BHI3xx

Ultra-low power high performance Smart Sensor Hub with integrated sensors

BHI3xx Evaluation Setup Guide

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1 General description

This guide provides the tools and information needed to evaluate features of BHI360/BHI380/BHI385 (hereafter referred to as BHI3xx), on both Windows and Linux based systems.

Hardware and software requirements are described, and simple examples can be used to get started with the BHI3xx sensor. The examples can then be used as a reference to build custom examples for various tasks. Additionally, the setup can be used to evaluate custom firmware images developed using the Software Development Kit (see Reference 3).

Finally, the command line interface tool bhy2cli is introduced. This provides a simple and quick way of communicating to the BHI3xx device via a command line.

The examples provided are based on **COINES** ("**CO**mmunication with **IN**ertial and **E**nvironmental **S**ensors"), an evaluation software tool from Bosch Sensortec, which provides a low-level interface to Bosch Sensortec's Application board 3.0/3.1 connected to a BHI sensor shuttle board.

2 Software requirements

2.1 COINES

COINES is a software tool that enables users to evaluate sensors using the Bosch Sensortec Application Board.

1. Download the latest COINES software for your OS.
2. To install the COINES, follow the instructions below for the respective operating system.
   a. **Windows**
      Run the COINES installation package (.exe) to install the software.
   b. **Linux**
      Run the "./coines_v<*version*>.sh" with executable privilege in a shell to install the COINES software.
      Note: This requires an internet connection. Root privileges may be required to install dependencies.
3. After COINES is installed, install the USB driver for the application board. A prompt should follow the COINES installation to install this or can be installed later using the installer under COINES_SDK\v2.11.0\driver.

2.1.1 Linux and MacOS

Details about the operation of COINES can be under <COINES install path>\v2.11.0\doc\BST-DHW-AN013.pdf.

2.2 Firmware on the Application Board

The Application board ships with default firmware which may need an update depending on the time of update. In any case, it is recommended to update the board's firmware, instructions for which are available in the README.

2.2.1 Update COINES bridge firmware

BHy examples in COINES V2.11.0 and later version are only supported COINES bridge firmware Users need running "update_coines_ bridge_flash_fw_bat" file. The location of the file is in different paths depending on the Application Board used, "<COINES install path>\v2.11.0\firmware\app3.0\coines_bridge" or "<COINES install path>\v2.11.0\firmware\app3.1\coines_bridge".

2.3 BHI3xx Sensor API

The Sensor API should be updated separately. The latest Sensor API repository on Github contains the host drivers to be used in the user's product, along with relevant application examples. Some of these examples, such as the bhy2cli tool, are also utilities to be used during the development and evaluation of the product. And for BHI360 Sensor API is available to be cloned or downloaded, and for BHI385 Sensor API is available to be cloned or downloaded. For evaluation, the sensorAPI examples can be compiled using the COINES environment, to do so, copy or clone the SensorAPI github files to <COINES install path>\v2.11.0\examples\<sensorAPI>.

2.4 BHI3xx CLI tool

The Application Board can be interfaced using a CLI tool using the bhy2cli example in this repository. It can be compiled from the source code by installing the compiler and toolchain described below, before compile the BHy2CLI project, you should clone or download the BHy2CLI source code to your local pc or server, take PC for example, perform this command:

git clone --recurse-submodules https://github.com/boschsensortec/BHy2CLI.git

The BHy2CLI folder structure:

```
BHy2CLI:
   +---docs
   +---scripts
   +---source
   +---submodules
   +---tools
```

docs: Contains release documents (User_Guide, CHANGELOG.md, Compatibility.txt, ...)

scripts: Contains batch files to clean, generate and download BHy2CLI executables/binaries

source: Holds the BHy2CLI source files.

submodules: Destination folder for package dependency modules.

tools: Contains initial automation tools.

2.5 BHI3xx Compiler and Toolchain

The following is a summary of the setup instructions in the previously installed COINES **<COINES install path>\v2.11.0\doc\BST-DHW-AN013.pdf** documentation. The system compiler is for executing examples from the PC interface in COINES. The toolchain allows cross-compilation to execute examples on the Application Board's MCU. The toolchain installation can be skipped if you only intend to run using the PC interface, for example if you just want to use the CLI tool.

