CY8CKIT-062-WiFi-BT PSoC™ 6 Wi-Fi-Bluetooth® Pioneer Kit

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PCBA	121-60435-01
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SCH Title : PSoC™ 6 Wi-Fi Bluetooth® Pioneer Kit

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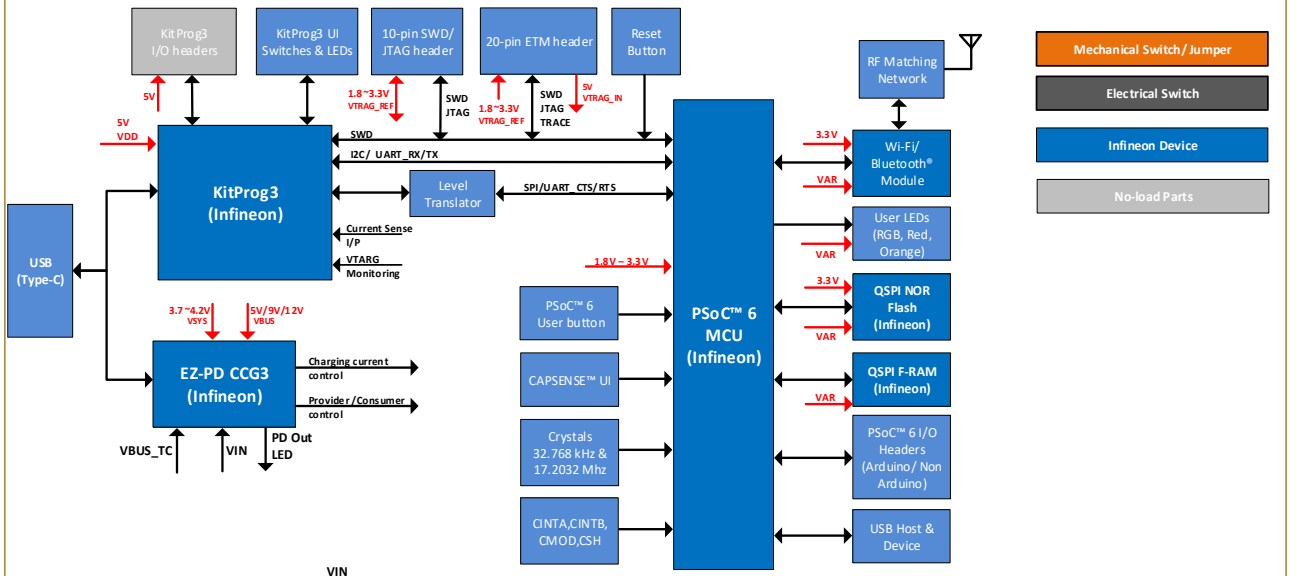
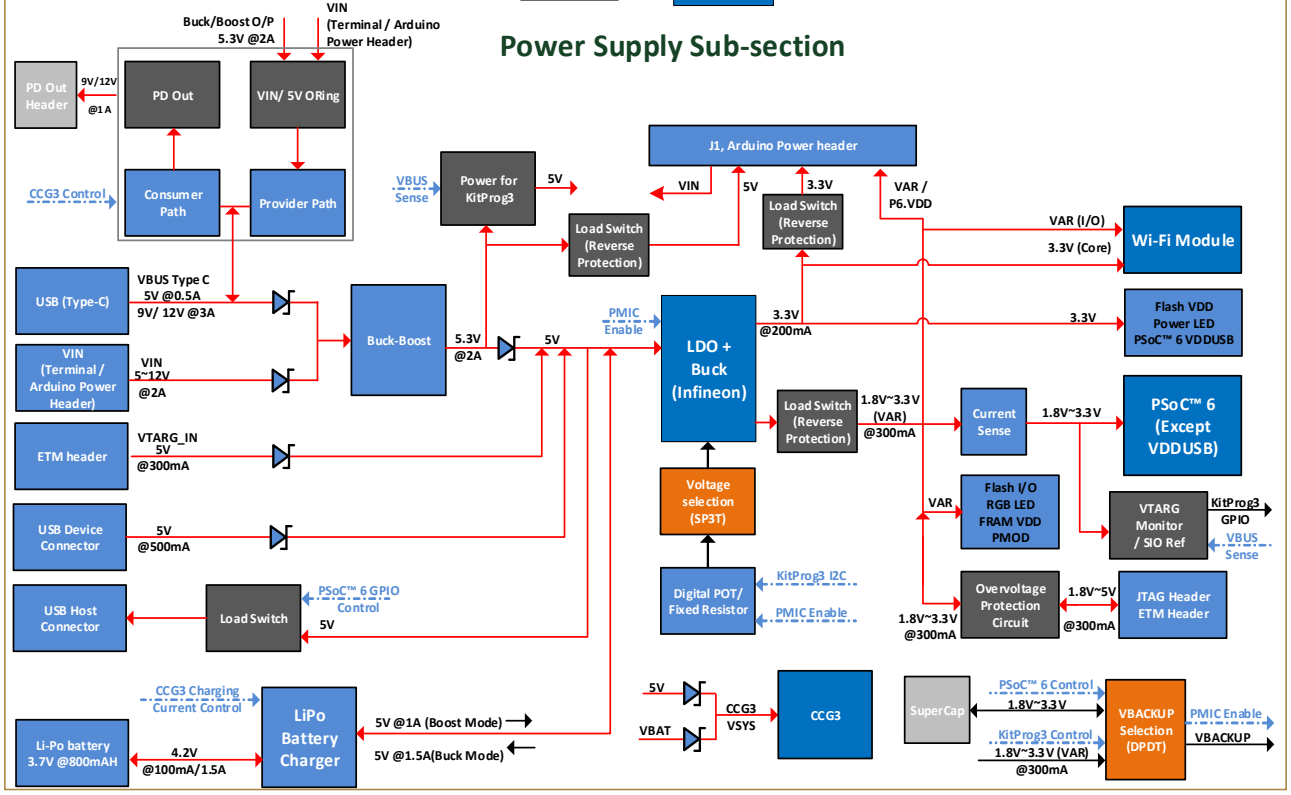
CY8CKIT-062-WiFi-BT Architecture Block Diagram



