1 Features

1.1 Hardware

- High-performance IMU array
- Factory calibration for scale factor, cross-axis, and bias
- Gyro bias instability lower to 2.5° /h
- Accelerometer bias instability up to 30 µg
- Fully symmetric design
- Multi-function I/O signals (sync input/output, alarm, etc.)
- Excellent vibration robustness
- Integrated temperature sensor
- Compact surface-mount package for easy integration
- RoHS and CE compliant/certified

1.2 Software

- Adaptive EKF fusion algorithm with up to 1000 Hz output and low latency
- Excellent dynamic tracking with strong vibration suppression
- Effective suppression of linear acceleration effects
- Startup time < 2 s
- Supports multiple protocols including Binary, CANopen, and Modbus
- No external configuration required; outputs data immediately
- Rich set of user configuration commands
- Multi-function GUI (Support UART and RS232 only)
- Supports ROS, C, Qt, and other reference software

2 Applications

- Precision instrumentation
- Platform stabilization and control
- Construction machinery
- Downhole instrumentation
- Low-speed autonomous robots

3 Description

3.1 Product Appearance

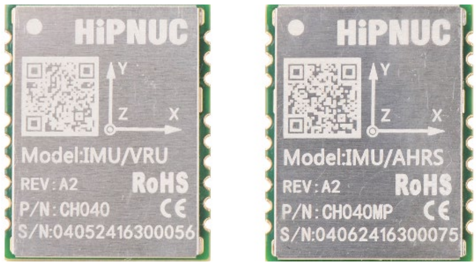

Figure1: CH040

3.2 System Block Diagram

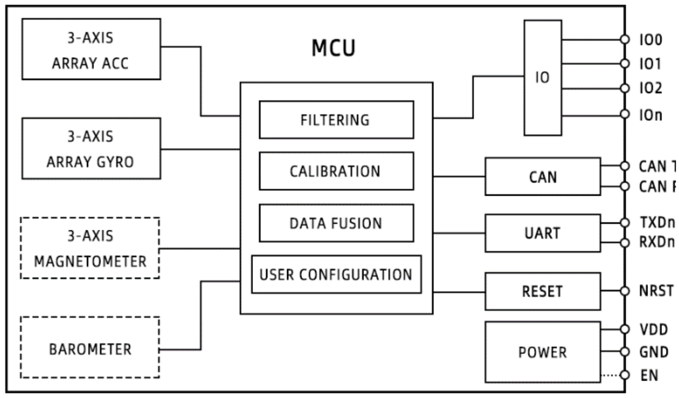

Figure2: Functional Block Diagram

Note1: Dashed blocks indicate features not supported by all models; see the product selection table (Table 1).

3.3 Overview

The CH040 series is an IMU/VRU/AHRS sensor built from an array MEMS IMU together with a magnetometer and barometer. It incorporates proprietary adaptive extended Kalman filtering, IMU noise dynamic analysis, and motion-state analysis algorithms to maintain attitude accuracy under high dynamics and reduce heading drift.

Each sensor is carefully compensated at the factory for temperature (selected models), bias, scale factor, and cross-axis alignment.

CH040 series sensors transmit data via a UART interface and provide extensive user configuration options. If a CAN interface is required, users must integrate an external CAN transceiver circuit.

The CH040 series can be synchronized to a host system via an external trigger, and it can also time-align with external systems such as radar and cameras using its sync output.

The multifunction PC GUI enables rapid product evaluation, including (but not limited to) module configuration, data visualization, firmware upgrade, and data logging.

For model selection and ordering information, see Table 1 and Table 2.

Table of Contents

4 Product Selection

Table 1: Selection

P/N	Model	IMU Array	Auxiliary Sensors	Notes
CH040	IMU/VRU Module	4	-	
CH040MP	IMU/AHRS Module	4	Magnetometer + Barometer	

5 Ordering Information

5.1 Ordering Information

Table 2: Ordering Information

Part Number	Name	Description	Notes
CH040	IMU/VRU Module	6DoF, 2.5° /h, 30 μg, 4-array	
CH040MP	IMU/AHRS Module	6DoF + Magnetic + Pressure, 2.5° /h, 30 μg, 4-array	

5.2 Contact Information

Products can be ordered via the following channels:

1. Email: sltech@ms28.hinet.net
2. Tel: +886-02-89699610
3. Website: https://sealandtech.com.tw
4. LINE: Sea Land Technology

6 Revision History

6.1 Applicable Scope

6.1.1 Firmware Version

Some features described in this document are only supported in firmware version 1.5.4 or later. Please contact us for details.

6.1.2 Hardware Version

This document applies to modules with hardware revision A2 or later. The hardware revision history is as follows:

Table 3: Hardware Revision Changes

P/N	Hardware Version	Change Description	Notes
CH040	A0	Initial release	
	A1	Adjusted shield-can pins	
	A2	In A1, reserved pins became spare I/O; UART3 was brought out as spare; the shield can added QR code, SN, and other markings.	
CH040MP	A0	Initial release	
	A2	In A0/A1, reserved pins became spare I/O; UART3 was brought out as spare; the shield can added QR code, SN, and other markings.	

6.2 Document Version Information

Table 4: Version

Version	Date	Change Description
1.0	2024-04-23	Initial release
1.1	2024-07-15	Updated pin descriptions and wiring
1.2	2024-07-17	Updated multiplexing description of multifunction IO pins and datasheet formatting
1.3	2024-10-22	Updated F1 model/specs in Sections 9.1 and 9.4
1.4	2024-10-25	Updated recommended PCB footprint
1.5	2024-11-21	Updated product dimensions (Section 7.14) and sync signal description (Section 9.2)

6.3 Related Documents and Development Kit

1. Command & Programming Manual
2. CAE / Package files
3. CH040-EVK evaluation board user manual and design files
4. CE/RoHS and other certification documents
5. PC GUI and reference software

7 Specifications

Unless otherwise noted, all tests are performed at 25° C with a 5 V supply. Gyro full scale is 2000° /s, accelerometer full scale is 12 g, magnetometer full scale is 2 Gauss, and the sample size is 8 pcs.

7.1 Absolute Maximum Ratings

Table 5: Absolute Maximum Ratings

Parameters	Limit	Comment
Mechanical Shock	2000g	Duration <1ms
Storage Temperature	-40℃-85℃	
ESD HBM	2KV	JEDEC/ESDA JS-001
Input Voltage	6.5V	
IO To GND	-0.3-5V	

7.2 Recommended Operating Conditions

Table 6: Recommended Operating Conditions

Parameters	Condition	Min	Nom	Max	Unit	Note
Input Voltage		3.2	-	5.5	V	
Power Consumption	CH040/CH040MP			305	mW	
Operating Temperature		-40	-	85	℃	
Gyroscope Full Scale Range		125	2000	2000	° /s	1
Accelerometer Full Scale Range		3	12	24	g	1
Startup Time				2	s	2

Note1: To configure other ranges, refer to the Command & Programming Manual.
Note2: Startup time is the time from power-off to valid data output. Keep the module stationary during startup.