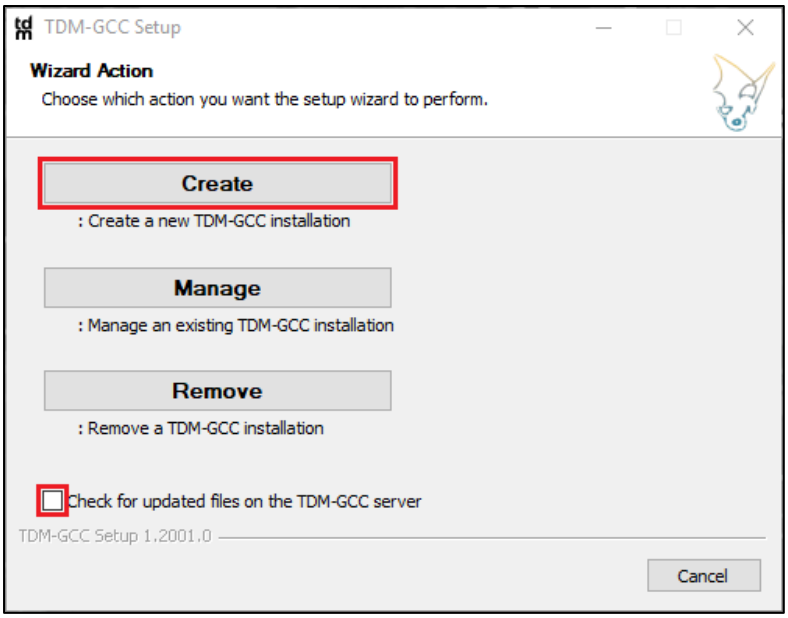
2.5.1 Windows

It is recommended to use these Software tools in Windows 7 or newer.

To set up the required software environment, execute the following steps:

1. Install the GCC compiler for Windows as part of the TDM32 bundle (for 32-bit Windows installations) or TDM64 bundle (for 64-bit Windows installations), which can be found here:

a. Uncheck the checkbox and click **Create**.



b. Read and accept the license agreement, then finish the installation with default options.

2. If you wish to run the Application Board in MCU mode (e.g. If you need to disconnect the device from a PC) download and install the GNU ARM Embedded Toolchain. Make sure you have checked 'Add path to environmental variable'.

2.5.2 Linux and MacOS

On a Debian or Redhat based Linux system, the COINES installer prompts for the installation of missing the dependencies e.g. gcc, make and libusb-dev packages. If due to some reason installation fails, the user can manually install the dependencies:

- Debian based distros - gcc, make, libusb-1.0-0-dev, dfu-util
- Redhat based distros - gcc, make, libusbx-devel, dfu-util
- MacOS - libusb, dfu-util

If you intend to run the COINES examples on Application Board's integrated MCU, download the latest version of GNU Embedded Toolchain for ARM for Linux and extract the package. Add the compiler to the PATH variable by editing $HOME/.bashrc or similar config file such as /etc/profile or /etc/environment.

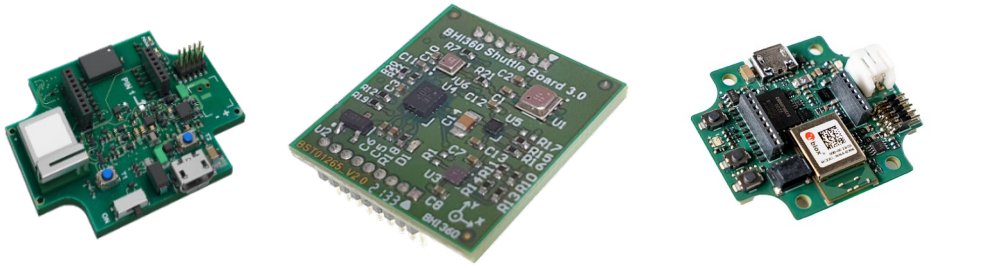
3 Hardware requirements

This section describes the hardware required for using COINES as an evaluation tool. The evaluation of BHI3xx requires two components which are usually delivered pre-mounted:

- Bosch Sensortec Application Board 3.0/3.1
- BHI3xx Shuttle Board

Additionally, a micro-USB-to-USB cable is required to connect the Application Board to a PC. See Figure 1 and Figure 2, which takes the BHI360 shuttle board as an example.