Power Supply Sub-section



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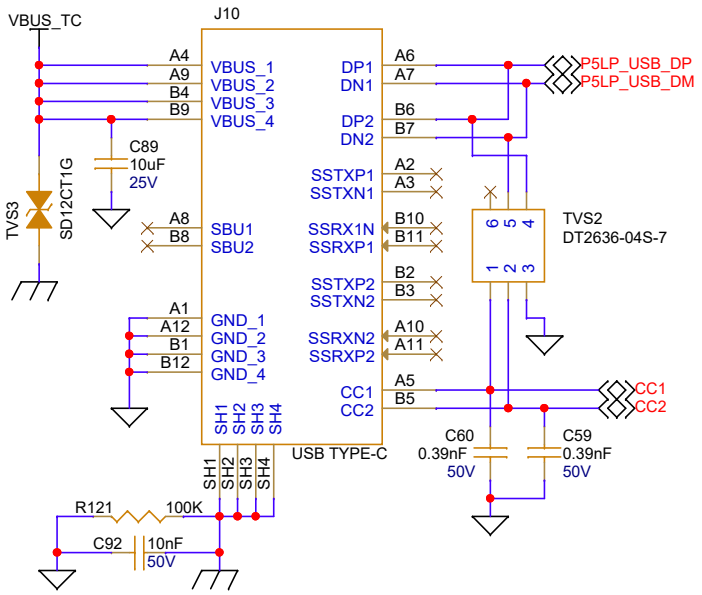
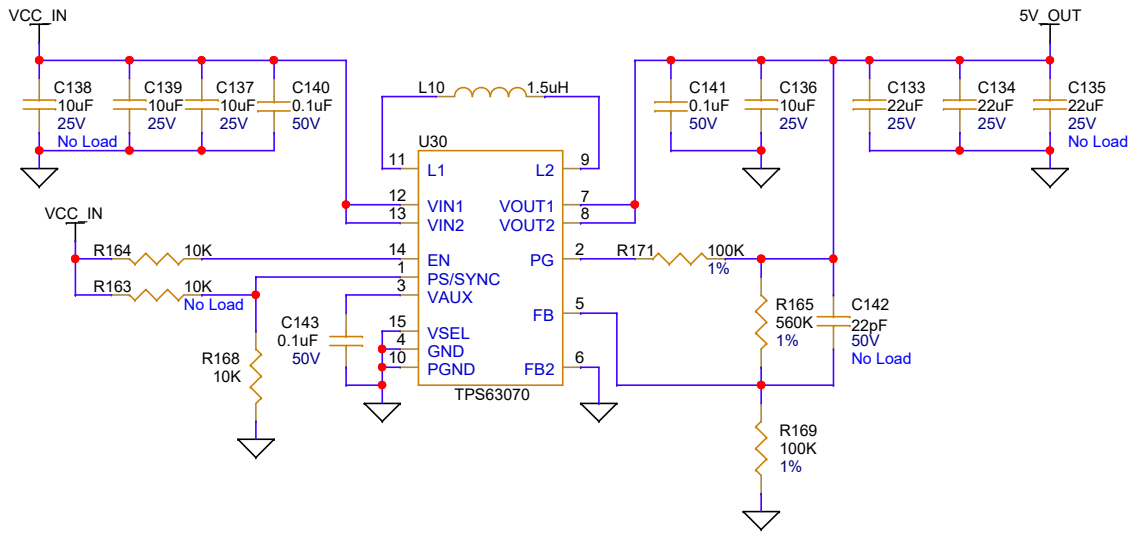
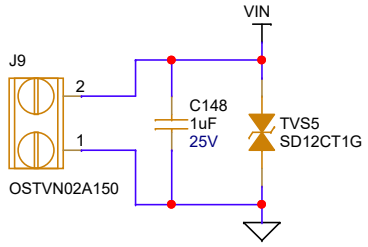
KitProg3 USB Type-C Connector

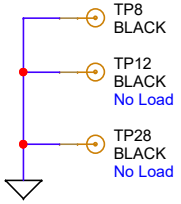


5V Buck-Boost Regulator

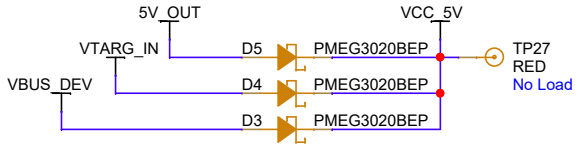


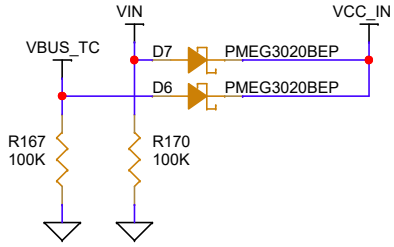
VIN Header



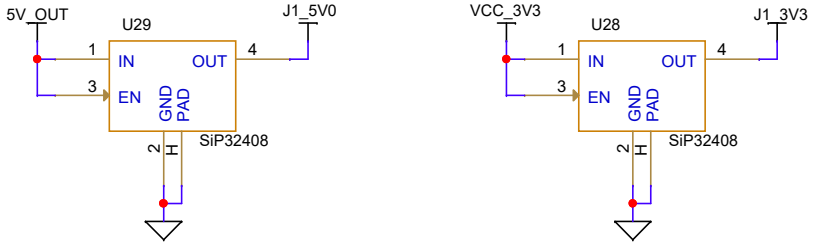


Power Supply 'OR'ing





Arduino Header O/P



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Page Title : 5V Buck/Boost Regulator				
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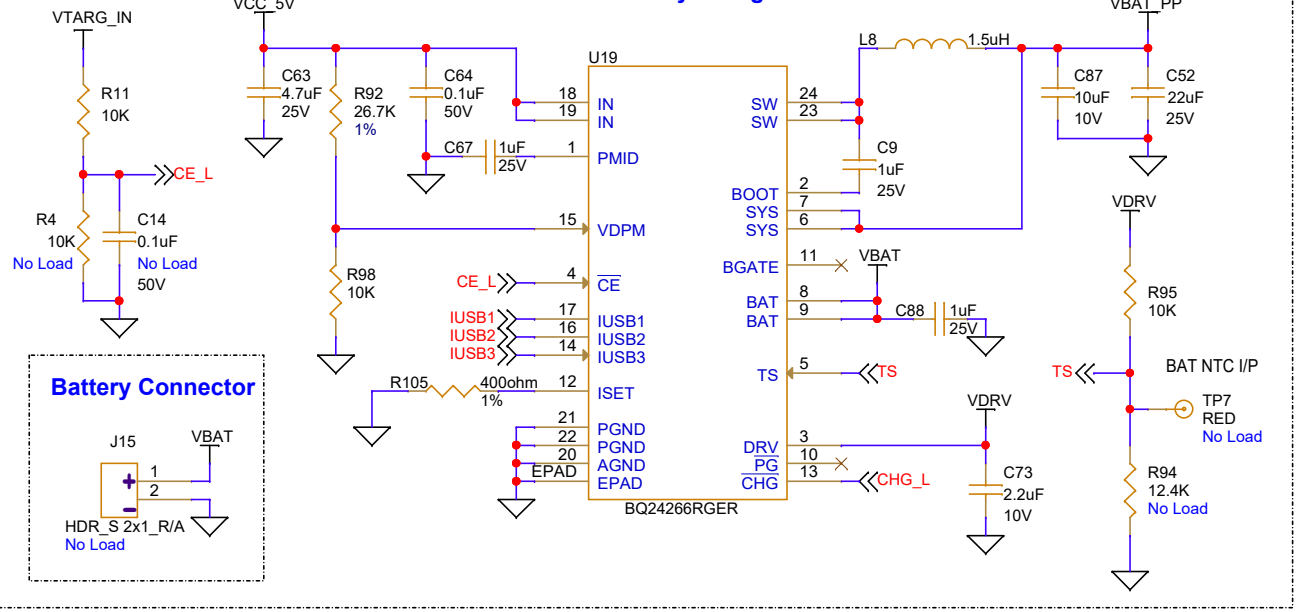
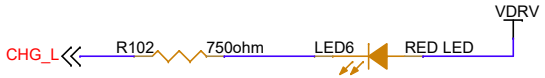
LiPo Battery Charger

