Document Information

Version	Date	Author	Description
1.0	Oct 30, 2024	Hipnuc	Initial release
1.1	Mar 3, 2026	Hipnuc	Added new models and updated the appearance and pin definitions

Contents

1 Overview

The EVAL HI04 is an evaluation board designed for HI04 series modules, enabling rapid functional verification and performance evaluation. It is equipped with two Molex connectors, J1 and J2, and can communicate with a host through a USB-to-Molex cable assembly or an open-end cable assembly. During use, the EVAL HI04 should be rigidly mounted to the user device or test fixture.

2 Ordering Information

2.1 Model Information

Table 1: Model Information

Part Number	Name	Description
EVAL HI04M0-MI0	HI04M0-MI0 Evaluation Board	Evaluation board for HI04M0-MI0
EVAL HI04M3-MI0	HI04M3-MI0 Evaluation Board	Evaluation board for HI04M3-MI0
EVAL HI04S2-MI1	HI04S2-MI1 Evaluation Board	Evaluation board for HI04S2-MI1
EVAL HI04S3-MI1	HI04S3-MI1 Evaluation Board	Evaluation board for HI04S3-MI1

2.2 Contact Information

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3 Related Documents

1. HI04 Datasheet

2. Command and Programming Manual

3. STEP File

4. GUI Software and Reference Examples

4 Specifications

4.1 Absolute Maximum Ratings

Table 2: Absolute Maximum Ratings

Parameter	Limit	Description
Mechanical Shock	2000 g	Duration < 1 ms
Storage Temperature	-40 ℃ to 85 ℃	
ESD (HBM)	15 kV	JEDEC/ESDA JS-001
Input Voltage (VDD)	6.0 V	
I/O Pin Voltage to GND	-0.3 V to 3.3 V	
CAN H or CAN L Voltage to GND	±36 V	

4.2 Mechanical Dimensions and Pin Definitions

All dimensions are in mm.
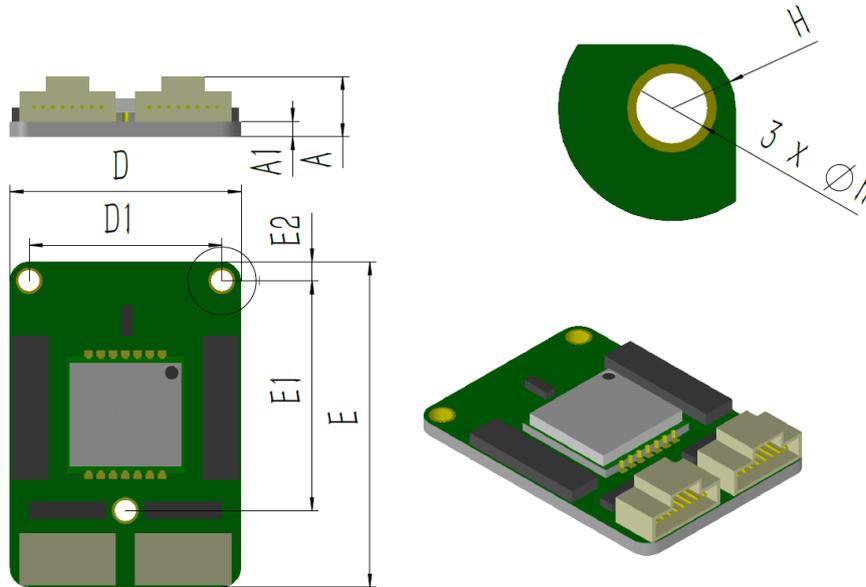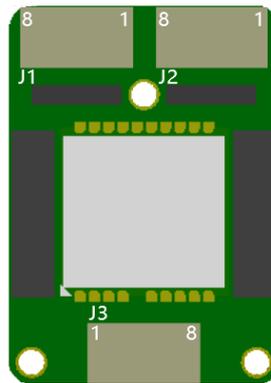
4.2.1 EVAL HI04 Dimensions

Figure 1: HI04 Evaluation Board Dimensions

Table 3: HI04 Evaluation Board Dimensions

Symbol	Min (mm)	Typ (mm)	Max (mm)
D	23.7	24	24.3
D1	19.9	20	20.1
E	33.7	34	34.3
E1	23.9	24	24.1
E2	1.8	2	2.2
A	6.1	6.3	6.5
A1	1.5	1.6	1.7
H	Φ1.9	Φ2	Φ2.1

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4.2.2 EVAL HI04 Pin Definitions

The pin definitions of connectors J1 and J2 are listed in Tables 4 to 6.

