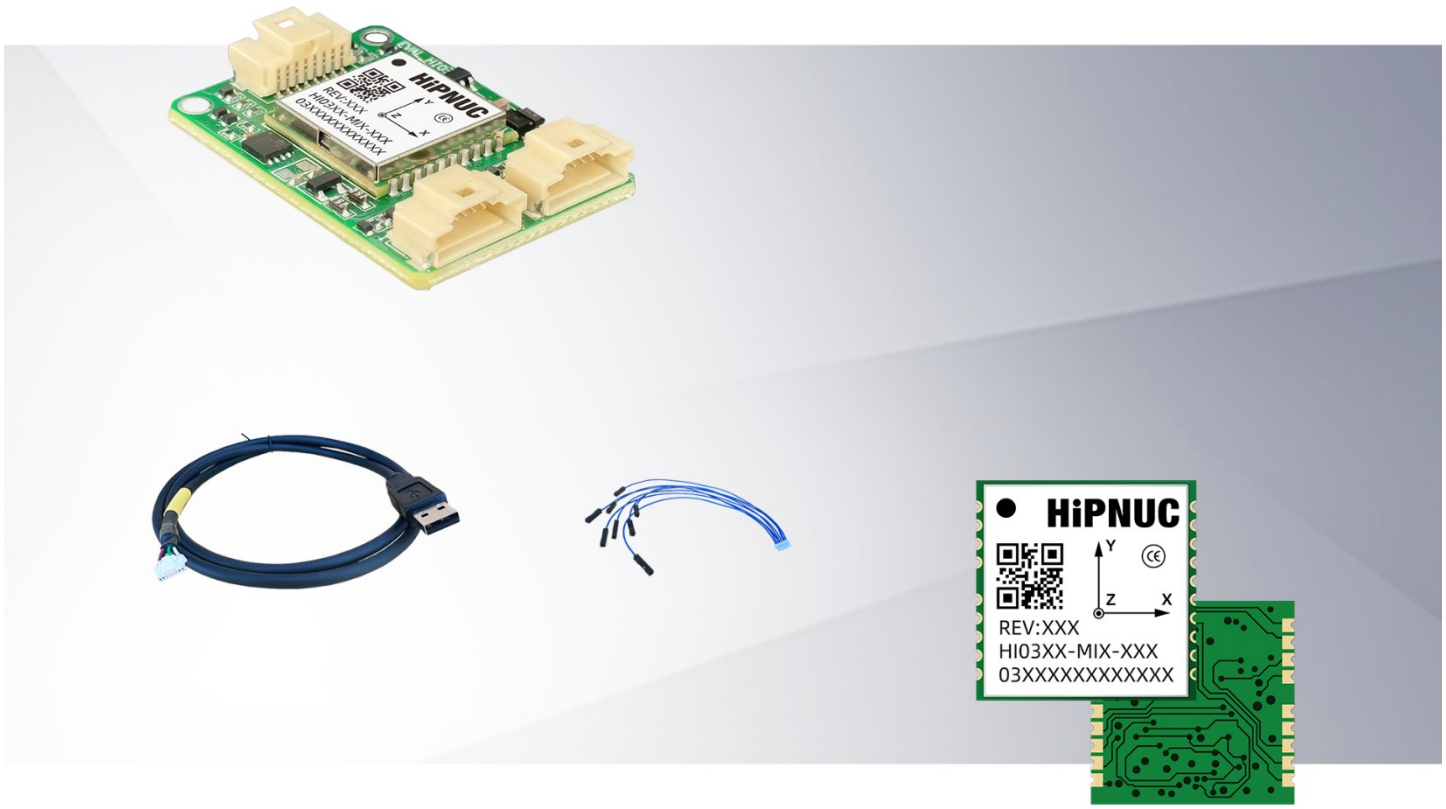

Document Information

Version	Date	Section	Changes
1.0	3/2/2025	-	Initial

1 OVERVIEW

EVAL HI03 is a simplified evaluation board designed for quickly evaluate HI03 series attitude sensors. It has three Molex connectors (J1,J2,J3) for communication with host devices via compatible USB-to-Molex cables or OPEN wiring harnesses. The EVAL HI03 must be rigidly mounted to user equipment during operation

2 SELECTION

2.1 Model Information

Table 1: Model Information

Part Number	Name	Description	Note
EVAL HI03R2-MI1	HI03R2-MI1 Evaluation Board		
EVAL HI03R3-MI1	HI03R3-MI1 Evaluation Board		

2.2 Contact us

1. Email: overseas1@hipnuc.com
2. web: www.hipnuc.com

3 DOCUMENTATIONS

1. HI03 Data Sheet
2. Command&Programming Manual
3. Step File
4. GUI and Example Driver

4 SPECIFICATIONS

4.1 Operating

Table 2: Absolute Maximum Ratings

Parameters	Limit	Comment
Mechanical	2000g	Duration <1ms
Storage Temperature	-40℃-85℃	
ESD HBM	15KV	JEDEC/ESDA JS-001
Input Voltage	3.6-6.5V	
IO To GND	-0.3-3.3V	

4.2 Mechanical &Pin Definitions

All Dimensions in mm units.