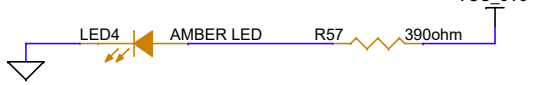


Battery Connector

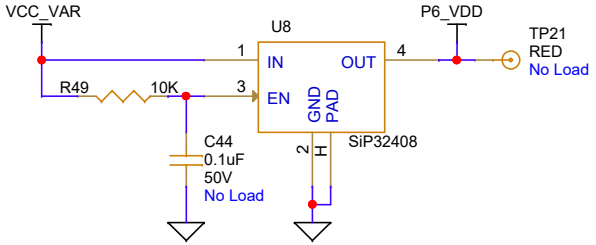
Charging LED



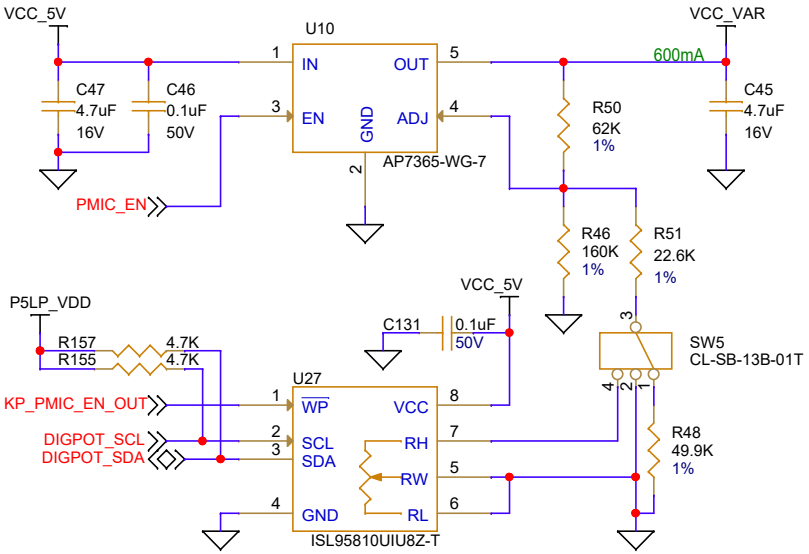
Power LED



Reverse Voltage Protection

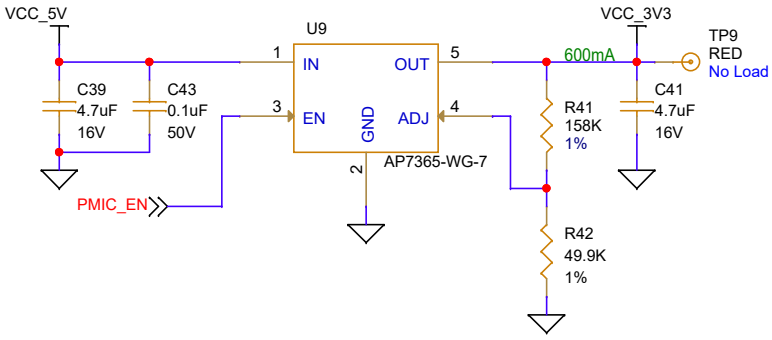


1.8V - 3.3V Variable Regulator



SW5	Source
POS1	1.8V
POS2	3.3V
POS3	Variable (1.8-3.3V)