7.3 Interface Parameters

Table 7: Interface Parameters

Interf	Parameters	Condition	Min	Nom	Max	Unit	Note
UART(TTL)	Serial Baud Rate		9600	115200	921600	bps	
	Start Bits		0	1		bit	
	Data Bits		0	8		bits	
	Stop Bits			1		bit	
	Parity			None		bit	
	Output Data Rate		0	100	1000	Hz	1
	Logic Level	High	2.0	3.3	3.6	V	
		Low			0.6		
CAN	Serial Baud Rate		125	500	1000	kbps	2
	Output Data Rate		5	100	200	Hz	3
	Logic Level	High	2.0	3.3	3.6	V	
		Low			0.6		
NRST(RESET)	Logic Level	High	2.0	3.3	3.6	V	
		Low			0.6		
	Reset Pulse Width		140			ms	
IO	Logic Level	High	2.0			V	
		Low			0.6		
	Latency (Trigger)	From trigger to data transmission			800	us	4

Note1: The sensor supports 1, 5, 10, 50, 100, 200, 250, 500, and 1000 Hz data output.
Note2: Supported CAN bit rates are 125k, 250k, 500k, and 1000k.
Note3: For CAN communication, the sensor supports 5, 10, 50, 100, and 200 Hz data output.
Note4: For multifunction I/O operation and configuration, refer to the Command & Programming Manual.

7.4 Gyroscope

Table 8: Gyroscope Parameters

Parameters	Condition	Product	Min	Nom	Max	Unit	Note
Full Scale Range				2000		°/s	
Resolution				16bit			
Scale Factor	100°/s	CH040/CH040MP		<280	350	ppm	1
Nonlinearity	Best-fit line, Fs = 2000°/s		-0.05	-	0.05	%Fs	2
3 dB Bandwidth				116		Hz	
Sampling Rate				1000		Hz	
Bias Instability	Allan Variance	CH040/CH040MP		2.5		°/h	3
Bias Repeatability	Allan Variance	CH040/CH040MP		0.05		°/s	3
Angle Random Walk	Allan Variance	CH040/CH040MP		0.3		°/√h	3
Bias over Temperature -40-85℃	Z Y X			0.015 0.05 0.03	0.035 0.18 0.08	°/s	4
Accel Sensitivity (g-sensitivity)	All three axis			0.1		°/s/g	

Note1: Measured as the average of 10 turns in each direction on a rate table; this value may change after user soldering—refer to actual performance.
Note2: Maximum deviation from the best-fit line within the specified range
Note3: Average across test samples; see 7.9 Allan variance curves
Note4: Measured on a rate table in a temperature chamber with temperature ramp < 3°C/min; see Figure 9 temperature compensation curves for details

7.5 Accelerometer

Table 9: Accelerometer Parameters

Parameters	Condition	Product	Min	Nom	Max	Unit	Note
Full Scale Range				12		g	
Resolution				16bit			
Initial Bias					10	mg	1
Nonlinearity	Best-fit line, Fs = 3 g			0.5		%Fs	2
3 dB Bandwidth				145		Hz	
Sampling Rate				1600		Hz	
Bias Instability	Allan Variance	CH040/CH040MP		30		ug	3
Bias Repeatability	Allan Variance	CH040/CH040MP		1.5		mg	3
Random Walk	Allan Variance	CH040/CH040MP		0.04		m/s√h	3
Bias over Temperature	-40-85°C			1	2.5	mg	4

Note1: This value may change after user soldering; refer to actual performance
Note2: Maximum deviation from the best-fit line within the specified range
Note3: Average across test samples; see 7.9 Allan variance curves
Note4: Measured on a rate table in a temperature chamber with temperature ramp < 3° C/min; see Figure 9 temperature compensation curves for details

7.6 Magnetometer

Table 10: Magnetometer Parameters

Parameters	Condition	Min	Nom	Max	Unit	Note
Full Scale Range			2	8	Gauss	
Resolution	Fs=2G		2		mGauss	
Sampling Rate			200Hz			
Linearity	Best-fit line, Fs = 2 G		0.1		Fs%	

7.7 Barometer

Table 11: Barometer Parameters

Parameters	Condition	Min	Nom	Max	Unit	Note
Full Scale Range		300	-	1200	hPa	
Resolution			± 0.006		hPa	
Sampling Rate			64Hz			
Accuracy			± 0.06		hPa	

7.8 Temperature Sensor

Table 12: Temperature Sensor Parameters

Parameters	Condition	Min	Nom	Max	Unit	Note
Full Scale Range		-104	-	150	℃	
Offset error			±1		K	

7.9 Allan Variance Curves

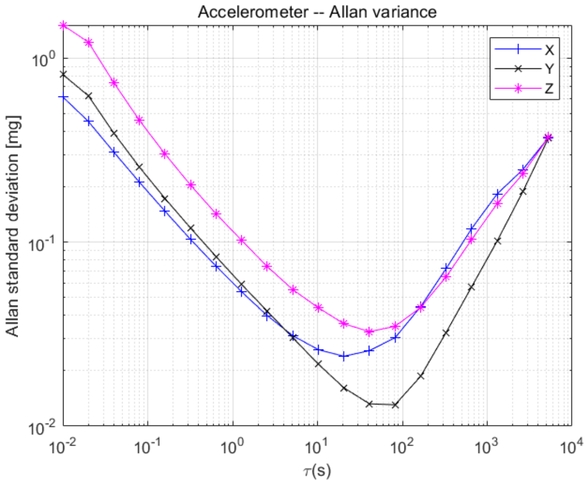

Figure3: CH040 Accelerometer Allan Variance

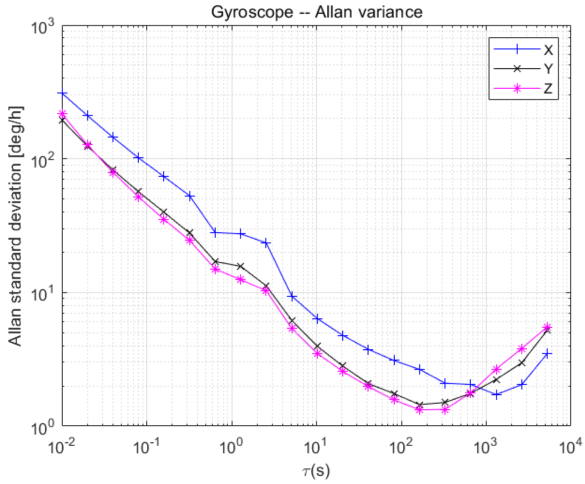

Figure4: CH040 Gyroscope Allan Variance

7.10 Fusion Parameters

Table 13: Fusion Parameters

Parameters	Value
Pitch	±90°
Roll	±180°
Yaw	±180°
Resolution	0.01°

7.11 Attitude Accuracy

Table 14: Attitude Accuracy

Parameters	Condition	Product	Min	Nom	Max	Unit	Note
Pitch/Roll (static)				0.1	0.2	°	1
Pitch/Roll (dynamic)				0.1	0.2	°	1
Static heading drift (6DoF)	Stationary for 2 h			0.1	0.2	°	2
Dynamic heading drift (6DoF)		CH040/CH040MP		5		°	3
Heading with magnetic aiding (AHRS)		CH040MP		2	3	°	4
Heading rotation error (6DoF)	Rotation at 100° /s	CH040/CH040MP			1.3	°	1,5

Note1: May be affected after soldering; refer to actual performance
Note2: Module stationary on a level surface for 2 h
Note3: Measured after 1 hour of motion on an indoor cleaning robot (1 σ)
Note4: Measured after magnetometer calibration with no magnetic interference nearby; the product must be configured to AHRS mode.
Note5: Cumulative heading error after 10 continuous turns on a rate table

7.12 Mechanical and Environmental Specifications

Table 15: Mechanical and Environmental Specifications

Parameters	Product	Value
Dimensions	CH040/CH040MP	25X20X2.7mm
Weight	CH040/CH040MP	<2.5g
Shield Can Material		Nickel silver (copper-nickel-zinc alloy)
Vibration		1.0mm(10Hz-58Hz)&≤20g(58Hz-600Hz)
Environmental Compliance		RoHS Directive 2011/65/EU
CE		LVD Directive 2014/35/EU
Drop Test		Free-fall drop 3 times from a 75 cm high lab bench
Thermal Shock		Temperature ramps from -40° C to 85° C within 1 hour, repeated 5 times

7.13 Package Dimensions

All Dimensions in mm units.