4.2.1 Dimensions

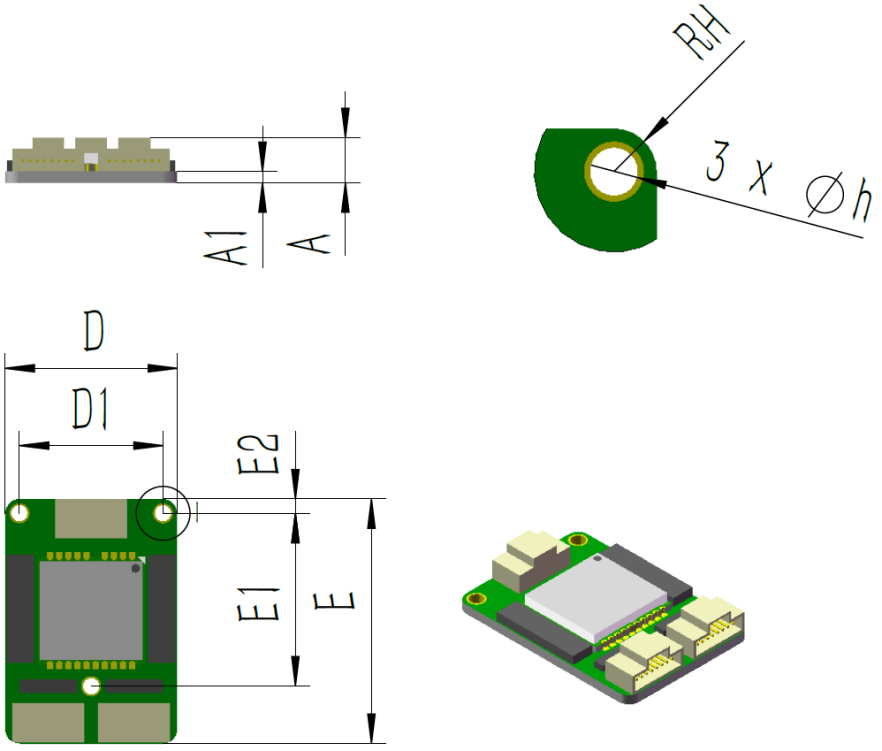

Figure1: EVAL HI03 Mechanical Dimension

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

4.2.2 EVAL HI03 Pin Definitions

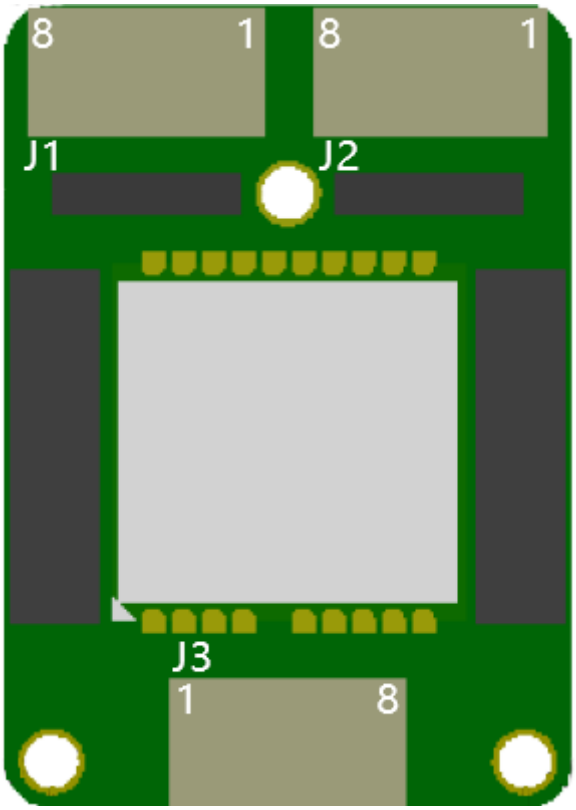

Table 3: EVAL HI03 Pin Functional

Pin Number	Pin Name J1	Pin Name J2	Pin Name J3	Note
1	UART1_TX	UART2_TX		
2	UART1_RX	UART2_RX		
3	GND	CAN H	SPI_MOSI	
4	NRST	CAN L	SPI_MISO	
5,	IO1/SYNC_IN/PPS	UART3_RX/I2C_SDA	SPI_SCK	
6	IO2/SYNC_OUT	UART3_TX/I2C_SCL	SPI_CS	
7	GND	GND	GND	
8	VDD	VDD	VDD	

5 CABLES

5.1 Molex A (501330-0800) Dupont Header Cable

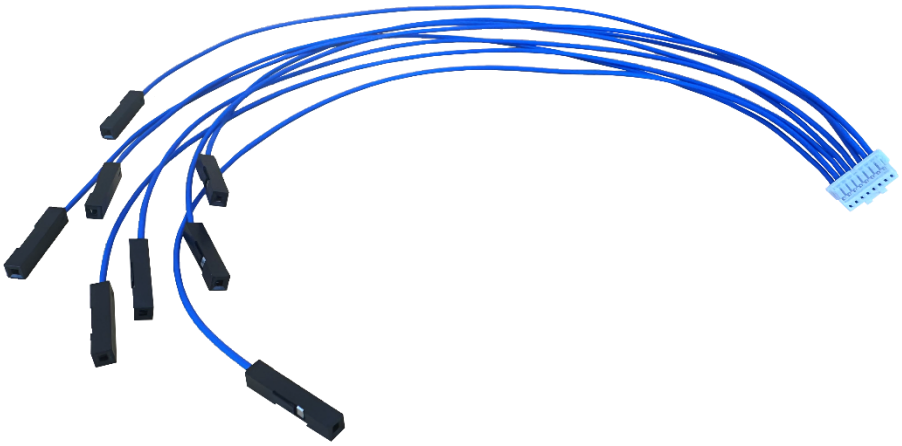

Figure2: 501330-0800 To Dupont Cable

Note1: Cable length 30cm

5.2 USB to Molex A (501330-0800) Cable

Figure3: USB to Molex A (501330-0800) Cable

Note1: Compatible with EVAL HI03XX products. 1m length, integrated USB-to-UART (TTL) converte.connect J1/J2

Note2: Driver download [CP210x USB to UART Bridge VCP Drivers - Silicon Labs (silabs.com)]