3.3V Regulator



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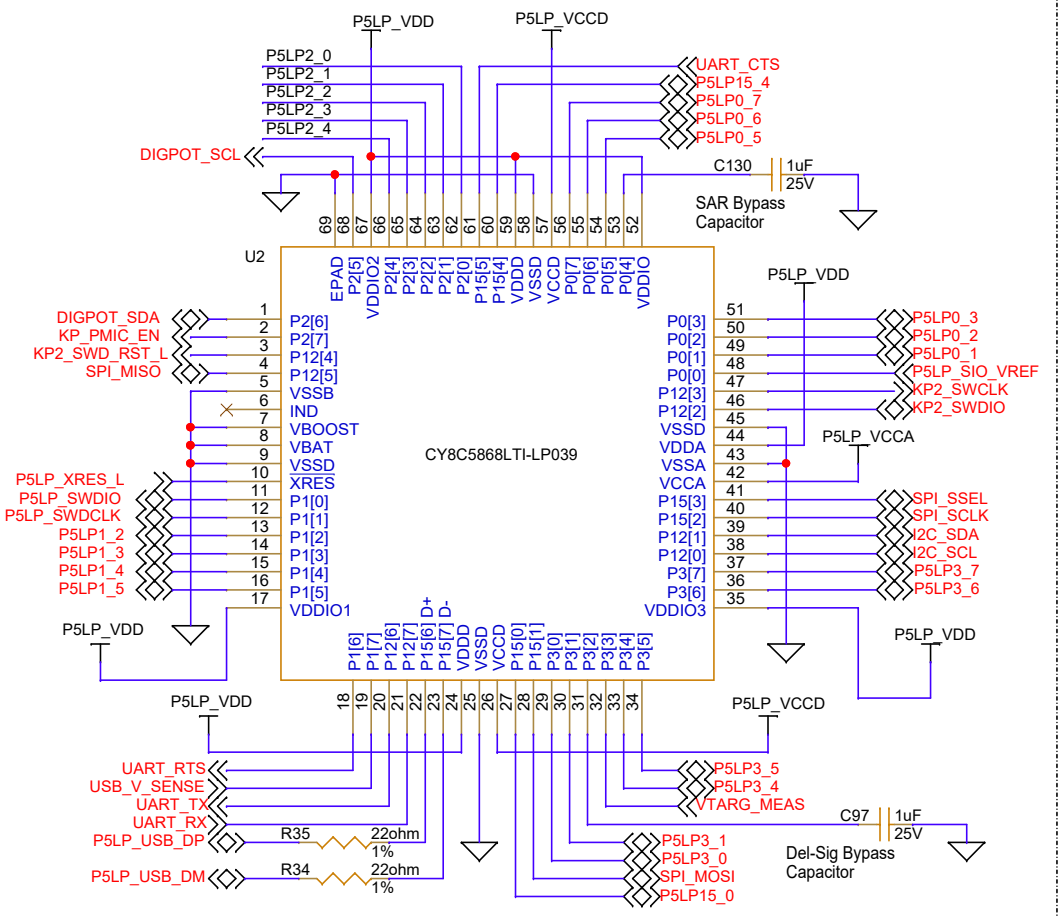
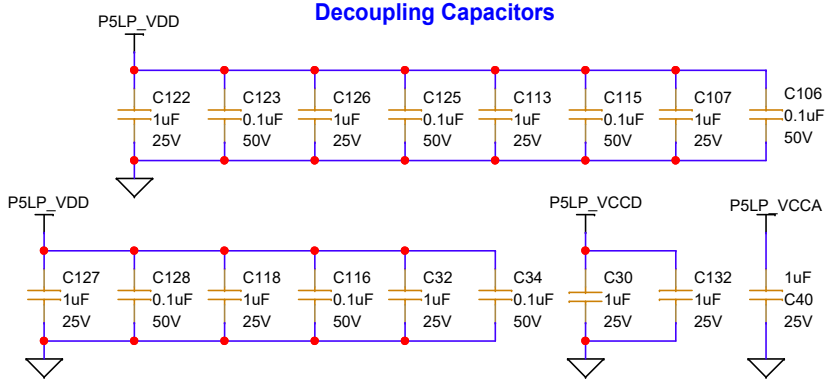
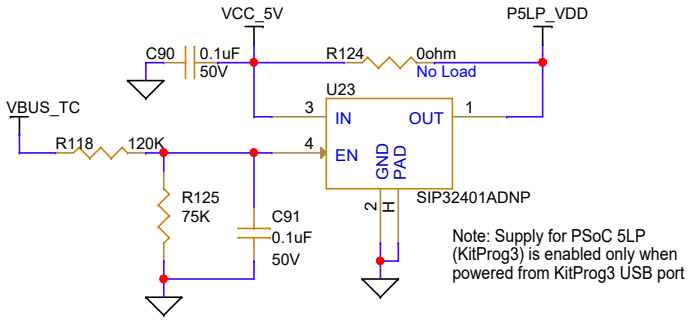
PSoC 5LP based KitProg3



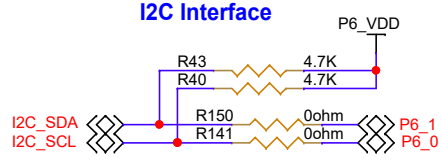
Decoupling Capacitors



Supply for PSoC 5LP

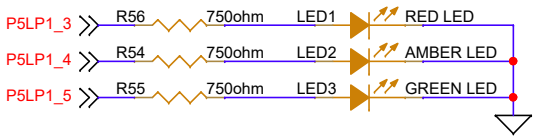


I2C Interface

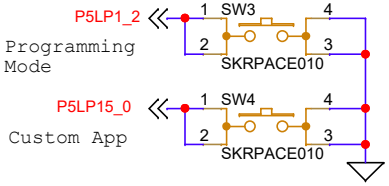


UART Interface

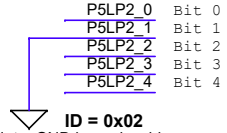
PSoC 5LP Status LEDs



PSoC 5LP User Switches



KitProg3 HW Revision



ID = 0x02

Note: GND is read as binary "1" and floating as "0"

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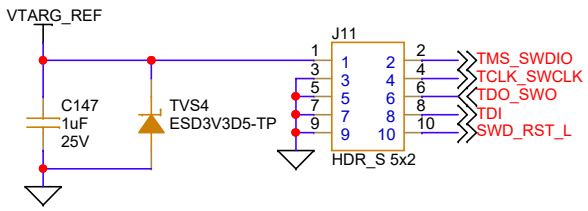
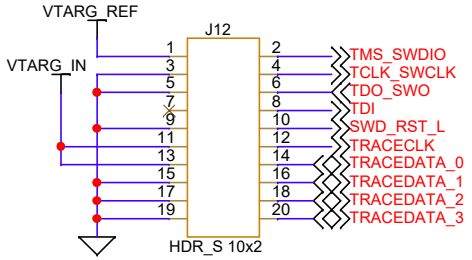
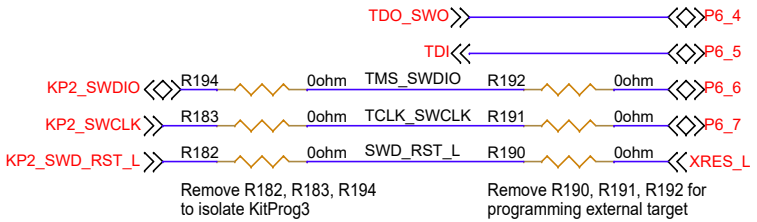
Target PSoC Program/Debug Header