7.13.1 CH040/CH040MP mechanical dimensions

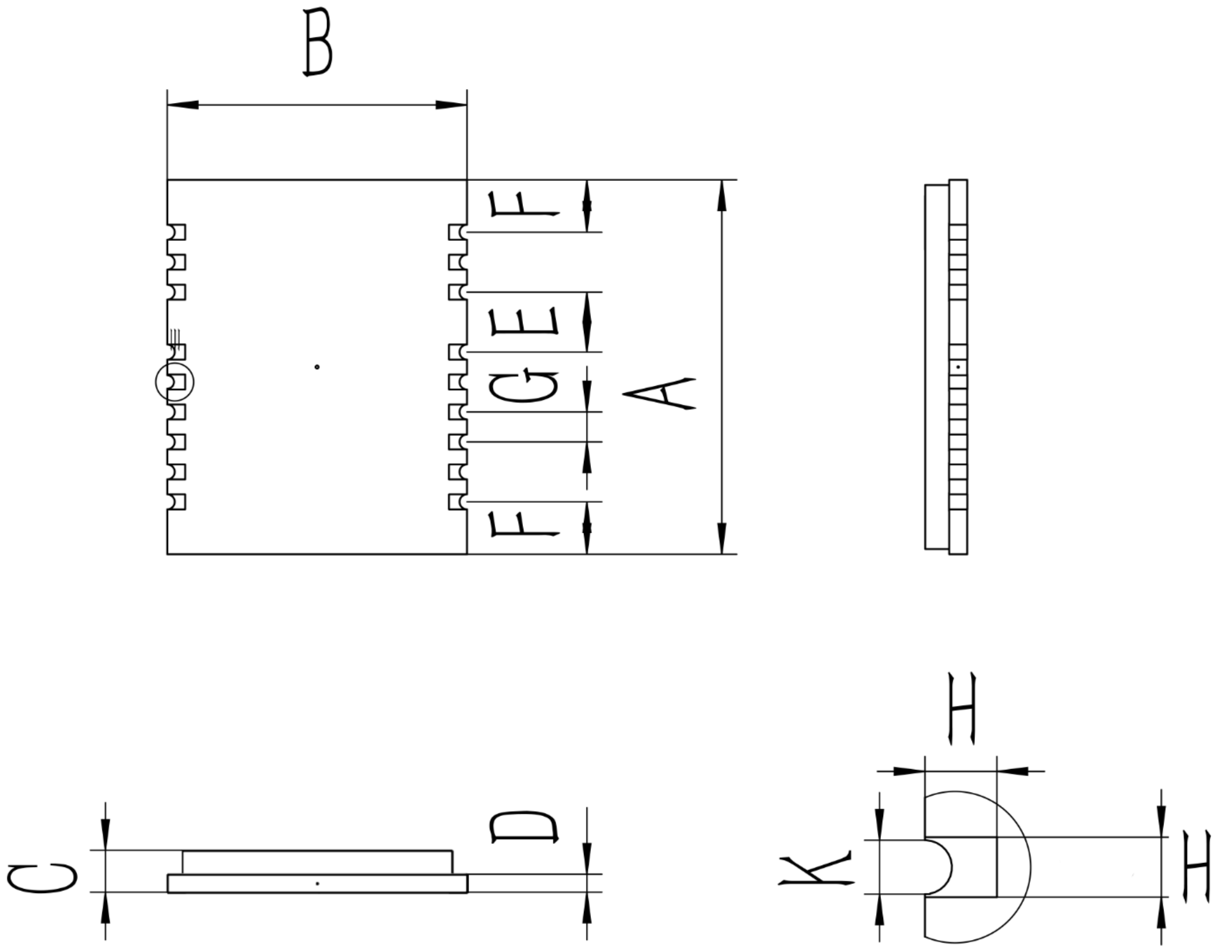

Figure6: CH040/CH040MP mechanical specifications

7.13.2 CH040/CH040MP mechanical dimension table

Symbol	Min(mm)	Typ(mm)	Max(mm)
A	24.8	25	25.2
B	19.8	20	20.2
C	2.5	2.6	2.7
D	0.9	1	1.1
E	3.9	4	4.1
F	3.3	3.5	3.7
G	1.9	2	2.1
H	1.1	1.2	1.3
K	0.85	0.9	0.95

7.13.3 CH040/CH040MP recommended PCB footprint

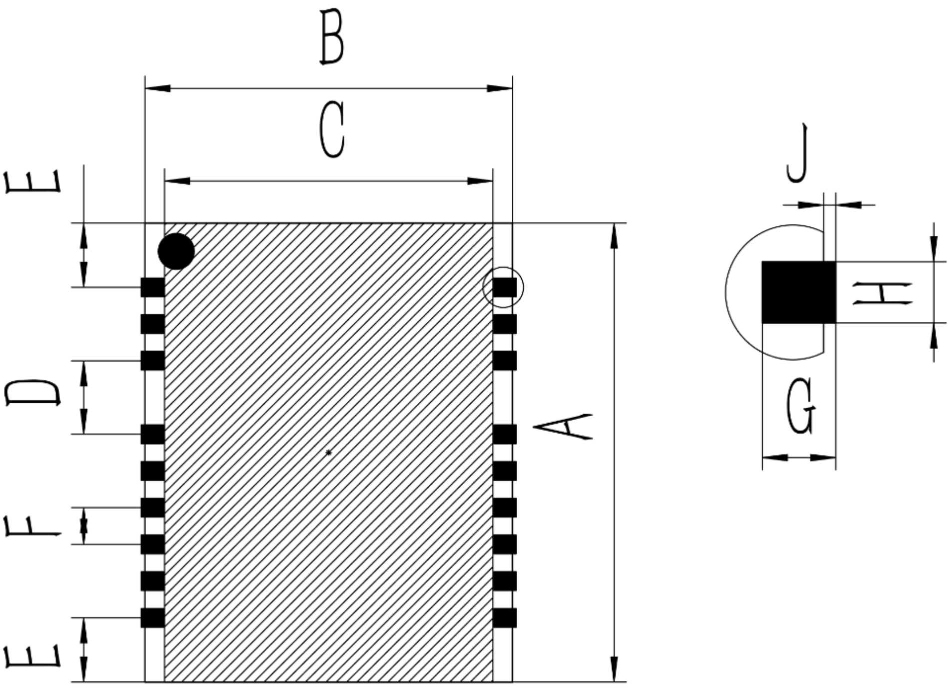

Figure7: CH040/CH040MP recommended PCB footprint

Note1: No copper pour or routing in the shaded area

7.13.4 CH040/CH040MP recommended footprint table

Symbol	Min(mm)	Typ(mm)	Max(mm)
A		25	
B		20	
C		18.6	
D		4	
E		3.5	
F		2	
G		1.4	
H		1.2	
J		0.4	

