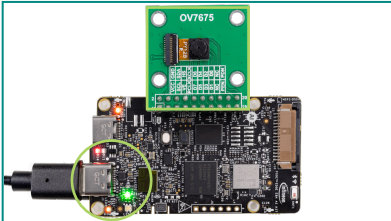# PSOC™ Edge E84 AI Kit

KIT_PSE84_AI

Kit contents

1. PSOC™ Edge E84 AI board
2. OV7675 DVP Camera module
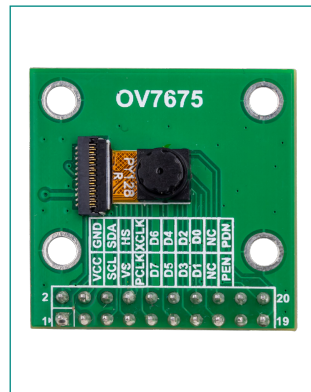
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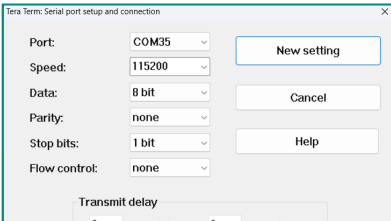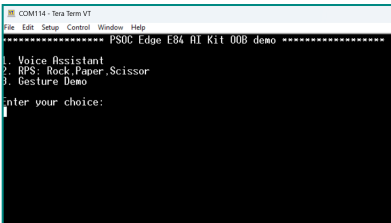
| 1 | Connect the kit to PC |

| 2 | USB-UART COM Port settings |

| 3 | Serial terminal |

Note: The applications listed in the sample image may vary from the actual applications available in the Out-of-box (OOB) demo.

Before you start, ensure you have the following:
1. PC with USB port.
2. UART terminal software such as Tera Term or Minicom.

Connect and power up the board
1. Optionally connect the OV7675 camera module to header (J14) based on code example requirement.
2. Connect the board to your PC using the USB-C cable at USB-C connector (J1).
3. The green LED (LED1) starts blinking indicating that the Out-of-box demo has started.

Connect the kit with the UART terminal software
1. Open Tera Term and select the KitProg3 USB-UART COM port with following settings:
   – Baudrate: 115200, Data bit: 8, Parity: None, Stop bit: 1, Flow control: None
2. Press the reset/black button (SW2) on the board.

Note: If you are unable to connect to a PC to run the Out-of-box (OOB) demo, press the user button (SW1) on the board to run the Voice Assistant application. The blue LED (LED2) will turn on, indicating that the Voice Assistant application is running.
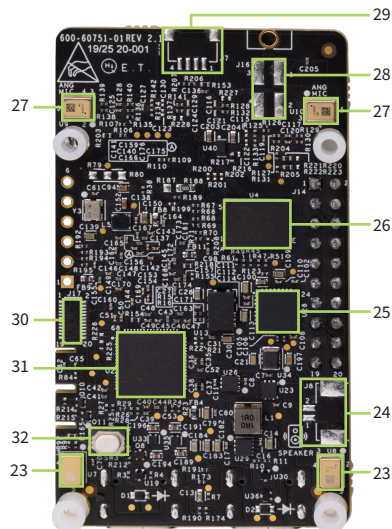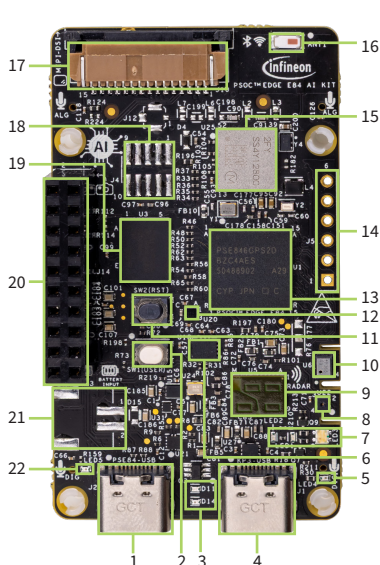
Run the pre-programmed code example
1. Observe the boot-up message on the serial terminal. A menu appears listing the demo applications pre-programmed into the kit.

2. Select the application to be demonstrated by entering the corresponding option number via keyboard input.

3. Enter the (b or B) key on the keyboard or press the reset/black button (SW2) on the board to return to the main menu from the application that was running.

4. Follow the on-screen instructions to execute the demo.

To experience various other applications, please visit the Web-based OOB webpage.

Refer to the kit guide available at the kit webpage for more details.

