

QUICK START GUIDE

PSOC™ Edge E84 Evaluation Kit

KIT_PSE84_EVAL

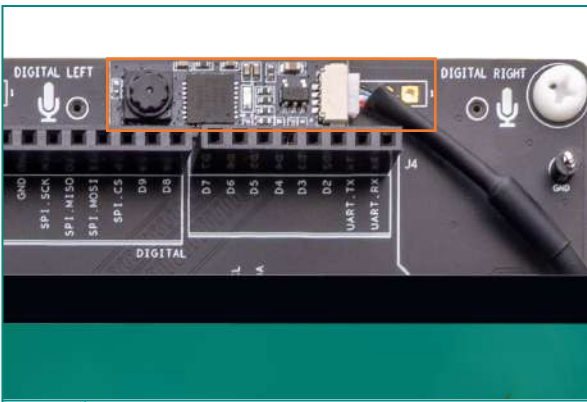
Kit contents

1. PSOC™ Edge E84 Evaluation Kit
 - PSOC™ Edge E8 base board
 - PSOC™ Edge E84 SOM (MOD_PSE84_SOMS2)
2. USB Type-C to Type-C cable
3. 4.3 inch display with capacitive touch screen (mounted on base board)
4. 0.3MP USB camera module with USB Type-A Cable

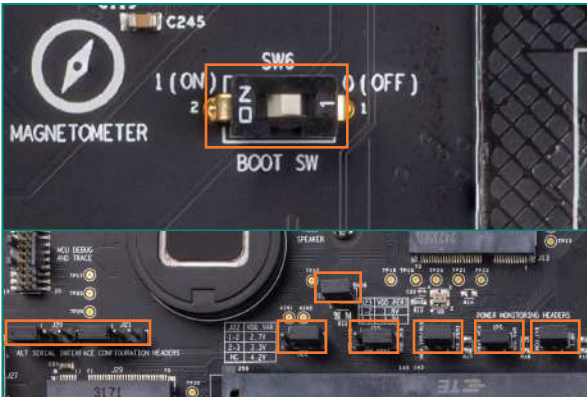


<https://osts.infineon.com/devkit>





1 Affix camera module on baseboard



2 Default BOOT SW Location and jumper settings



***NOTE:** The Boot switch (SW6) must be typically set to ON position to run other code examples from ModusToolbox™. See the Hardware Setup section in the README file of the corresponding code example to know the correct Boot switch position.



3 USB cable connected to the KitProg3 USB connector



www.infineon.com/KIT_PSE84_EVAL


Before you start

1. Ensure that you have a PC, with USB Type-C port. In case USB Type C port is absent in PC, use a USB Type-A to USB Type-C cable or a Type-C to Type-A converter which are not provided with EVK.
2. Affix camera module to preferred location (Image-1 shows the recommended location on baseboard)
 - Connect the 4 pin connector of camera's USB cable to camera module
 - Before attaching the camera, ensure the PCB surface is clean and free of debris. If necessary, use a soft cloth and a cleaning solution to gently wipe the surface
 - Gently peel the backing (or the protective layer) off of the 3M tape
 - Carefully align the camera module with the preferred mounting area on the baseboard
 - Once the camera is aligned, gently press it onto the baseboard. Remove protective film from Camera lens
 - Ensure that the camera cable is not obstructing the microphone opening

