CY8CKIT-028-TFT

TFT DISPLAY SHIELD CY8CKIT-028-TFT

TFT Display, Audio, and Multiple Sensors

The TFT Display Shield Board (CY8CKIT-028-TFT) has been designed such that a TFT display, audio devices, and sensors can interface with Cypress' PSoC 6 MCUs.
It comes with the features below to enable everyday objects to connect to the Internet of Things (IoT).

- 2.4 inch TFT Display
- Motion Sensor
- Ambient Light Sensor
- PDM Microphone
- Audio Codec
- 3.5-mm Audio Jack

Kit Contents:

TFT Display Shield

The TFT Display Shield Board is compatible with the PSoC 6 WiFi-BT Pioneer Kit CY8CKIT-062-WiFi-BT and the PSoC 6 BLE Pioneer Kit CY8CKIT-062-BLE.

The table below shows the pin mapping for the PSoC 6 MCU Pioneer Kits that the TFT Display Shield is compatible with:

PCB Connector Pin Number	Arduino Pin	Arduino Function	CY8CKIT-028-TFT Shield Function	CY8CKIT-062-BLE CY8CKIT-062-WiFi-BT
J1.1	VIN	VIN	NC	VIN
J1.2	GND	GND	GND	GND
J1.3	GND	GND	GND	GND
J1.4	5 V	5 V	NC	5 V
J1.5	3.3 V	3.3 V	VCC 3.3V	3.3 V
J1.6	RESET	RESET	NC	SWD RESET
J1.7	I/O REF	I/O REF	VIO REF	P6 VDD
J1.8	--	--	NC	NC
J2.1	A0	ADC0	ALS OUT	P10[0]
J2.2	--	--	TFT DISP DB8	P9[0]
J2.3	A1	ADC1	Codec PDN SW	P10[1]
J2.4	--	--	TFT DISP DB9	P9[1]
J2.5	A2	ADC2	IMU INT1	P10[2]
J2.6	--	--	TFT DISP DB10	P9[2]
J2.7	A3	ADC3	IMU INT2	P10[3]
J2.8	--	--	NC	P9[3]
J2.9	A4	ADC4 / SDA (I2C)	PDM CLK	P10[4]
J2.10	--	--	TFT DISP DB11	P9[4]
J2.11	A5	ADC5	PDM DATA	P10[5]
J2.12	--	--	TFT DISP DB12	P9[5]
J3.1	D8	DIGITAL I/O	TFT DISP DB14	P13[0]
J3.2	D9	PWM	TFT DISP DB15	P13[1]
J3.3	D10	SS/PWM	TFT DISP RD_L	P12[3]
J3.4	D11	MOSI/PWM	TFT DISP WR_L	P12[0]
J3.5	D12	MISO	TFT DISP D/C	P12[1]
J3.6	D13	SCK	TFT DISP RST_L	P12[2]
J3.7	GND	GND	GND	GND
J3.8	AREF	analog ref i/p	NC	VREF
J3.9	SDA	SDA	I2C SDA (IMU and audio codec)	P6[1]
J3.10	SCL	SCL	I2C SCL (IMU and audio codec)	P6[0]
J4.1	D0	RX	I2S MCLK	P5[0]
J4.2	D1	TX	I2S TX SCK	P5[1]
J4.3	D2	DIGITAL I/O	I2S TX WS	P5[2]
J4.4	D3	PWM, I/O	I2S TX SDO	P5[3]
J4.5	D4	DIGITAL I/O	I2S RX SCK	P5[4]
J4.6	D5	PWM, I/O	I2S RX WS	P5[5]
J4.7	D6	PWM, I/O	I2S RX SDI	P5[6]
J4.8	D7	DIGITAL I/O	TFT DISP DB13	P0[2]