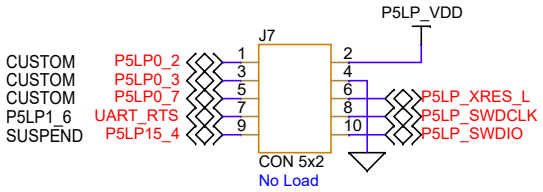
ETM Header



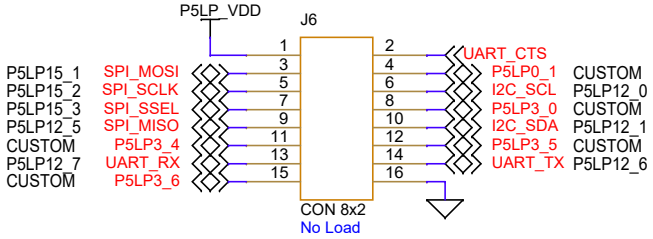
PSoC 6 SWD/JTAG Interface



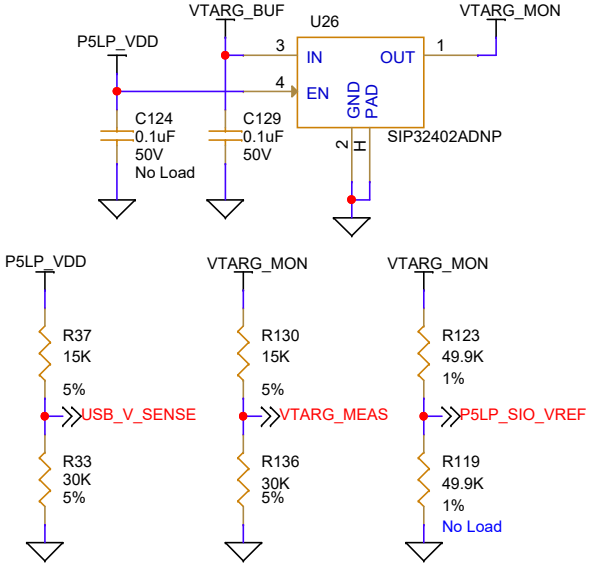
PSoC 5LP Custom Application Header



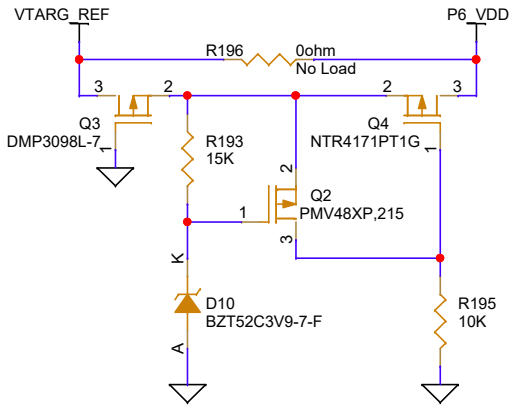
PSoC 5LP GPIO Expansion Header



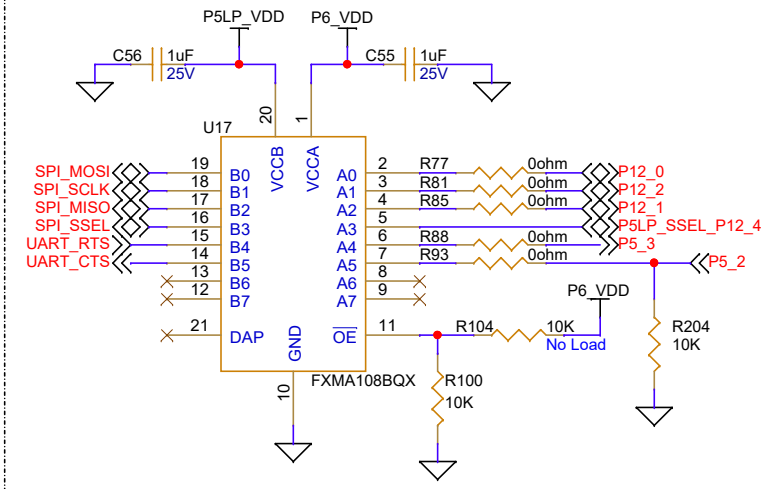
Voltage Monitoring



Program/Debug Overvoltage Protection



Level Translator for SPI and UART flow control



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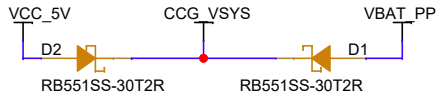
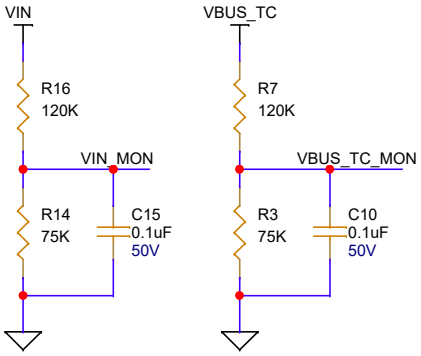
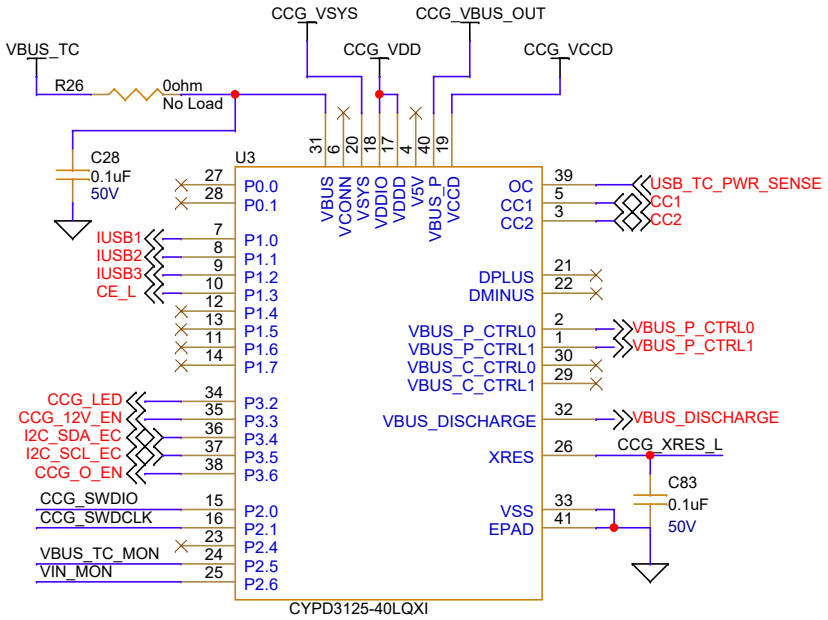
CCG3 Supply Selection