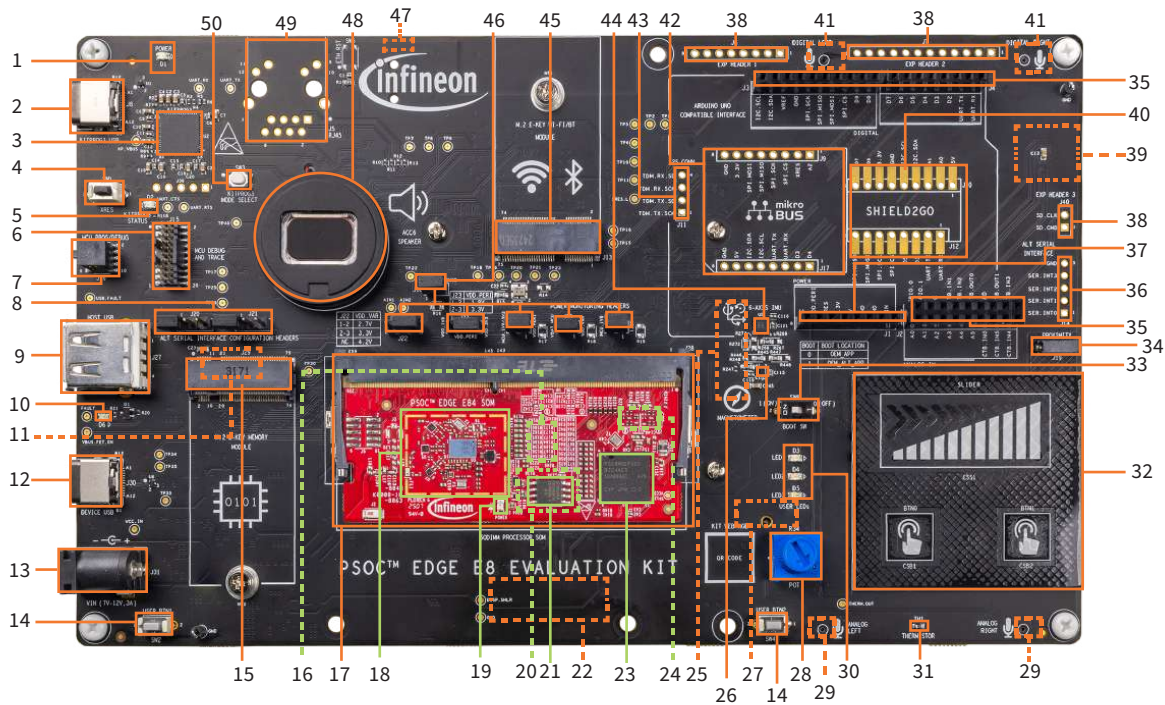
Connect and power up the board

1. Ensure that the Boot configuration switch (SW6) is OFF* position and jumpers are set to their default positions as shown in Image-2.
 - J22, J23: 2-3
 - J18, J24, J25, J26: SHORT
 - J20, J21: OPEN
3. Connect the camera module cable to USB host Type-A connector on baseboard(J27).
4. Connect the KitProg3 USB connector (J8) to your PC using the Type-C to Type-C USB cable.
5. Ensure that the power LED (D1, yellow) on the base board and the power LED (D3, yellow) on the SOM are ON.

Run the pre-programmed demo

1. Press Reset button (SW1) on baseboard and observe the splash screen on boot-up on the 4.3 inch display.
2. On the appeared carousel menu, select the application to be demonstrated by swiping left or right and clicking on the icon.
3. Click the info (i) button/icon for instructions and details of available voice commands for the demo app.
4. Press the **Home**  button to get back to main menu.
5. Press the XRES button (SW1) to reboot the device to splash screen (if required).
6. Open the UART terminal and connect to kit's UART COM port with 115200 8N1 settings for additional logs and instructions.
7. Visit the [PSOC™ Edge E84 Evaluation Kit webpage](http://www.infineon.com/PSOC_E84_Evaluation_Kit) for latest software and other kit documentation.
8. Visit devkit.infineon.com to load the latest demo on the kit.

