



## E-ink Display Shield Board CY8CKIT-028-EPD

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### Ultra-low-power Display, Sensors, and Arduino Uno Compatibility

The E-ink Display Shield Board (CY8CKIT-028-EPD) has been designed such that an ultra-low-power E-ink display, sensors and a microphone can interface with Cypress' **PSoC 4** and **PSoC 6** MCUs. It comes with the features below to enable everyday objects to connect to the Internet of Things (IoT).

- Ultra-low-power 2.7 inch E-ink Display
- Motion Sensor
- Temperature Sensor
- PDM Microphone

The E-ink Display Shield Board uses the Arduino Uno pin layout, enabling this shield board to be used with Cypress' PSoC 4 and PSoC 6 MCU based Pioneer Kits.

The table below shows the pin mapping for the PSoC 4 and PSoC 6 MCU Pioneer Kits that the E-ink Display Shield is compatible with:

Arduino	CY8CKIT-028-EPD	<a href="#">CY8CKIT-062-BLE</a> <a href="#">CY8CKIT-062-WiFi-BT</a>	<a href="#">CY8CKIT-046</a>	<a href="#">CY8CKIT-044</a>	<a href="#">CY8CKIT-042-BLE</a>	<a href="#">CY8CKIT-042</a>
D10	SSEL	P12[3]	P6[3]	P2[7]	P0[2]	P3[4]
D11	MOSI	P12[0]	P6[0]	P6[0]	P0[0]	P3[0]
D12	MISO	P12[1]	P6[1]	P6[1]	P0[1]	P3[1]
D13	SCLK	P12[2]	P6[2]	P6[2]	P0[3]	P0[6]
D2	EPD_RST	P5[2]	P1[0]	P1[0]	P1[6]	P0[7]
D3	BUSY	P5[3]	P1[1]	P1[1]	P1[7]	P3[7]
D4	EPD_EN	P5[4]	P1[2]	P1[2]	P1[3]	P0[0]
D5	DISCH	P5[5]	P1[3]	P1[3]	P1[2]	P3[5]
D6	BORDER	P5[6]	P5[6]	P5[3]	P1[1]	P1[0]
D7	IO_EN	P0[2]	P5[5]	P5[5]	P1[0]	P2[7]
A0	THER_VDD	P10[0]	P2[0]	P2[0]	P3[0]	P2[0]
A1	THER_OUT	P10[1]	P2[1]	P2[1]	P3[1]	P2[1]
A2	THER_OUT	P10[2]	P2[2]	P2[2]	P3[2]	P2[2]
A3	THER_GND	P10[3]	P2[3]	P2[3]	P3[3]	P2[3]
A4	PDM_CLK	P10[4]	P2[4]	P2[4]	P3[4]	P2[4]
A5	PDM_DATA	P10[5]	P2[5]	P2[5]	P3[5]	P2[5]
SCL	I2C_SCL	P6[0]	P4[0]	P4[0]	P3[5]	P4[0]
SDA	I2C_SDA	P6[1]	P4[1]	P4[1]	P3[4]	P4[1]

Code Example in PSoC Creator for the E-Ink Display Shield Board (CY8CKIT-028-EPD)

Project	Development Platform	Description
CE218133 PSoC 6 MCU E-Ink Display with CapSense	CY8CKIT-062-BLE & CY8CKIT-062-WiFi-BT kit with PSoC Creator 4.2 software	This code example show how to create a user-interface design using an E-Ink display and CapSense

**Kit Contents:**  
E-ink Display Shield