KIT_PSE84_AI PSOC™ Edge AI board details

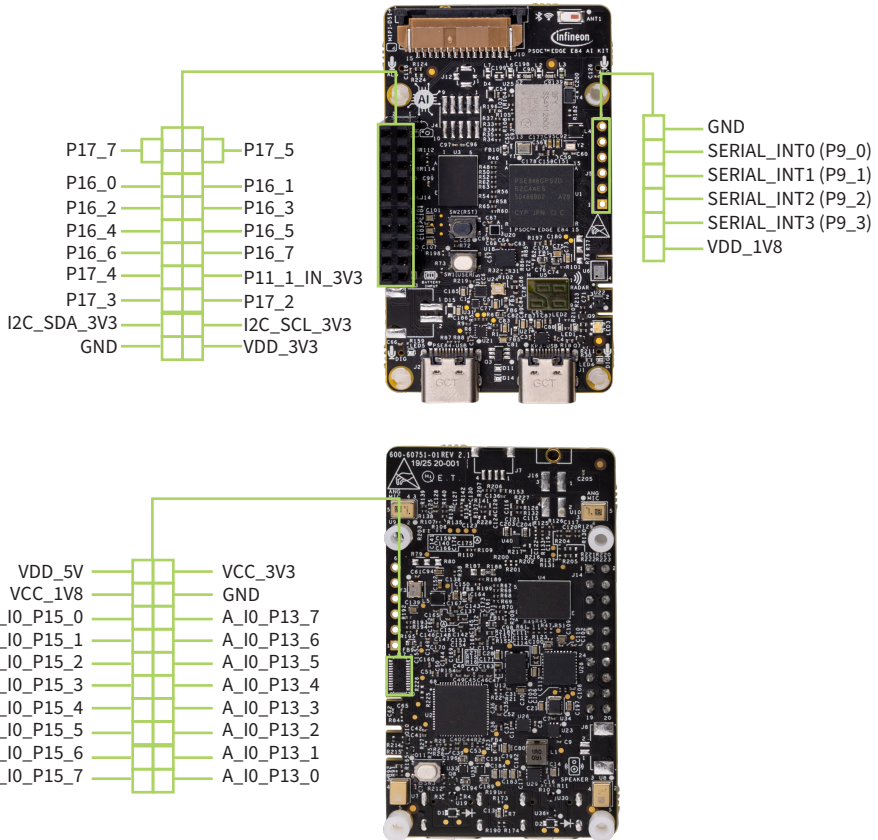|	
1	PSOC™ Edge E84 USB-C device/host connector (J2)
2	PSOC™ Edge E84 MCU user button (SW1)
3	PSOC™ Edge E84 USB-C host/device mode indication LED's (D11, D14)
4	KitProg3 program/debug USB-C connector (J1)
5	KitProg3 status LED (LED4)
6	6-axis accelerometer and gyroscope (U18)
7	User LEDs (LED1, LED2, LED3)
8	Digital humidity and temperature sensor (U22)
9	XENSIV™ 60 GHz RADAR sensor - BGT60TR13C (U5)
10	XENSIV™ digital barometric pressure sensor with built-in temperature sensor - DPS368 (U6)
11	PSOC™ Edge E84 MCU reset button (SW2)
12	3-axis magnetometer (U20)
13	PSOC™ Edge E84 MCU - PSE846GPS2DBZC4A (U1)
14	Expansion I/O headers (J5)*
15	CYW55513-based Murata Type 2FY module (U25)
16	Wi-Fi/Bluetooth® antenna (ANT1)
17	Raspberry Pi compatible MIPI-DSI display connector (J10)
18	PSOC™ Edge E84 MCU 10-pin SWD/JTAG program and debug header (J4)*
19	128-Mbit Octal-SPI HYPERRAM™ - S70KS1283GABHI020 (U3)
20	DVP Camera interface header (J14)
21	Battery input connector (J3)*
22	Power LED (LED5)
23	XENSIV™ digital MEMS microphones - IM73D122V01 (U7, U8)**
24	Speaker connector output (J8)*
25	Audio DAC and Amplifier (U28)**
26	512 - Mbit Quad-SPI NOR flash - S25HS512TFABHI013 (U4)**
27	Analog Microphone - IM73A135V01XTSA1 (U9, U10)**
28	Raspberry Pi compatible display capacitive touch connector input (J16)*
29	I2C interface (J7)*
30	Analog I/O interface header (J17)*
31	KitProg3 (PSOC™ 5LP) programmer and debugger - CY8C5868LTI-LP039 (U2)**
32	KitProg3 programming mode selection button (SW3)**

* Footprint only, not populated on the board

** Component is located at the bottom side of the board

KIT_PSE84_AI PSOC™ Edge AI board pinout details

P17_7	P17_5
P16_0	P16_1
P16_2	P16_3
P16_4	P16_5
P16_6	P16_7
P17_4	P11_1_IN_3V3
P17_3	P17_2
I2C_SDA_3V3	I2C_SCL_3V3
GND	VDD_3V3

- GND
- SERIAL_INT0 (P9_0)
- SERIAL_INT1 (P9_1)
- SERIAL_INT2 (P9_2)
- SERIAL_INT3 (P9_3)
- VDD_1V8

VDD_5V	VCC_3V3
VCC_1V8	GND
A_I0_P15_0	A_I0_P13_7
A_I0_P15_1	A_I0_P13_6
A_I0_P15_2	A_I0_P13_5
A_I0_P15_3	A_I0_P13_4
A_I0_P15_4	A_I0_P13_3
A_I0_P15_5	A_I0_P13_2
A_I0_P15_6	A_I0_P13_1
A_I0_P15_7	A_I0_P13_0

See the kit guide available at www.infineon.com/KIT_PSE84_AI for more details.