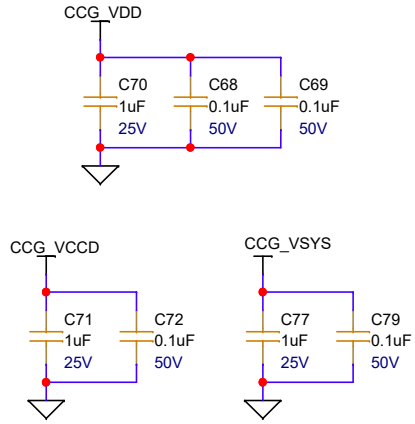
VBUS & VIN Voltage Monitoring



CCG3 USB Type-C Controller

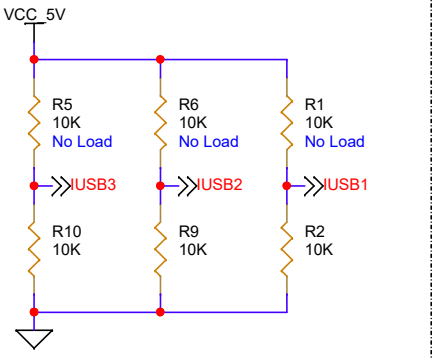


Decoupling Capacitors

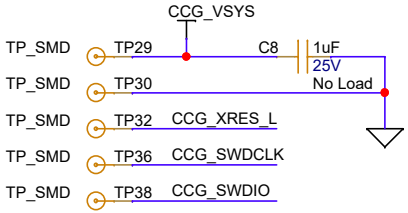


I2C Bootloader

LiPo Battery Charger Pull Up



CCG3 Programming



Output Indication

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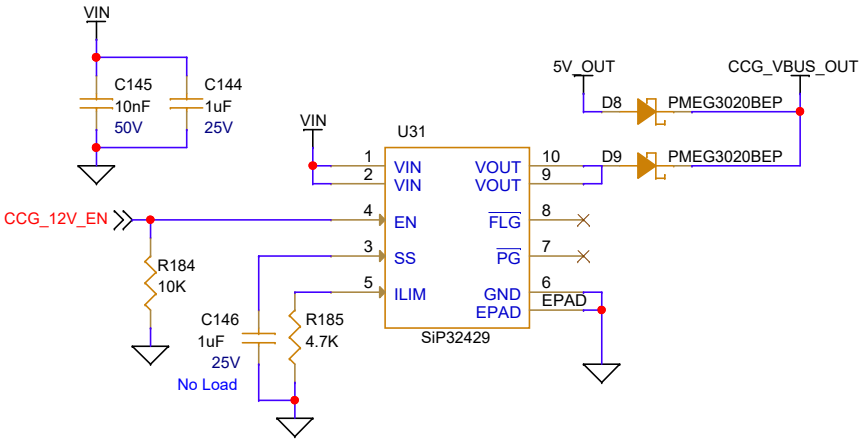
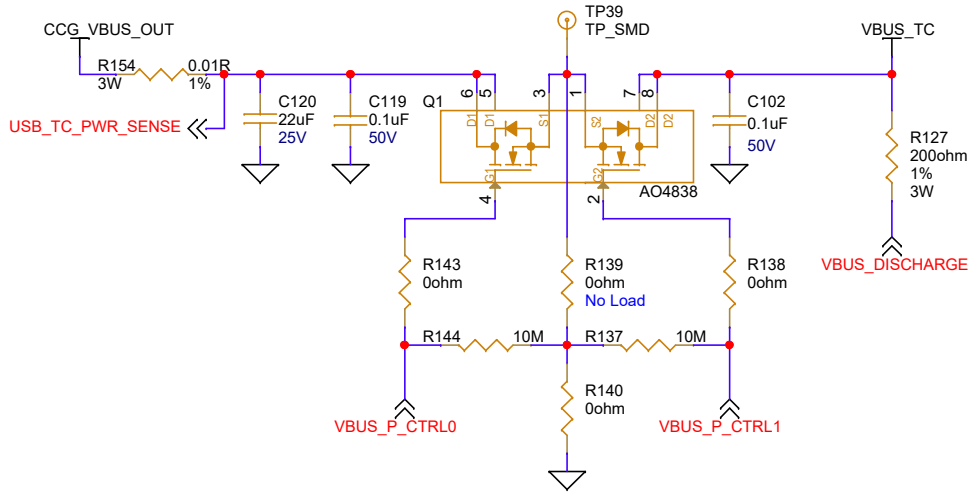
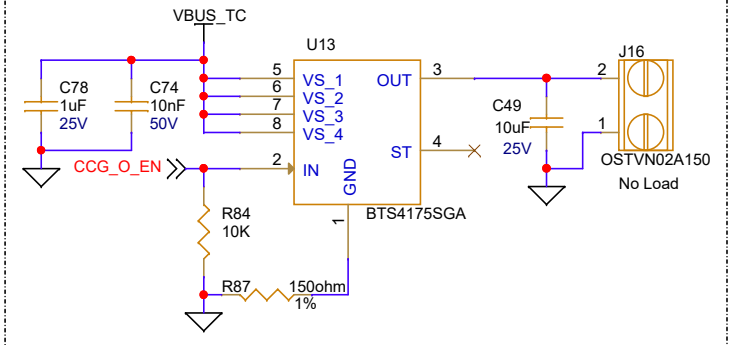
CCG3 Provider Path 'OR'ing



VBUS Provider Path



CCG3 Consumer Path



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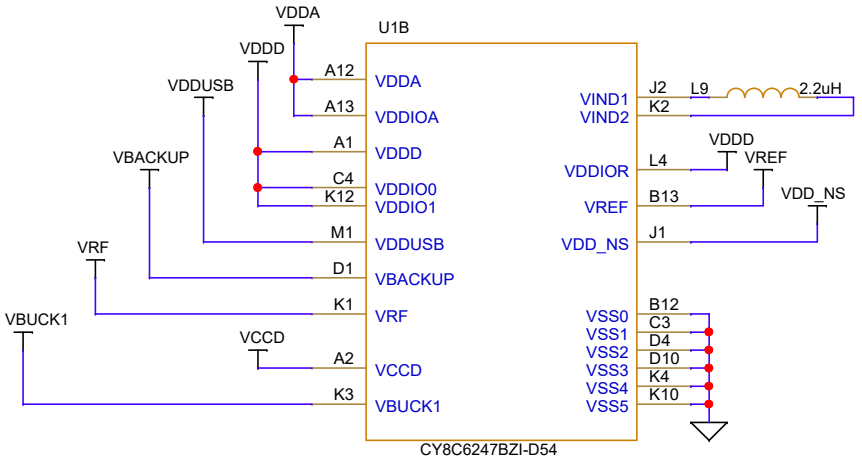
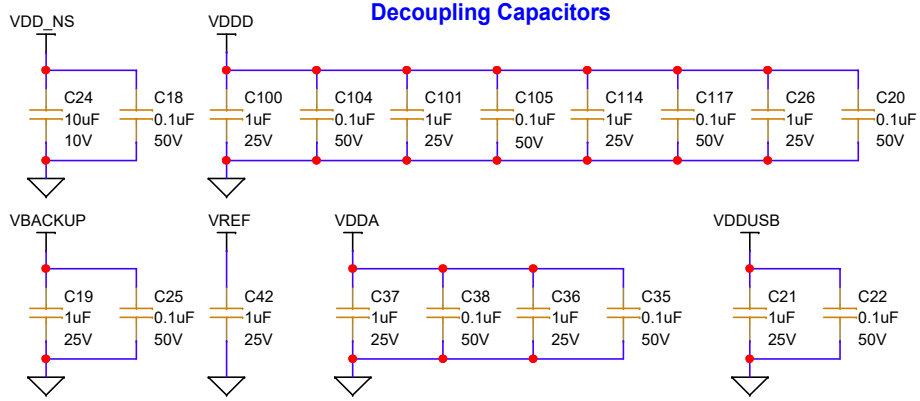
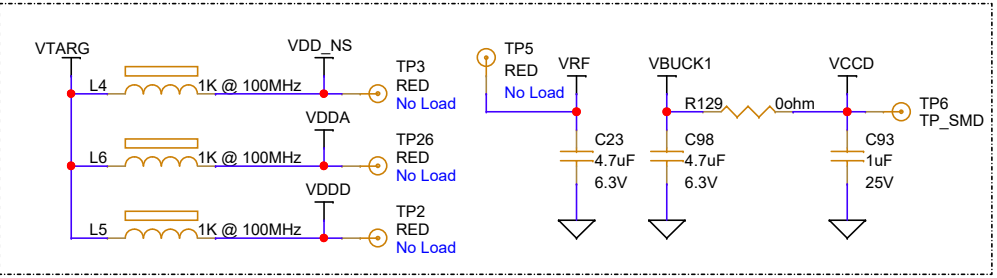
PSoC 6 Power