The Bosch Sensortec Application Board 3.0/3.1 is an evaluation device that supports most Bosch Sensortec sensors and allows users to change the sensor shuttle board freely.



Application Board 3.0 | BHI3xx Shuttle Board | Application Board 3.1

Figure 1: Required components.

Execute the following steps to set up the hardware components (if they are not already mounted):

1. Mount the BHI3xx shuttle board to the application board. Ensure that the pins are aligned correctly to avoid damaging the connector or bending the pins. Note that one header is 7-pin, and the other is 9-pin.

Figure 2: Mounting the shuttle board.

2. Once aligned, press down on the board to fit the Shuttle Board 3.0 onto the Application Board 3.0/3.1.
3. Connect the application board to your PC with a micro-USB-to-USB cable.
4. Turn on the Application Board by setting the power slider switch to the “on” position if the Application Board is 3.0

Under Windows, the correct connection of the application board as well as the installation of the necessary drivers can be confirmed by checking the device manager. The application board should now be visible under “BST Board” (see Figure 3).

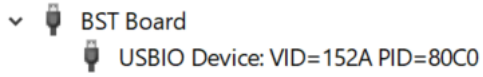


Figure 3: Checking the connection in Device Manager.

If update coines bridge firmware, device will be visible as Bosch Sensortec APP3.0/3.1 Board (see Figure 4).

Figure 4: Checking the connection in Device Manager

4 Building and executing examples

This section will guide you through the process of building and executing the example “bhy2cli”.

The following examples are included under < BHy2CLI Installation path>\.

1. Open a command prompt terminal or PowerShell terminal and navigate to the directory of the bhy2cli example.

```
>cd C:\BHy2CLI
```

2. To build the application, run:
   .*scripts**build.bat for TARGET PC*

   .*scripts**build_app30.bat for TARGET MCU_APP30*

   .*scripts**build_app31.bat for TARGET MCU_APP31*

The following examples use PC mode.

a. Windows

```
PS C:\BHy2CLI> .\scripts\build.bat
------------------------------------------------------------
          Updating Firmwares of BHI360, BHI380 and BHI385
------------------------------------------------------------
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360.fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_Aux_BMM150.fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_BMM150.fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_BMM150_BMP580_BME688
.fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_BMM150_HeadOrientati
on.fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_BMM350C.fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_BMM350C_BME688_IAQ.f
w
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_BMM350C_BMP580.fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_BMM350C_BMP580_BME68
8.fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_BMM350C_HeadOrientat
ion.fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_BMM350C_Poll.fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_BMM350C_Turbo.fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_BMP580_test_example.
fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_HWActivity.fw
.\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360_HWActivity_Turbo.fw
[ CC ] pc/coines_pc/platform/Windows/serial/sync_comm/sync_comm_windows.c
[ CC ] pc/coines_pc/platform/common/ble/simpleble-0.6.0/ble.c
[ AR ] libcoines-pc.a
[ LD ] decompressor
.\tools\decompressor\decompressor.exe
1 File(s) copied
```

b. Linux and MacOS

```
$ make
```

```
Platform: Linux / macOS
cc:  "/usr/bin/gcc".
[ MKDIR ] build/PC
[ CC ] parse.c
[ CC ] logbin.c
[ CC ] cli.c
[ CC ] bhy2cli_callbacks.c
[ CC ] common_callbacks.c
[ CC ] verbose.c
[ CC ] ../common/common.c
[ CC ] ../../source/bhy2.c
[ CC ] ../../source/bhy2_hif.c
[ CC ] ../../source/bhy2_parse.c
[ CC ] ../../source/bhy2_klio.c
[ CC ] ../../source/bhy2_pdr.c
[ CC ] ../../source/bhy2_swim.c
[ CC ] ../../source/bhy2_bsec.c
[ CC ] ../../source/bhy2_head_tracker.c
[ CC ] bhy2cli.c
[ MAKE ] coines-api
[ MKDIR ] build/PC
[ CC ] pc/coines.c
[ CC ] pc/comm_intf/comm_intf.c
[ CC ] pc/comm_intf/comm_ringbuffer.c
[ CC ] pc/comm_driver/usb.c
[ AR ] libcoines-pc.a
[ LD ] bhy2cli
```