7.13.5 CH040/CH040MP pin assignment

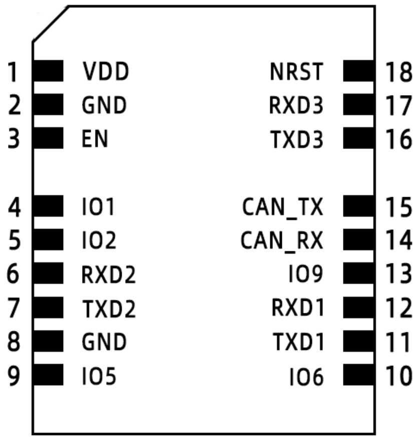

Figure8: CH040/CH040MP Pin Name

Table 16: CH040/CH040MP pin description

Pin Number	Pin Name	Type	Description	Note
1	VDD	POWER	Power input 3.3—5 V	
2	GND	POWER	GND	
3	EN	I	Enable pin (active high) with internal pull-up. Pull EN low to disable the module; leave floating if unused.	
4,5,9,10	IO1,IO2,IO5,IO6	I/O	PMUX1 SYNC_IN Sync input / PPS input; leave floating if unused PMUX2 SYNC_OUT Sync output; leave floating if unused PMUX3 LED LED run indicator; leave floating if unused PMUX4 SOUT_DIV Divided sync output; leave floating if unused PMUX5 ALARM Alarm output; leave floating if unused	1,
6	RXD2	I	Module UART2 RX (currently not used; leave floating)	
7	TXD2	O	Module UART2 TX (currently not used; leave floating)	
8	GND	POWER	GND	
11	TXD1	O	Module UART1 TX	2
12	RXD1	I	Module UART1 RX	
13	IO9	I/O	Reserved; leave floating	
14	CAN_RX	I	CAN_RX	3
15	CAN_TX	O	CAN_TX	
16	TXD3	O	Module UART3 TX (currently not used; leave floating)	
17	RXD3	I	Module UART3 RX (currently not used; leave floating)	
18	NRST	I	Reset pin (active low); leave floating if unused	

Note1: For details on multifunction I/O pins, refer to the Command & Programming Manual.
Note2: UART1 is primarily used for data output and module configuration.
Note3: To use CAN, an external CAN transceiver is required (e.g., TJA1044GT/3Z).

Table 17: Default functions of IO pins

IO	Function
IO1	PMUX1
IO2	PMUX2
IO5	PMUX3
IO6	PMUX4

7.13.6 CH040/CH040MP DK (USB output development board) dimensions

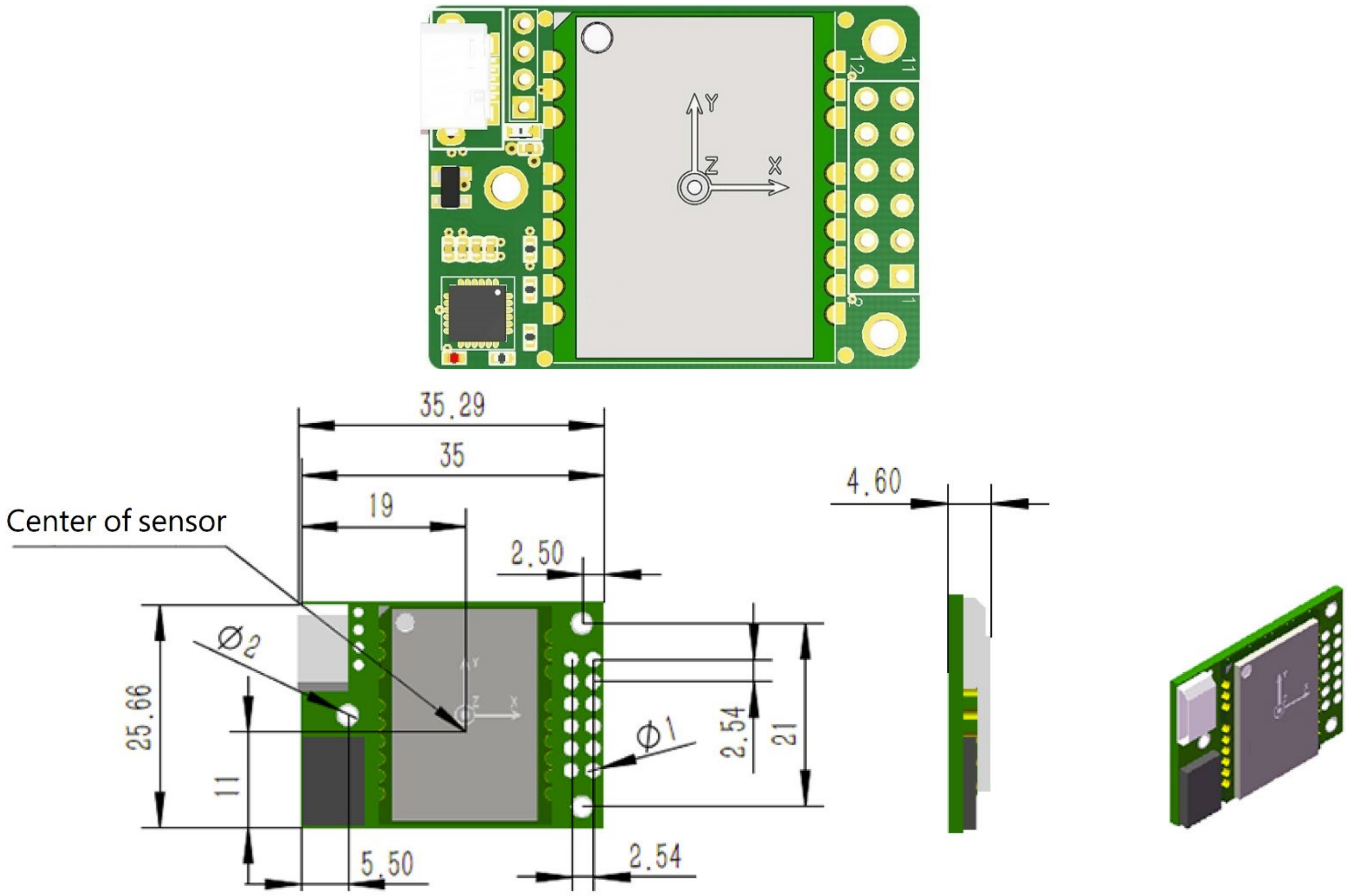

Figure9: CH040/CH040MP DK (Development Kit)

8 Coordinate System Definition

8.1 Coordinate Systems

The body frame uses a Right-Forward-Up (RFU) coordinate system, and the navigation frame uses an East-North-Up (ENU) coordinate system. The accelerometer and gyro axes are shown below:

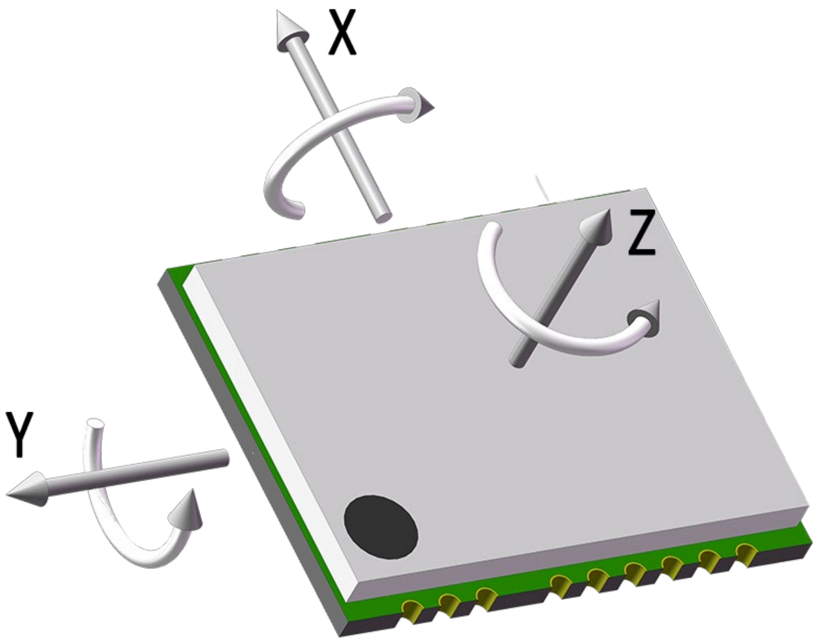

Figure10: CH040 Coordinate System

The Euler angle rotation order is ENU-312 (rotate about Z, then X, then Y). Definitions are as follows:

