

## Quick start guide

# CY8CKIT-028-SENSE IoT sense expansion kit

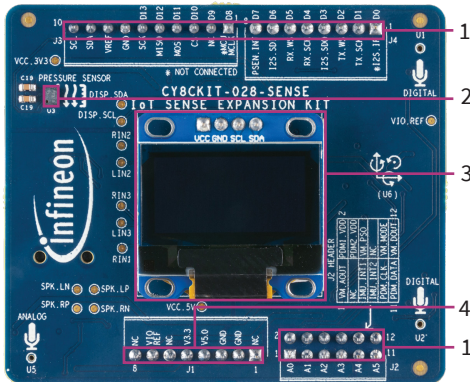
## Kit contents

- › CY8CKIT-028-SENSE IoT sense expansion kit
- › Quick start guide (this document)

## Features

- › XENSIV™ digital barometric pressure sensor with built-in temperature sensor
- › Two high-performance XENSIV™ MEMS digital microphones
- › Six-axis inertial measurement unit
- › Wake-on-sound piezoelectric MEMS microphone
- › I<sup>2</sup>C-based OLED display module
- › Arduino™ UNO compatible headers
- › Low-power stereo audio codec with audio jack

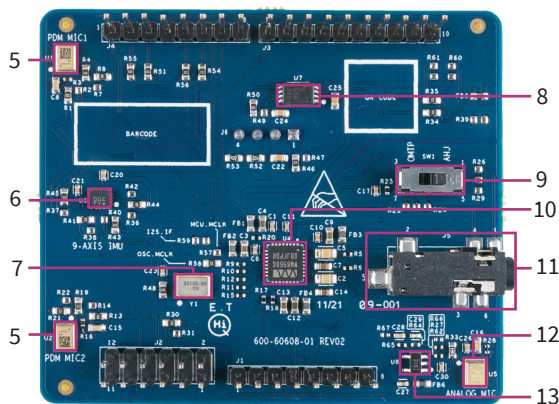
## Top board details



- 1 Arduino UNO R3 compatible I/O headers (J2, J3, J4)
- 2 XENSIV™ digital barometric pressure sensor with built-in temperature sensor (U3)
- 3 OLED display module (ACC6, J6)
- 4 Arduino UNO R3 compatible power header (J1)



## Bottom board details



- 5 XENSIV™ MEMS digital microphones (U1, U2)
- 6 Six-axis inertial measurement unit (U6)<sup>1</sup>
- 7 Crystal oscillator (Y1)
- 8 I²C level translator (U7)
- 9 Audio jack type selection switch (SW1)
- 10 Audio codec (U4)
- 11 3.5-mm stereo audio jack socket (J5)
- 12 Piezoelectric MEMS analog microphone (U5)
- 13 Preamplifier for analog microphone (U8)

**Note 1 :** The Rev \*B version of this kit has BMI160 (at U6) in place of BMX160, which does not support the magnetometer feature.

To learn more about how to use this shield for Machine Learning applications, please visit: [www.infineon.com/modustoolboxml](http://www.infineon.com/modustoolboxml).

Use this expansion kit along with an Infineon MCU kit that has a compatible interface such as CY8CKIT-062S2-43012. For the complete list of compatible kits, see [www.infineon.com/CY8CKIT-028-SENSE](http://www.infineon.com/CY8CKIT-028-SENSE).