3. Run the bhy2cli executable file.
   a. Windows

```
>bhy2cli.exe -h
```

   b. Linux and MacOS

```
$ ./bhy2cli -h
```

The output should match the following:

```
Host Interface : SPI
Copyright (c) 2025 Bosch Sensortec GmbH
Version 1.0.0 Build date: Nov  4 2025
Include sensor API with chip id: 0x7A
Include sensor API with chip id: 0x7C
Device found. Chip ID read 0x7A
Usage:
bhy2cli [<port>] [<port_name>] [<options>]
Options:
  -h OR help    = Print this usage message
  version
        = Prints the version
  -v OR verb <verbose level>
        = Set the verbose level. 0 Error, 1 Warning, 2 Infos
  -b OR ramb <firmware path>
        = Reset, upload specified firmware to RAM and boot from RAM
          [equivalent to using "reset ram <firmware> boot r" successively]
   -d OR flb <firmware path>
        = Reset, upload specified firmware to Flash and boot from Flash
          [equivalent to using "reset fl <firmware path> boot f" successively]
  -n OR reset   = Reset sensor hub
```

5 Command-line interface tool bhy2cli

The command-line interface tool bhy2cli is an application based on the BHy2CLI API. It is used to communicate with BHI3xx by using predefined commands that it translates to corresponding host interface commands. The requirements for using the tool are described in chapters 2 and 3.

Calls to the bhy2cli tool are structured as follows:

```
>bhy2cli <option1> <parameters1> <option2> <parameters2> …
```

There can be any number of <options> used subsequently and the same options can be used multiple times.

5.1 Overview

The implemented options with necessary parameters and short descriptions can be found through running command

```
>bhy2cli.exe -h
```

using windows prompt. Or running command

```
$ ./bhy2cli -h
```

using Linux terminal.

5.2 Getting started

To start using bhy2cli, the following minimal example set of commands can be used to get started:

1. Establish the hardware connections described in chapter 3.
2. Build the tool as described in the chapter 4 based on software requirements in chapter 2.
3. Use the “-b” option to reset, load a firmware to RAM and boot the device from RAM. In the BHI360 example below, the “.fw” file is located in a different directory as the bhy2cli executable.
    a. Windows
    ```
    > bhy2cli.exe -b .\submodules\bhi360\firmware\bhi360\Bosch_Shuttle3_BHI360.fw
    ```
    b. Linux
    ```
    $ ./bhy2cli -b ./submodules/bhi360/firmware/bhi360/Bosch_Shuttle3_BHI360.fw
    ```
4. Display general device information including the existing virtual sensors in the firmware.
    a. Windows
    ```
    > bhy2cli.exe -i
    ```
    b. Linux
    ```
    $ ./bhy2cli -i
    ```
5. Activate the virtual sensor “Game Rotation Vector” at 25 Hz to see the data provided by the device.
    a. Windows
    ```
    > bhy2cli.exe -c 37:25
    ```
    b. Linux
    ```
    $ ./bhy2cli -c 37:25
    ```