Rotation about Z-axis: Yaw (ψ), range: -180° to 180°
Rotation about X-axis: Pitch (θ), range: -90° to 90°
Rotation about Y-axis: Roll (φ), range: -180° to 180°

If the module is viewed as an aircraft, the positive Y-axis points toward the nose. When the sensor frame coincides with the inertial frame, the ideal Euler outputs are: Pitch = 0° , Roll = 0° , Yaw = 0° .

If you need to change the default sensor coordinate system, refer to the Command & Programming Manual.

8.2 Sensor Center-of-Gravity (CoG) Reference

Table 18: CH040 series sensor reference point (center)

Axis	X-offset	Y-offset	Z-offset	Unit
X	0	0	0	mm
Y	0	0	0	mm
Z	0	0	0	mm

9 Typical Reference Design

9.1 Power Supply

The CH040 series includes an onboard LDO and power filtering to minimize the impact of external supply noise. Users may power the module using an LDO or DC-DC converter within the 3.3—5 V range.

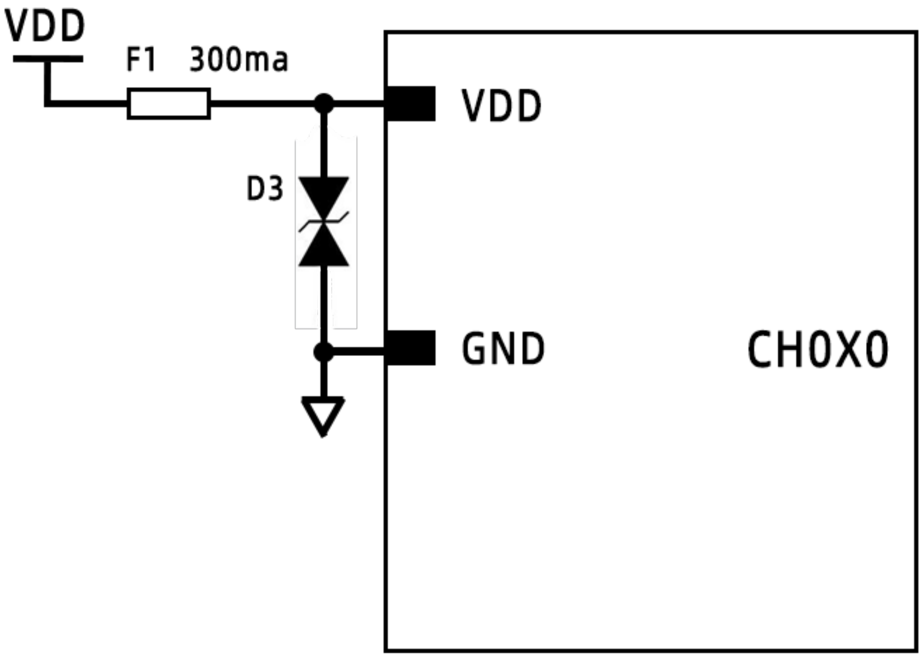

Figure11: CH040 power supply reference circuit

9.2 UART Communication

A 3.3 V logic-level host MCU is recommended. If UART communication with a 5 V or 1.8 V MCU is required, add a level shifter. We recommend 74LVCH1T45GW,125 provided it does not limit the baud rate.

9.2.1 UART minimum-system reference design

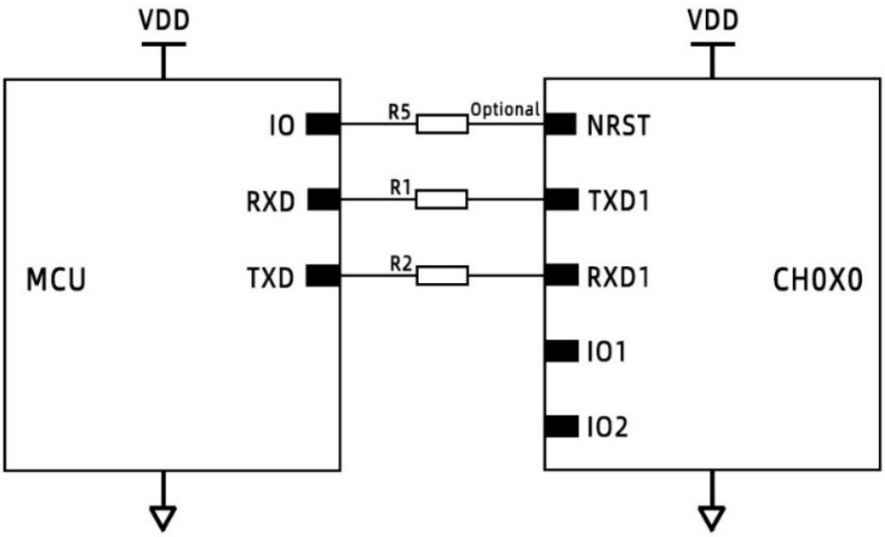

Figure12: CH040 UART communication reference schematic

9.2.2 UART communication (IMU synchronized to host)

In this connection method, IO1/IO2 are connected to the host system for data synchronization. They can be used independently; the choice depends on the host design.

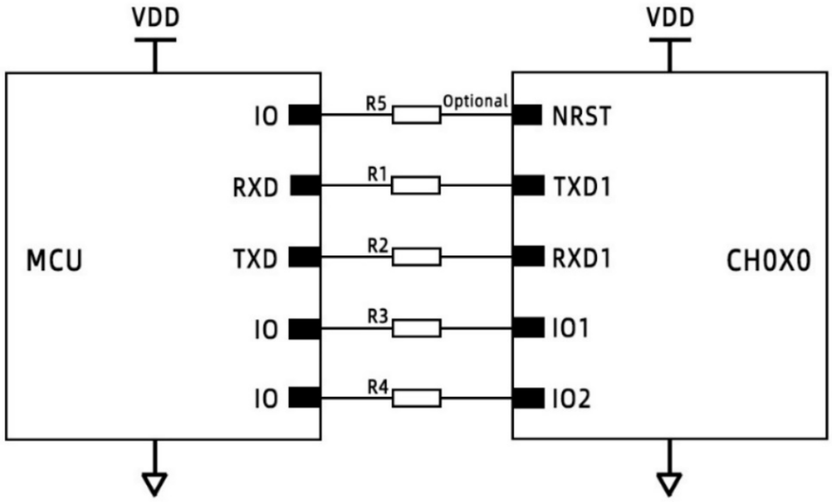

Figure13: CH040 UART communication (no sync)

Note1: If IO1 is used, set IO1 to the sync input function (PMUX1). The MCU pulse should be at the same frequency as the output data rate, or you can use GNSS PPS for synchronization. See the Command & Programming Manual for details.
Note2: If IO2 is used, set IO2 to the sync output function (PMUX2). The MCU can receive pulses at the same frequency as the output data rate (default) or at a different frequency. By default it is the same frequency and can be used as a Data Ready signal. See the Synchronization section and the Command & Programming Manual. This method is recommended for host synchronization.