PSOC™ Edge E84 Evaluation board details



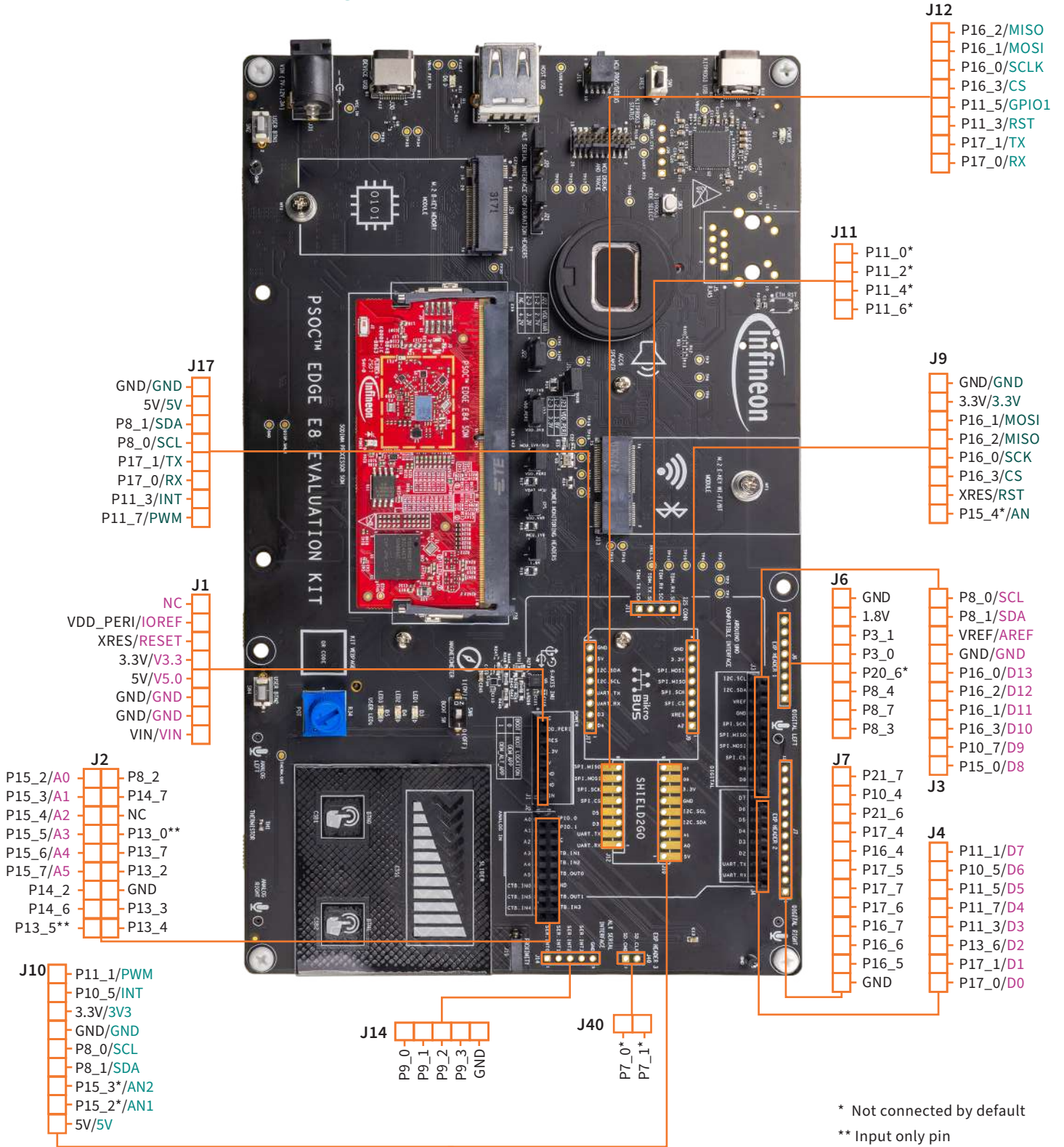
- | | | | |
|----|--------------------------------------------------------------------------|----|--------------------------------------------------------------------------------------|
| 1 | Base board power LED (D1) | 26 | 3-axis magnetometer (U4) |
| 2 | KitProg3 program/debug USB Type-C connector (J8) | 27 | Raspberry Pi compatible display capacitive touch connector (J41)** |
| 3 | PSOC™ 5LP-based KitProg3 programmer and debugger (CY8C5868LTI-LP039, U2) | 28 | Linear potentiometer (R34) |
| 4 | Reset button (SW1) | 29 | Analog microphones (IM73A135V01XTSA1, U36 and U37)** |
| 5 | KitProg3 status LED (D2) | 30 | User LEDs (D3, D4, D5) |
| 6 | PSOC™ Edge E84 MCU ETM/JTAG debug and trace header (J15) | 31 | Thermistor (TH1) |
| 7 | PSOC™ Edge E84 MCU 10-pin SWD/JTAG program and debug header (J16) | 32 | CAPSENSE™ buttons and slider (CSB1, CSB2, CSS1) |
| 8 | Alternative serial interface configuration headers (J20, J21) | 33 | BOOT configuration switch (SW6) |
| 9 | PSOC™ Edge E84 MCU USB host Type-A connector (J27) | 34 | Proximity sense connector (J19) |
| 10 | USB Type-C power delivery (PD) fault LED (D6) | 35 | I/O headers compatible with Arduino UNO R3 (J2, J3, J4) |
| 11 | Custom display capacitive touch panel connector (J37)** | 36 | Alternative serial interface I/O header (J14)* |
| 12 | PSOC™ Edge E84 MCU USB device Type-C connector (J30) | 37 | Power header compatible with Arduino UNO R3 (J1) |
| 13 | External power supply VIN connector (J31) | 38 | PSOC™ Edge E84 MCU expansion I/O headers (J6, J7, J40)* |