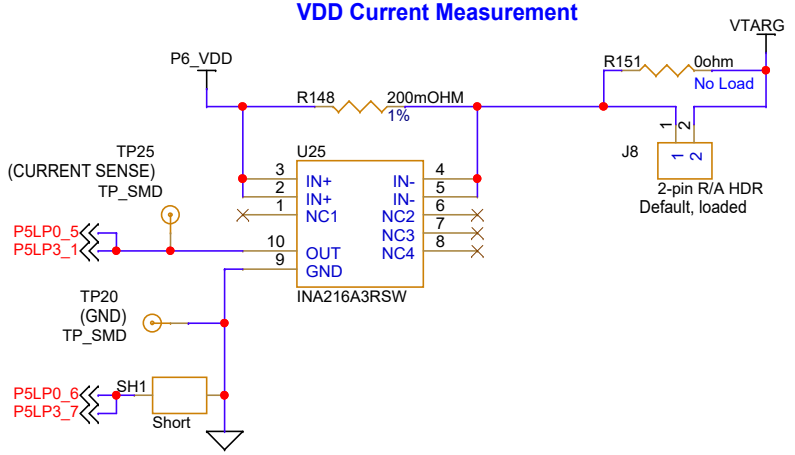


Decoupling Capacitors

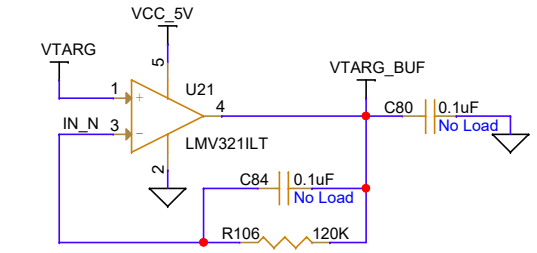




VDD Current Measurement

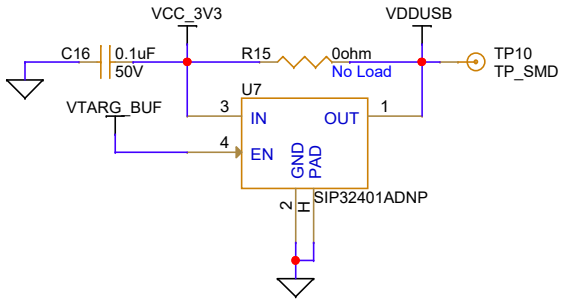


Voltage Follower



Note: This circuit is to reduce the leakage current in VTARG domain

PSoC 6 VDDUSB Enable



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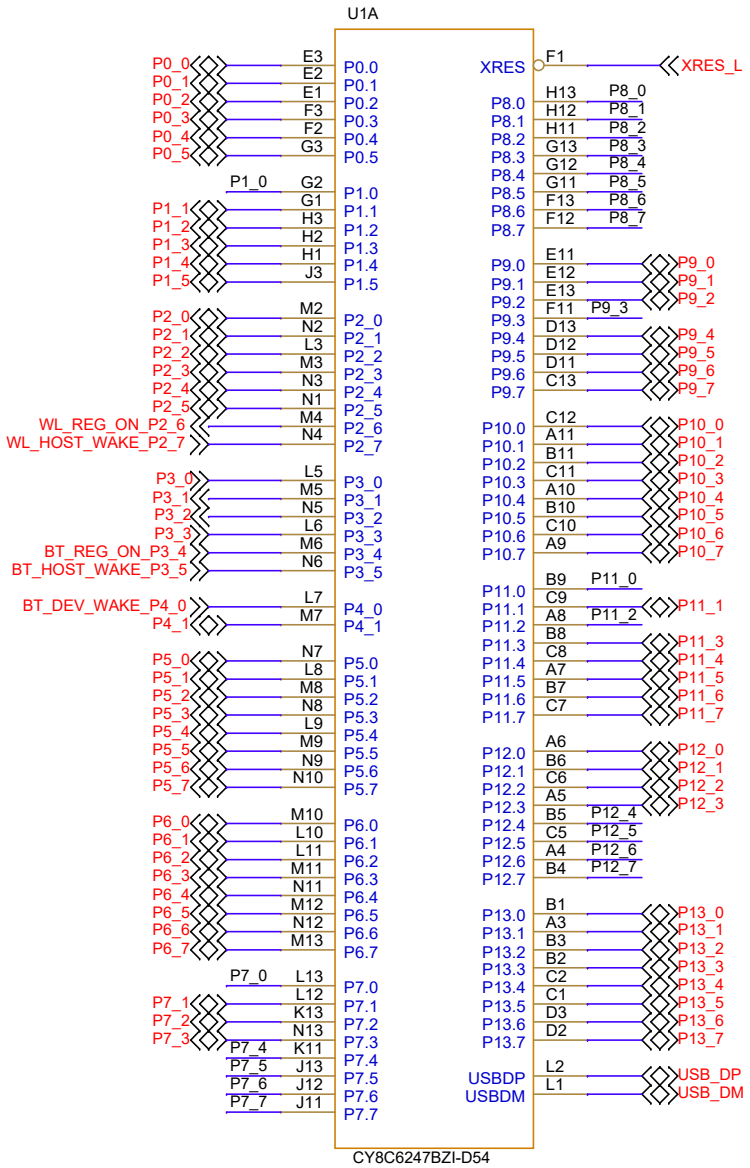
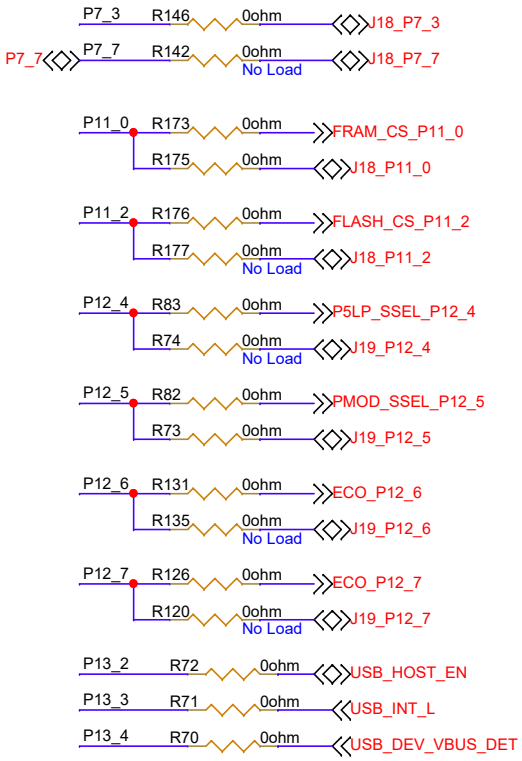
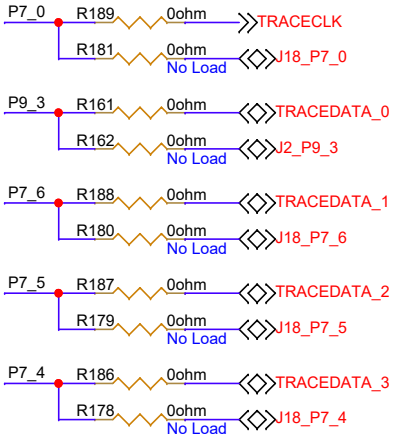
PSoC 6 Signals