9.2.3 UART communication (IMU synchronized to external systems)

CH040 supports synchronization with external systems (camera/LiDAR). Ensure a common ground between systems.
Connection Method 1: The IMU is connected to both the host and an external sync device.

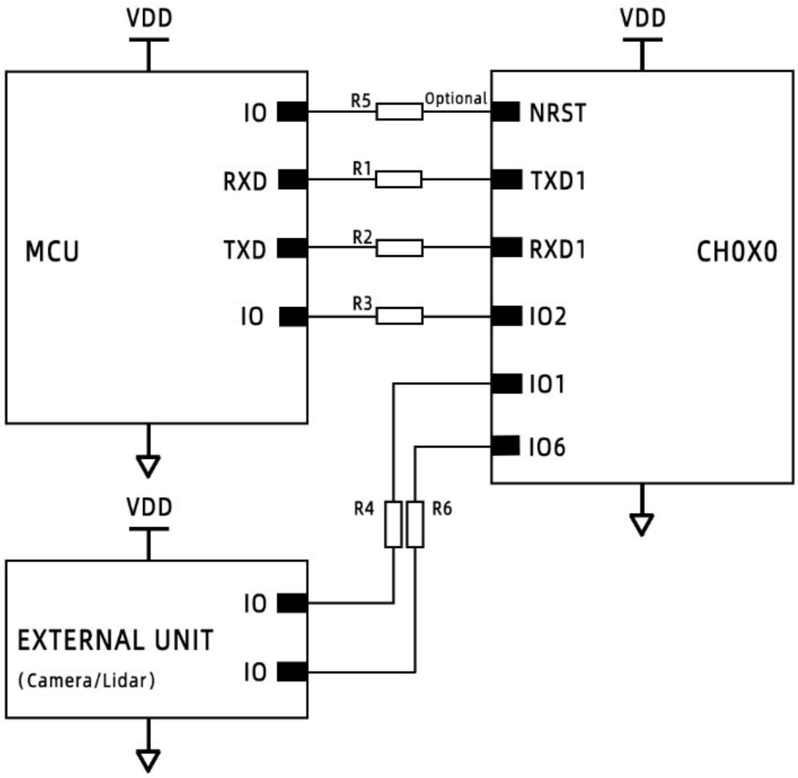

Figure14: CH040 UART communication with external system sync (1)

Note1: If IO2 is used, set IO2 to the sync output function (PMUX2). The MCU receives pulses at the same frequency as the output data rate and can use it as a Data Ready signal. See the Synchronization section and the Command & Programming Manual for details.

Note2: If IO1 is used, set IO1 to the sync input function (PMUX1). The MCU pulse should be at the same frequency as the output data rate, or you can use GNSS PPS for synchronization. See the Synchronization section and the Command & Programming Manual for details.

Note3: If IO6 is used, set IO6 to the divided sync output function (SYNC_OUT_DIV) to trigger devices such as cameras/LiDAR. Ensure the IO6 sync frequency is within the acceptable range of the external system.

Connection Method 2: The IMU is connected only to an external sync device.

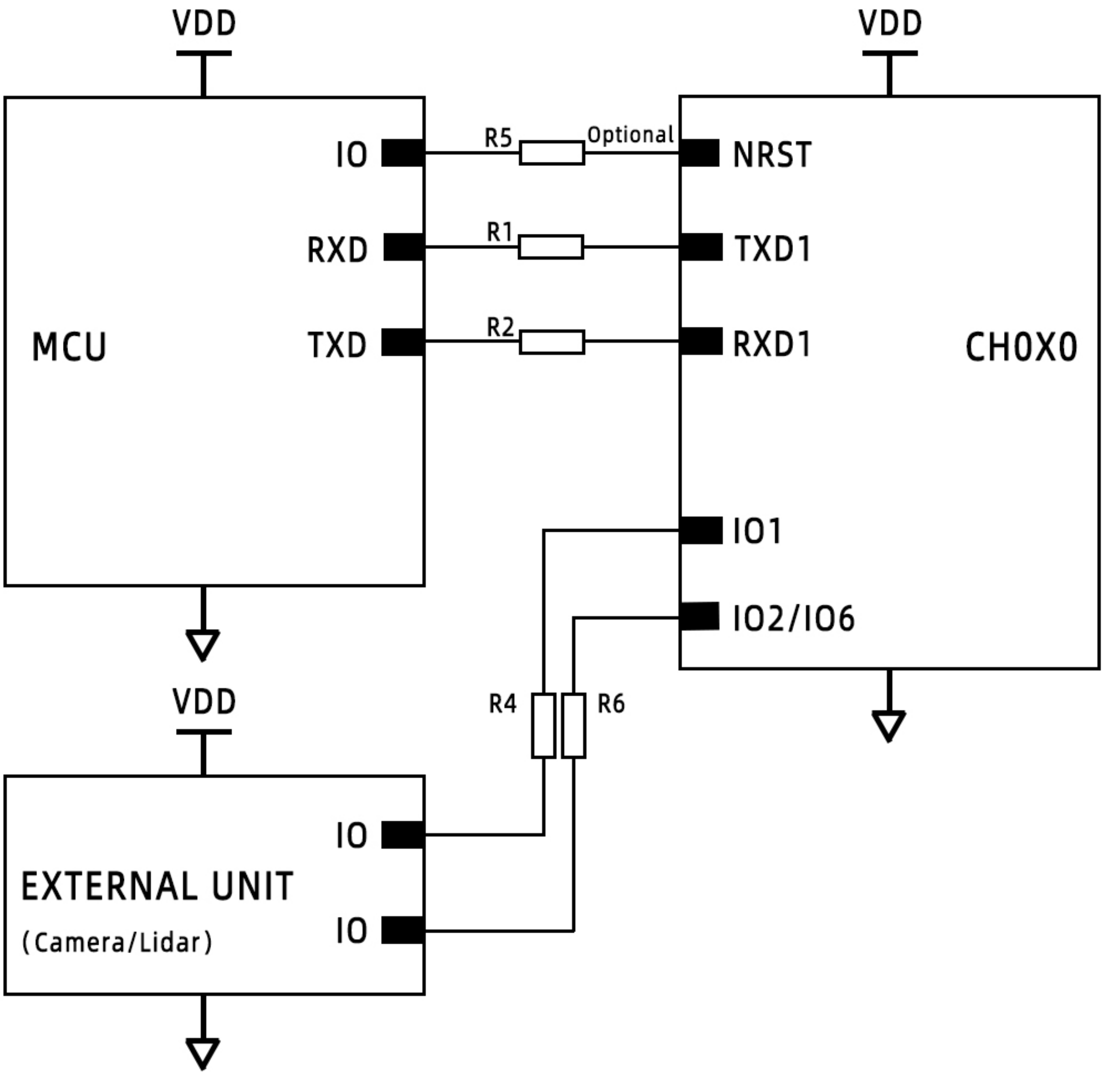

Figure15: CH040 UART communication with external system sync (2)

Note1: If IO1 is used, set IO1 to the sync input function (PMUX1). The MCU pulse should be at the same frequency as the output data rate, or you can use GNSS PPS for synchronization. See the Command & Programming Manual for details.
Note2: If IO2/IO6 are used, set IO2/IO6 to the sync output functions (PMUX1/PMUX4) to trigger devices such as cameras/LiDAR. Ensure the sync frequency is within the acceptable range of the external system.

