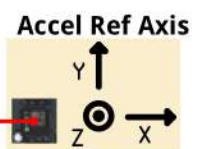
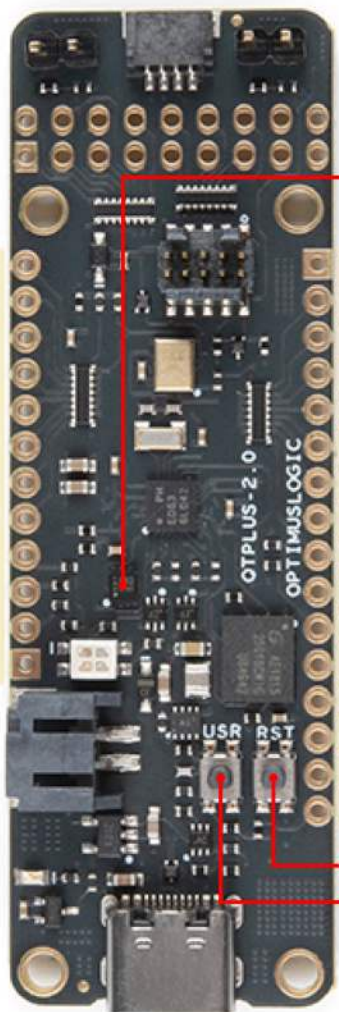


SparkFun QuickLogic Thing Plus - EOS S3

DEV-17273

Legend

Name	UART
Power	I2C
GND	SPI
Control	PDM
BGAPin#	I2S
ADC	Misc



J9*

C1	SDA	1
B1	SCL	0
A2	IMUINT	3
D1	INT	43
E7	SCK1	16
D7	CIPO1	17
H8	COPI1	19
G8	CS1	20
H5	CS	27
	VUSB	VUSB
	EN	
	VBAT	VBAT

JST Connector for single cell LiPo

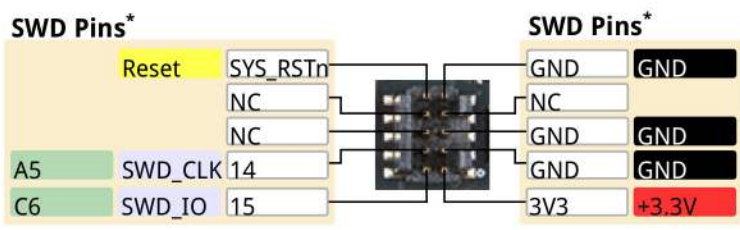
Charge LED: Yellow

J6*

GND	GND	
44	TXO	E1
45	RXI	G1
36	CIPO	H3
38	COPI	E2
34	SCK	F3
2	IO	A1
13	IO	D6
25	IO	F7
30	IO	F4
A1	ADC1	C7
NC		
GND	GND	
NC		
3V3	+3.3V	
RESET	Reset	

RST Button
USR Button (6)

USB-C Connector



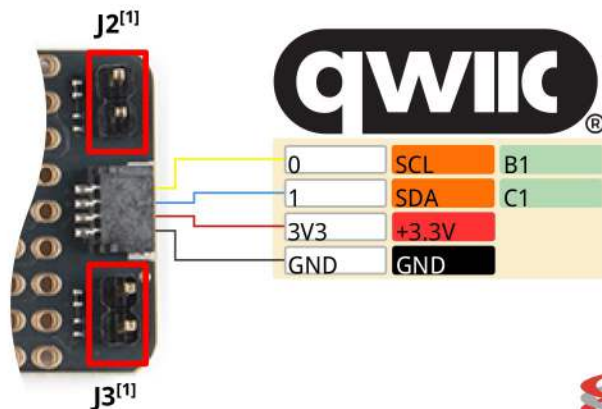
J8*

G5	PDM Data	28
H6	I2S wCLK	23
G4	I2S CLK	31
B5	IO	12
C3	IO	5
A3	IO	7
A4	IO	10
	+3.3V	3V3
	+3.3V	3V3



J8*

29	PDM CLK	F5
24	I2S Data	G6
11	IO	C5
4	IO	B2
6	USR Button	B3
8	IO	C4
35	IO	F2
GND	GND	
GND	GND	



Power and Logic Levels

VUSB: direct to USB (5V)
VBAT: direct to LiPo battery (and Microchip MCP73831 charger)
3V3: Output of TI TPS62821 regulator (3.3V/1A)
GPIO logic levels: 3.3V

Notes

* - Header pin 1 can be referenced by either the square PTH pad polarity marker °
[1] - Close bootstrap jumper pins when using J-Link programmer, otherwise keep open

EOS S3 MCU + eFPGA SoC

- Arm® Cortex®-M4F Microcontroller
- up to 80 MHz operating frequency
- up to 512 Kb SRAM
- Embedded FPGA (eFPGA)
- 2400 effective logic cells
- 64 Kb RAM

Storage

- GigaDevice GD25Q16CEIGR
- 16 Mbit SPI NOR flash memory

Interfaces

- 1x ADC, 1x UART, 1x I²C, 2x SPI, 1x I²S, 1x PDM

Sensors

- STMicro LIS2DH12TR [0b0011000, 0x18]
- I²C 3-Axis 12-bit Accelerometer
- Vesper VM3011
- Digital Pulse Density Modulation Mic w/ Wake-on-Sound

User Interfaces

- RST Button
- USR Button (Ⓑ)

LEDs

- RGB LED
- Red (ⒶⒶ), Green (ⒶⒶ), Blue (ⒶⒶ)
- Charge LED

