Attitude Module + Evaluation Kit	CH020_EVK
Attitude Module + Evaluation Kit	CH040_EVK
Attitude Module + Evaluation Kit	CH040MP_EVK

2. Electrical and Mechanical

2.1 Dimension



2.2 Interface

2.2.1 Type-C

Users can connect this interface to a PC using the provided cable and quickly evaluate this product through PC software. Before using it, you need to install the CP210N driver, with a default baud rate of 115200. The download address is

CP210x USB to UART Bridge VCP Drivers - Silicon Labs (silabs.com)

2.2.2 UART1

UART1 uses a 1.25mm connector with the model A1257WR-S-6P, which can be directly connected to the user's serial device. The default baud rate is 115200, and the pinout is as follows:

Number	Name	Description
1	VCC	Power 3.6-5.2V
2	GND	GND
3	RXD1	UART1 Receive
4	TXD1	UART1 Transmit
5	SYNC_OUT1	Synchronous Output
6	SYNC_IN1	Synchronous Input

Refer to the CH0X0 User Manual for instructions on using the synchronous feature

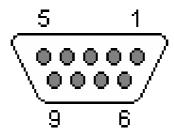
2.2.3 UART2

UART2 uses a 1.25mm connector with the model A1257WV-S-4P, which can be directly connected to the user's serial device. The default baud rate is 115200, and the pinout is as follows:

NumberName	Name	Description
1	VCC	Power 3.6-5.2V
2	RXD2	UART2 Receive
3	TXD2	UART2 Transmit
4	GND	GND

2.2.4 DB9 Female Connector

DB9 for CAN Interface, Default Baud Rate 500K



Number	Name	Description
2	CAN L	CAN Low
3	GND	GND
7	CAN H	CAN High

默认不带120欧姆电阻,可与PCAN直接相连

2.2.5 Expansion Interface - 2.54mm Pin Header

Number	Name	Description
1	TXD1	UART1Transmit
2	RXD1	UART1Receive
3	TXD2	UART2 Transmit
4	RXD2	UART2 Receive
5,6,8	NC	Reserved
7,13,15	GND	GND
9	SYNC1_OUT	Synchronous Output
10	SYNC1_IN	Synchronous Input
11	105	Reserved
12	NRST	Reset, Active Low
14,16	VCC	3.6-5.2V

3. Technical Support

For new product information and technical support, please follow the official WeChat account and website