9.3 CAN Communication

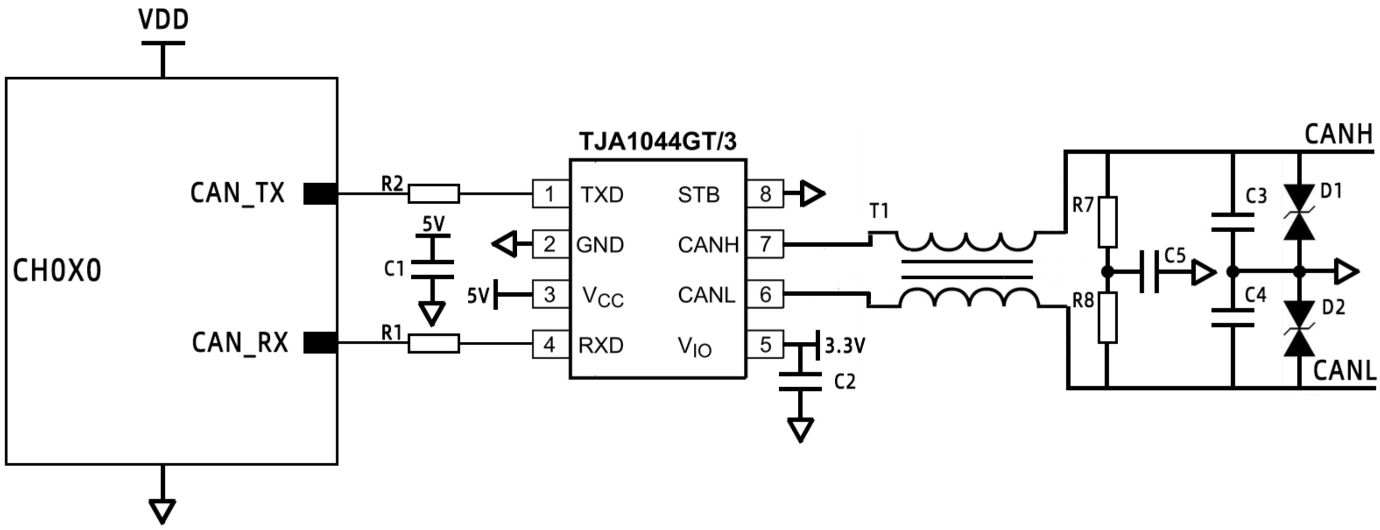

Figure16: CH040 series CAN communication reference circuit

Note1: R6 and R7 are CAN bus termination resistors (60.4 Ω). Solder them as needed for your system.

9.4 Reference Design BOM

Table 19: Reference design bill of materials

Item	Reference	Part	P/N	Vendor
Fuse	F1	300mA	JK-SMD0603-030-6	JK
TVS	D3	SMF5.0CA	SMF5.0CA	TWGMC
Resistor	R1,R2,R3,R4,R5,R6	1K	RC0402JR-071KL	YAGEO
Resistor	R7,R8	60.4Ω	RC1206FR-0760R4L	YAGEO
Capacitor	C1,C2	0.1uF	CC0402KRX5R7BB104	YAGEO
Capacitor	C3,C4	100pF	CC0402JRNPO9BN101	YAGEO
Capacitor	C5	1nF	CC0402KRX7R9BB102	YAGEO
Common Choke	T1	5.8kΩ@10MHz 100uH@100kHz 150mA	ACT45B-101-2P-TL003	TDK
TVS	D1,D2	SMBJ15CA	SMBJ15CA	BORN

10 Initial Configuration

CH040 is designed to require minimal configuration to cover most application scenarios. The default configuration meets many use cases, while additional options are provided for special scenarios.

10.1 Interface Default Configuration

Table 20: Interface Default Configuration

Interf	Parameters	Value	Unit	Note
UART	Serial Baud Rate	115200	bps	2
	Start Bits	1	bit	
	Data Bits	8	bits	
	Stop Bits	1	bit	
	Parity	None		1
	Protocol	Binary protocol (91)		
	Data Frame Rate	100	Hz	3
CAN	Protocol	CANopen		1
	Serial Baud Rate	500K	bps	2
	Data Frame Rate	100	Hz	3

Note1: To change the protocol, refer to the Command & Programming Manual.
Note2: To change the baud rate, refer to the Command & Programming Manual.
Note3: To change the output data rate, refer to the Command & Programming Manual.

10.2 Sensor Default Configuration

Table 21: Sensor Default Configuration

Parameters	Value	Unit	Note
Gyroscope Full Scale Range	±2000	°/s	1
3 dB Bandwidth	47	Hz	1
Accelerometer Full Scale Range	±12	g	1
3 dB Bandwidth	145	Hz	1
Magnetometer Full Scale Range	±2	Gauss	1
Mode	6DOF		1

Note1: To change range, bandwidth, mode, and other parameters, refer to the Command & Programming Manual.

11 Communication Protocols

11.1 Serial Binary Protocol

To make integration easier, we provide a rich set of serial protocols for users to choose from. For more details, refer to the Command & Programming Manual.

11.2 CAN

11.2.1 CANopen

The CAN interface complies with CANopen. All communication uses standard data frames and transmits data via TPDO1—7. Remote frames and extended data frames are not supported. All TPDOs use an asynchronous, time-triggered mode. For details, refer to the Command & Programming Manual.

11.2.2 J1939

The default CAN protocol is CANopen. For SAE J1939 support, please contact us.

12 Synchronization

If your system contains multiple subsystems such as LiDAR, cameras, and GNSS, data synchronization becomes critical. Our IMU supports sync pulse input and sync output to simplify integration. For details, refer to the Command & Programming Manual.

Note1: The IMU and the external sync system must share a common ground.

13 Soldering and Mounting

13.1 Reflow Profile

The recommended reflow profile is shown below with a peak temperature up to 250° C. Manual soldering is generally not recommended as it may affect module accuracy.