| 14 | PSOC™ Edge E84 MCU user buttons (SW2, SW4) | 39 | MicroSD card holder (J35)** |
| 15 | M.2 (B-key) memory interface connector (J29) | 40 | Infineon's Shield2Go interface headers (J10, J12)* |
| 16 | 128 Mbit Octal-SPI HYPERRAM™ (S70KS1283GABHI020, U12)*** | 41 | PDM microphones (IM72D128V01XTMA1, U7 and U8)** |
| 17 | Processor System on Module (SoM) 260-pin SODIMM connector (J28) | 42 | mikroBUS compatible headers by Mikroelektronika (J9, J17)* |
| 18 | CYW55513 tri-band (Wi-Fi & Bluetooth®) combo radio (U3) section | 43 | Extended I2S header (J11)* |
| 19 | Processor System on Module (SoM) power LED (D3) | 44 | 6-axis accelerometer and gyroscope IMU (U5) |
| 20 | 1 Gbit Octal-SPI NOR flash (S28HS01GTGZBH1030, U10)*** | 45 | M.2 (E-key) radio interface connector (J13) |
| 21 | 128 Mbit Quad-SPI NOR flash (S25FS128SAGMFB100, U11) | 46 | PSOC™ Edge E84 MCU power selection/monitoring headers (J18, J22, J23, J24, J25, J26) |
| 22 | MIPI-DSI custom display connector (J38)** | 47 | Headphone connector (J34)* |
| 23 | PSOC™ Edge E84 MCU (PSE846GPS2DBZC4A, U1) | 48 | Speaker (ACC6) |
| 24 | PSOC™ 4000T CAPSENSE™ Co-processor (U9)*** | 49 | RJ45 ethernet magjack connector (J5)* |
| 25 | Raspberry Pi compatible MIPI-DSI display connector (J39)** | 50 | KitProg3 programming mode selection button (SW3) |

*Footprint only, not populated on the board

**Component at the bottom side of the Baseboard

***Component at the bottom side of the SoM

PSOC™ Edge E84 Evaluation board pinout details



LEGEND ■ Arduino UNO R3 ■ Infineon Shield2Go ■ mikroBUS by Mikroelektronika ■ PSOC™ Edge E84 MCU I/Os

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