

Quick start guide

CY8CKIT-028-SENSE IoT sense expansion kit

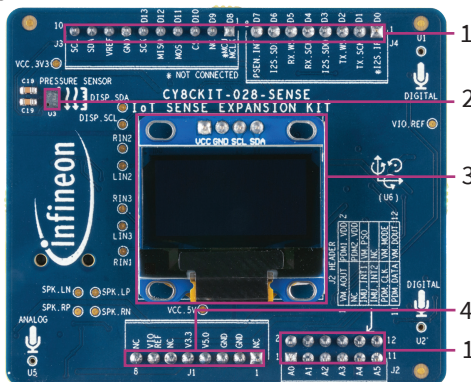
Kit contents

- › 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
- › 9-axis absolute orientation sensor
- › Wake-on-sound piezoelectric MEMS microphone
- › I²C-based OLED display module
- › Arduino™ UNO compatible headers
- › Low-power stereo audio codec with audio jack

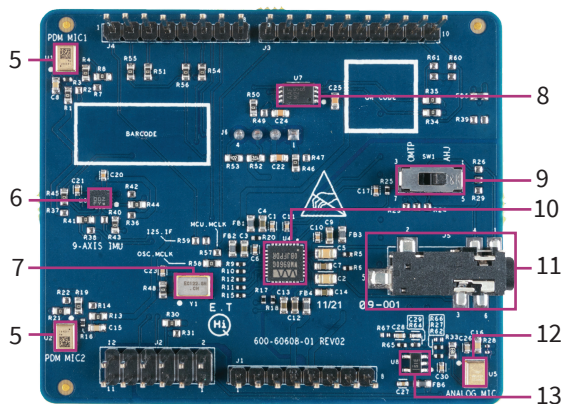
Top board details



- 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 Bosch 9-axis absolute orientation sensor (U6)
- 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 Vesper piezoelectric MEMS analog microphone (U5)
- 13 Preamplifier for analog microphone (U8)

To learn more about how to use this shield for Machine Learning applications please visit:
www.cypress.com/products/modustoolbox/machine-learning

This expansion kit is intended to be used along with an Infineon MCU kit that has a compatible interface, such as the CY8CKIT-062S2-43012. For a full list of compatible kits, see www.cypress.com/CY8CKIT-028-SENSE.