The following screen will appear.

```
Host Interface : SPI
Copyright (c) 2025 Bosch Sensortec GmbH
Version 1.0.0 Build date: Nov  4 2025
Include sensor API with chip id: 0x7A
Include sensor API with chip id: 0x7C
Device found. Chip ID read 0x7A
Reset successful
Uploading 130300 bytes of firmware to RAM
Uploading firmware to RAM successful
Waiting for firmware verification to complete
Boot Status : 0x38: Host interface ready. Firmware verification done.
[D][META EVENT WAKE UP]; T: 0.371671875; Firmware initialized. Firmware version 5991
[D][META EVENT]; T: 0.371671875; Firmware initialized. Firmware version 5991
Booting from RAM successful
```

```
Host Interface : SPI
Copyright (c) 2025 Bosch Sensortec GmbH
Version 1.0.0 Build date: Nov  4 2025
Include sensor API with chip id: 0x7A
Include sensor API with chip id: 0x7C
Device found. Chip ID read 0x7A
Product ID     : 89
Kernel version : 2380
User version   : 9794
ROM version    : 5166
Power state    : sleeping
Host interface : SPI
Feature status : 0x4a
Boot Status : 0x38: Host interface ready. Firmware verification done.
Virtual sensor list.
Sensor ID |                            Sensor Name |  ID | Ver |  Min rate |  Max rate |
----------+----------------------------------------+-----+-----+-----------+-----------|
        1 |            Accelerometer passthrough | 205 |   1 |    1.5625 |  400.0000 |
        3 |          Accelerometer uncalibrated | 203 |   1 |    1.5625 |  400.0000 |
        4 |             Accelerometer corrected | 241 |   1 |    1.5625 |  400.0000 |
        5 |                Accelerometer offset | 209 |   1 |    1.0000 |    1.0000 |
        6 |     Accelerometer corrected wake up | 192 |   1 |    1.5625 |  400.0000 |
        7 |  Accelerometer uncalibrated wake up | 204 |   1 |    1.5625 |  400.0000 |
       10 |              Gyroscope passthrough | 207 |   1 |    1.5625 |  400.0000 |
       12 |             Gyroscope uncalibrated | 244 |   1 |    1.5625 |  400.0000 |
       13 |                Gyroscope corrected | 243 |   1 |    1.5625 |  400.0000 |
       14 |                   Gyroscope offset | 208 |   1 |    1.0000 |    1.0000 |
       15 |                     Gyroscope wake up | 194 |   1 |    1.5625 |  400.0000 |
       16 |      Gyroscope uncalibrated wake up | 195 |   1 |    1.5625 |  400.0000 |
       28 |                        Gravity vector | 247 |   1 |    1.5625 |  400.0000 |
       29 |              Gravity vector wake up | 198 |   1 |    1.5625 |  400.0000 |
       31 |                 Linear acceleration | 246 |   1 |    1.5625 |  400.0000 |
       32 |        Linear acceleration wake up | 197 |   1 |    1.5625 |  400.0000 |
       37 |                Game rotation vector | 252 |   1 |    1.5625 |  400.0000 |
       38 |       Game rotation vector wake up | 200 |   1 |    1.5625 |  400.0000 |
       43 |                        Orientation | 254 |   1 |    1.5625 |  400.0000 |
       44 |                Orientation wake up | 202 |   1 |    1.5625 |  400.0000 |
      136 |             Low Power Step counter | 249 |   1 |    1.0000 |    1.0000 |
      137 |            Low Power Step detector | 248 |   1 |    1.0000 |    1.0000 |
      143 |       Low Power Any motion wake up | 191 |   1 |    1.0000 |    1.0000 |
      153 |                 Multi Tap Detector | 182 |   1 |    1.0000 |    1.0000 |
      154 |  Activity recognition for Wearables | 237 |   1 |    1.0000 |    1.0000 |
      156 |     Low Power Wrist Gesture wake up | 228 |   1 |    1.0000 |    1.0000 |
      158 |        Low Power Wrist Wear wake up | 178 |   1 |    1.0000 |    1.0000 |
      159 |         Low Power No Motion wake up | 181 |   1 |    1.0000 |    1.0000 |
```

```
Host Interface : SPI
Copyright (c) 2025 Bosch Sensortec GmbH
Version 1.0.0 Build date: Nov  4 2025
Include sensor API with chip id: 0x7A
Include sensor API with chip id: 0x7C
Device found. Chip ID read 0x7A
Sensor ID: 37, sample rate: 25.000000 Hz, latency: 0 ms
[D][META EVENT]; T: 25.623875000; Flush complete for sensor id 37
[D][META EVENT]; T: 25.624421875; Power mode changed for sensor id 37
[D][META EVENT]; T: 25.624421875; Sample rate changed for sensor id 37
[D]SID: 37; T: 25.855703125; x: -0.028442, y: -0.017578, z: 0.000061, w: 0.999390; acc:
0.000000
[D]SID: 37; T: 25.895203125; x: -0.028320, y: -0.017761, z: 0.000061, w: 0.999390; acc:
0.000000
[D]SID: 37; T: 25.934687500; x: -0.028198, y: -0.017944, z: 0.000122, w: 0.999390; acc:
0.000000
```