Table 4: J1 Pin Description for EVAL HI04MX/SX

Pin Number	Pin Name	Description
1	UART1_TX	UART1 transmit
2	UART1_RX	UART1 receive
3	GND	Power ground
4	NRST	Reset pin. Driving this pin low resets the module. Connection to a host GPIO is recommended; it may be left floating if unused.
5	IO1/SYNC_IN/PPS	Synchronization input. Can accept an external trigger signal, such as a GNSS PPS signal.
6	IO2/SYNC_OUT	Synchronization output. Can be used as a Data Ready signal.
7	GND	Power ground
8	VDD	Power input, 3.3 V to 5.0 V

Table 5: J2 Pin Description for EVAL HI04MX

Pin Number	Pin Name	Description
1	NC	Reserved, leave unconnected
2	NC	Reserved, leave unconnected
3	CAN H	CAN high
4	CAN L	CAN low
5	NC	Reserved, leave unconnected
6	NC	Reserved, leave unconnected
7	GND	Power ground
8	VDD	Power input, 3.3 V to 5.0 V

Table 6: J2 Pin Description for EVAL HI04SX

Pin Number	Pin Name	Description
1	UART2_TX	UART2 transmit
2	UART2_RX	UART2 receive
3	CAN H	CAN high
4	CAN L	CAN low
5	UART4_RX	UART4 receive
6	UART4_TX	UART4 transmit
7	GND	Power ground
8	VDD	Power input, 3.3 V to 5.0 V

5 Cable Assemblies

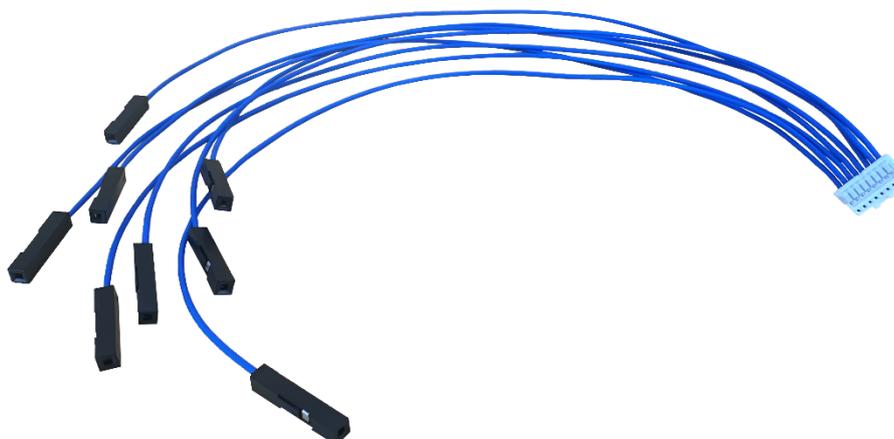## 5.1 Molex A (501330-0800) to 2.54 mm Header (Dupont) Cable Assembly

Figure 2: Molex A (501330-0800) to 2.54 mm Header (Dupont) Cable Assembly

Note 1: Cable length: 30 cm

5.2 USB to Molex A (501330-0800) Cable Assembly

Figure 3: USB to Molex A (501330-0800) Cable Assembly

Note 2: This cable assembly is suitable for EVAL HI04 products. The cable length is 1 m, and it integrates a USB-to-UART (TTL-level) converter.

Note 3: Driver download: CP210x USB to UART Bridge VCP Drivers