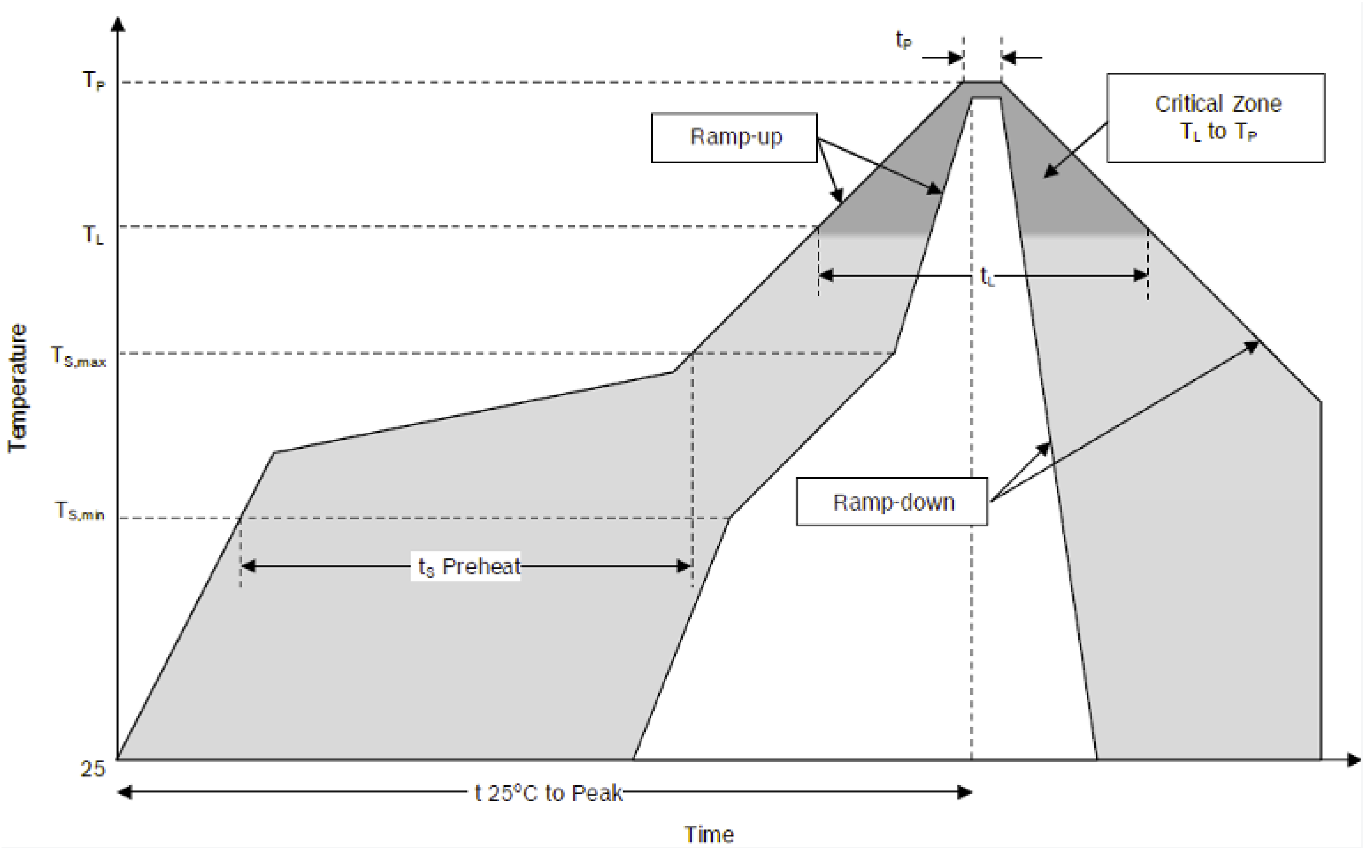

Figure17: SMT Temperature Profile

Table 22: Reflow profile parameter description

Specifications	Description
Average ramp-up rate (T_{Smax} to T_p)	3°C/s max
Temperature min (TSmin)	150°C
Temperature max (T_{Smax})	200°C
Time (TSmin to TSmax)	60-180s
Temperature (T_L)	170°C
Time (tL)	60-150s
Peak classification temperature (T_P)	250°C
Time within 5° C of actual peak temperature (tp)	20-40s
Ramp-down rate	6°C/min max
Time 25° C to peak temperature	8min max

13.2 Mounting Recommendations

In general, MEMS sensors are high-precision measurement devices combining electronic and mechanical structures. To achieve accuracy, efficiency, and mechanical robustness, consider the following recommendations when mounting the sensor on a PCB:

- It is recommended to mount the module level on the carrier under test.
- Do not place the sensor directly under or next to button contacts, as this can introduce mechanical stress.
- Do not place the sensor near high-temperature hot spots (e.g., controllers or graphics ICs), which can heat the PCB and the sensor. Also avoid locations with maximum mechanical stress (e.g., the center of a diagonal cross), as stress can bend the PCB and the sensor.
- Do not mount the sensor too close to screw holes. Avoid areas of the PCB that may exhibit resonance (vibration).

If the above recommendations cannot be fully met, performing a specific in-system offset calibration after PCB assembly may help minimize potential impacts.

14 Packaging

14.1 Tape Dimension

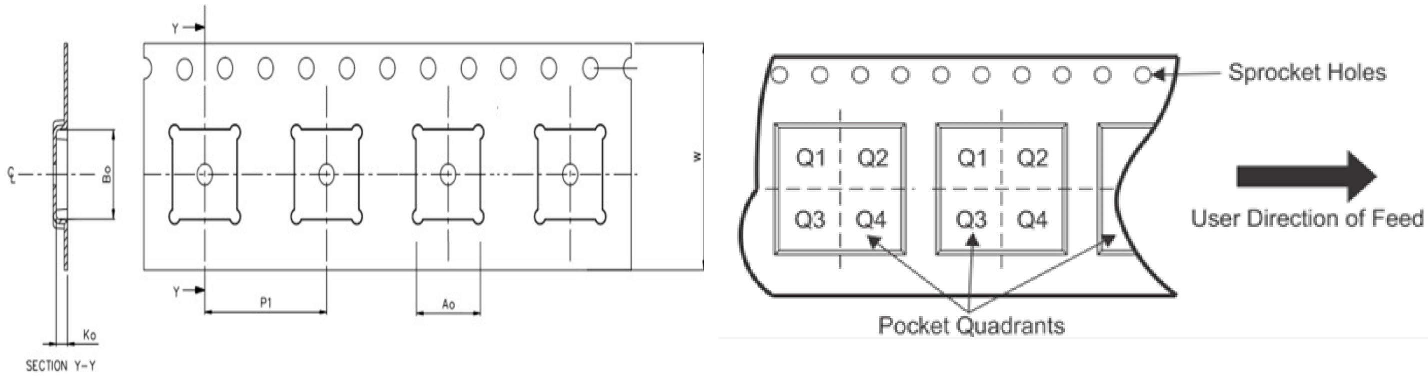

Figure18: Tape Dimension and pin 1

Table 23: Tape Dimension Information

Device	A0(mm)	B0(mm)	K0(mm)	P1(mm)	W(mm)
CH040/CH040MP	23	28	3.5	28	44

14.2 Reel Dimension

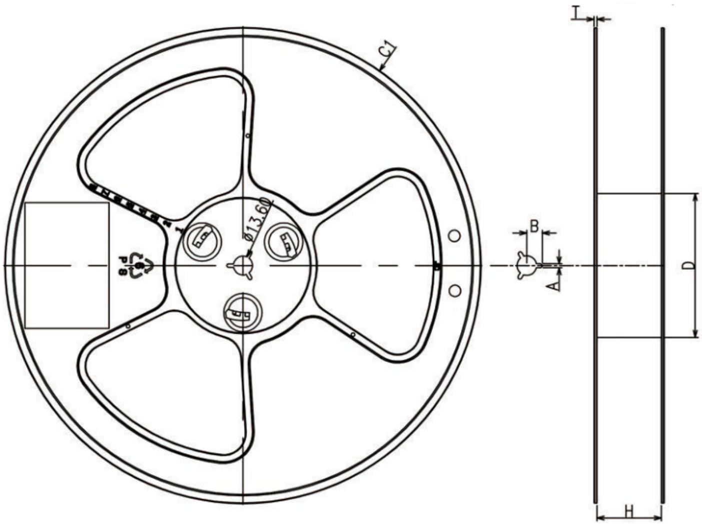

Figure19: Reel Dimension

Table 24: Reel Dimension Information

Device	SPQ(PCS)	Reel Diameter C1(mm)	Reel Width H(mm)	A(mm)	B(mm)	T(mm)	D(mm)
CH040/CH040MP	500	330	44.8	2.5	11	2.0	100

14.3 Bulk Packing Method

The CH040 series uses standard carton packaging.

Table 25: Packing

CH040 Reel Vacuumize Box

Table 26: Carton Dimensions

Device	SPQ(PCS)	L(mm)	W(mm)	H(mm)
CH040/CH040MP	500	360	360	55