Examples and further descriptions, here only a part of the commands have been selected. For all the command examples, please refer to the **Reference 2**.

Display Help [-h]

Available commands and connection status of the device will be displayed.
For more details, refer section 3.2.1 in **Reference 2** this doc file is at <BHy2CLI-<version> **install path** >\docs\

Show information [-i]

Display general device information, virtual sensors present in loaded firmware, boot status register content and error register content.

For more details, refer section 3.2.3 in **Reference 2** this doc file is at <BHy2CLI-<version> **install path** >\docs\

Change verbose [-v]

Set the verbose level. 0 prints only the error messages, 1 print warning messages and errors, 2 Give notifications regarding the complete state of the system in terms of errors, warnings, and information about the current state of execution.

For more details, refer section 3.17.1 in **Reference 2** this doc file is at <BHy2CLI-<version> **install path** >\docs\

Reset, load and boot [-b]

This will soft reset the device, load the firmware specified by the file location into RAM and boot the device from RAM.
For more details, refer section 3.3 in **Reference 2** this doc file is at <BHy2CLI-<version> **install path** >\docs\

Reset Device [-n]

Perform sensor hub reset.

For more details, refer section 3.3 in **Reference 2** this doc file is at <BHy2CLI-<version> **install path** >\docs\

Load firmware to RAM [-u]

Load the firmware into RAM.

Note that a soft reset or hard reset must be performed before being able to upload a firmware image.

For more details, refer section 3.3 in **Reference 2** this doc file is at <BHy2CLI-<version> **install path** >\docs\

Boot device [-g]

Boot device from specific medium -RAM.

For more details, refer section 3.3 in Reference 2 this doc file is at <BHy2CLI-<version> **install path** >\docs\

Activate Sensor [-c]

Activate a virtual sensor by providing the Sensor ID, frequency [Hz] and a latency [ms] (optional, default is 0 ms). To stop streaming, press Ctrl + C. To activate multiple sensors at a time, the –c options can be chained. Note that the streaming of sensor data will start at the end of the bhy2cli function call – all other options will be

For more details, refer section 3.6.1.1 in Reference 2 this doc file is at <BHy2CLI-<version> **install path** >\docs\

Register custom virtual sensor payload [-a]

Register the output payload of a custom virtual sensor by providing the Sensor ID, an arbitrary name, the total output payload in bytes and each expected output format.

Note: The registration of a custom sensor only applies for the current function call. To stream sensor data, the –c option **must** be used within the same call of the bhy2cli tool (see example below). Any registering of virtual sensor payloads using the -a option **has to** be done before the first -c option.

Possible output formats (with corresponding output payload) are:

- c : Character (1 byte)
- u8 : Unsigned 8 bit (1 byte)
- u16 : Unsigned 16 bit (2 bytes)
- u32 : Unsigned 32 bit (4 bytes)
- s8 : Signed 8 bit (1 byte)
- s16 : Signed 16 bit (2 bytes)
- s32 : Signed 32 bit (4 bytes)
- f : Single precision floating point (4 bytes)

For more details, refer section 3.6.4 in Reference 2 this doc file is at <BHy2CLI-<version> **install path** >\docs\

Write register address [-w]

This command will write specified values (one byte each) to subsequent addresses. Since more than one byte can be written to register 0x00, specifying it will result in writing to subsequent bytes of the chosen register. Writing more than one byte to the register addresses 0x04 ongoing will result in writing to the specified register, as well as the following registers, since these registers only hold one byte each (address auto increment for addresses >= 0x04). Detailed information about available registers can be found in Reference 1. Address and length can be specified as decimal or hexadecimal.

Example:

Write 0x0b to the first byte of Host Channel 0, 0x00 to the second byte of Host Channel 0, 0x04 to the third byte of Host Channel 0, 0x00 to the fourth byte of host channel 0, 0x01 to the fifth byte of Host Channel 0 and 0x00 to the last three bytes of Host Channel 0 (this executes the host command “Request Sensor Self-Test for the Sensor ID 1 (accelerometer). The command response can be found in the register Host channel 3 (register address 0x03). For more information regarding host commands please refer to Reference 1):

For more details, refer section 3.4 in Reference 2 this doc file is at <BHy2CLI-<version> **install path** >\docs\

Read register address [-r]

This command will read a specified amount of data from subsequent addresses. Since the Host Channel registers 0x01 – 0x03 hold more than one byte, specifying one of these registers will result in reading subsequent bytes from the chosen register. Reading more than one byte from the register addresses 0x04 ongoing will result in reading from the specified register, as well as the following registers, since these registers hold one byte each (address auto increment for addresses >= 0x04). Detailed information about available registers can be found in Reference 1. Address and length can be specified as decimal or hexadecimal.

For more details, refer section 3.4 in Reference 2 this doc file is at <BHy2CLI-<version> **install path** >\docs\

Read parameter [-s]

Display the read parameter response of the specified parameter ID, without the parameter ID and the response length (first four bytes of the response). Detailed information about available parameters can be found in Reference 1. Parameter IDs can be provided as decimal or hexadecimal.

For more details, refer section 3.5 in **Reference 2** this doc file is at <BHy2CLI-<version> **install path** >\docs\

Write parameter [-t]

Write data to the specified parameter ID, without the parameter ID and the response length (first four bytes). Each additional value that is provided results in the following byte to be written. Detailed information about available parameters can be found in Reference 1. Parameter IDs can be provided as decimal or hexadecimal.

For more details, refer section 3.5 in **Reference 2** this doc file is at <BHy2CLI-<version> **install path** >\docs\

6 Legal disclaimer

6.1 Engineering samples

Engineering Samples are marked with an asterisk (*), (E) or (e). Samples may vary from the valid technical specifications of the product series contained in this data sheet. They are therefore not intended or fit for resale to third parties or for use in end products. Their sole purpose is internal client testing. The testing of an engineering sample may in no way replace the testing of a product series. Bosch Sensortec assumes no liability for the use of engineering samples. The Purchaser shall indemnify Bosch Sensortec from all claims arising from the use of engineering samples.

6.2 Product use

Bosch Sensortec products are developed for the consumer goods industry. They may only be used within the parameters of this product data sheet. They are not fit for use in life-sustaining or safety-critical systems. Safety-critical systems are those for which a malfunction is expected to lead to bodily harm, death or severe property damage. In addition, they shall not be used directly or indirectly for military purposes (including but not limited to nuclear, chemical or biological proliferation of weapons or development of missile technology), nuclear power, deep sea or space applications (including but not limited to satellite technology).

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6.3 Application examples and hints

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7 References

Reference 1: BST-BHI360_BHI380-DS000-03.docx

Reference 2: BHy2CLI_User_Guide.pdf

Reference 3: BHI360 SDK Quick Start Guide

8 Document history and modifications

Rev. No	Chapter	Description of modification/changes	Date
2.8	All	Main release.	2020-02-04
2.9	All	Adaptations to COINES v2.0	2020-03-03
2.10	All	Adaptations to COINES v2.3	2020-05-15
2.11	All	Replaced BHI260AB, BHA260AB and BHy2 with BHy2xx	2021-11-23
2.12	All	Add BHI3xx contents. Adaptations to COINES v2.7	2022-07-11
2.13	All	Adaptations to COINES v2.8.8	2023-10-30
2.14	All	COINES bridge update usage	2024-02-19
2.15	All	Adaptations to COINES v2.10.4	2025-04-14
2.16	All	Adaptations to COINES v2.11.0 and BHY2CLI v1.0.0	2025-11-05

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