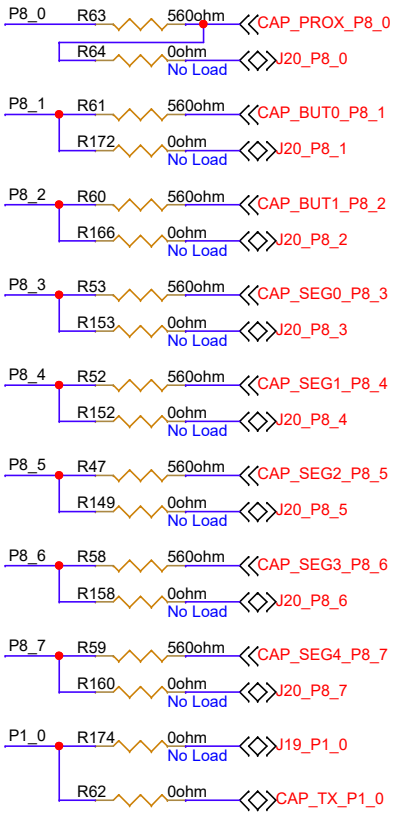
Additional Multiplexed Pins

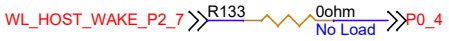


TRACE Multiplexed Pins



CapSense Multiplexed Pins





Note: Option for WLAN to wake PSoC 6 from Hibernate

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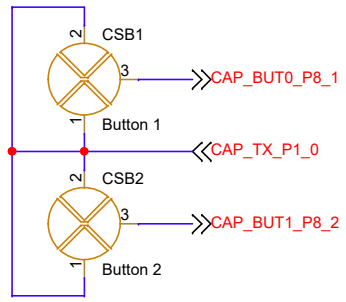
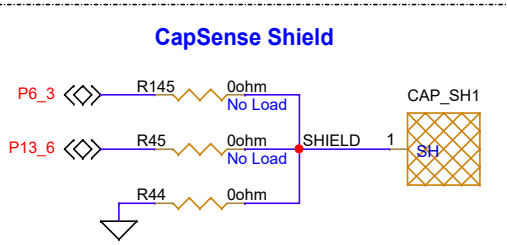
CapSense Button

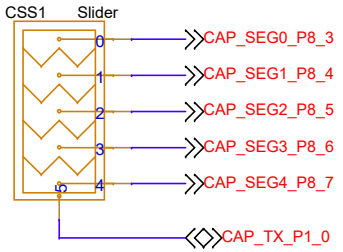


CMOD, CSH & CINT

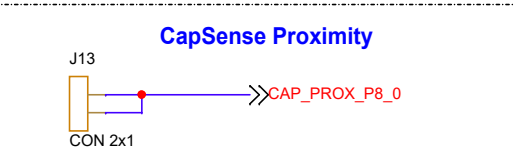
CapSense Shield



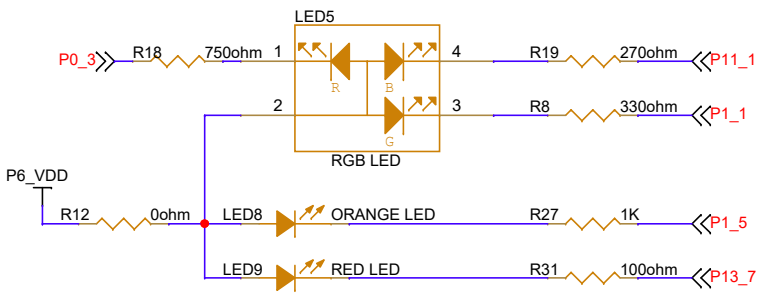
CapSense Slider



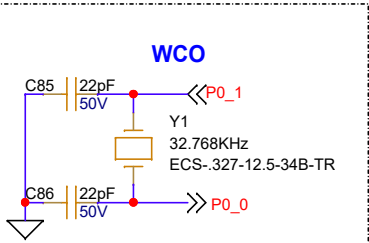
CapSense Proximity



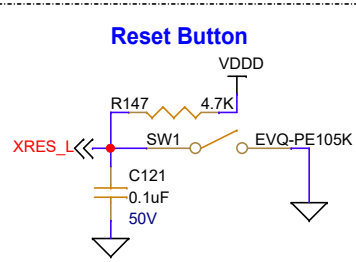
User LEDs



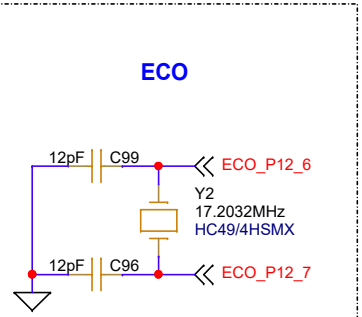
WCO



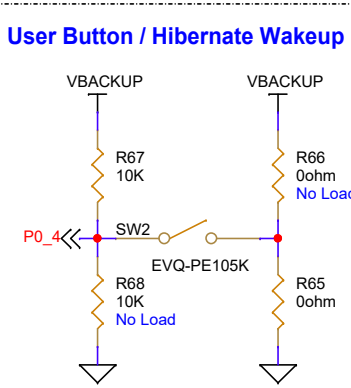
Reset Button



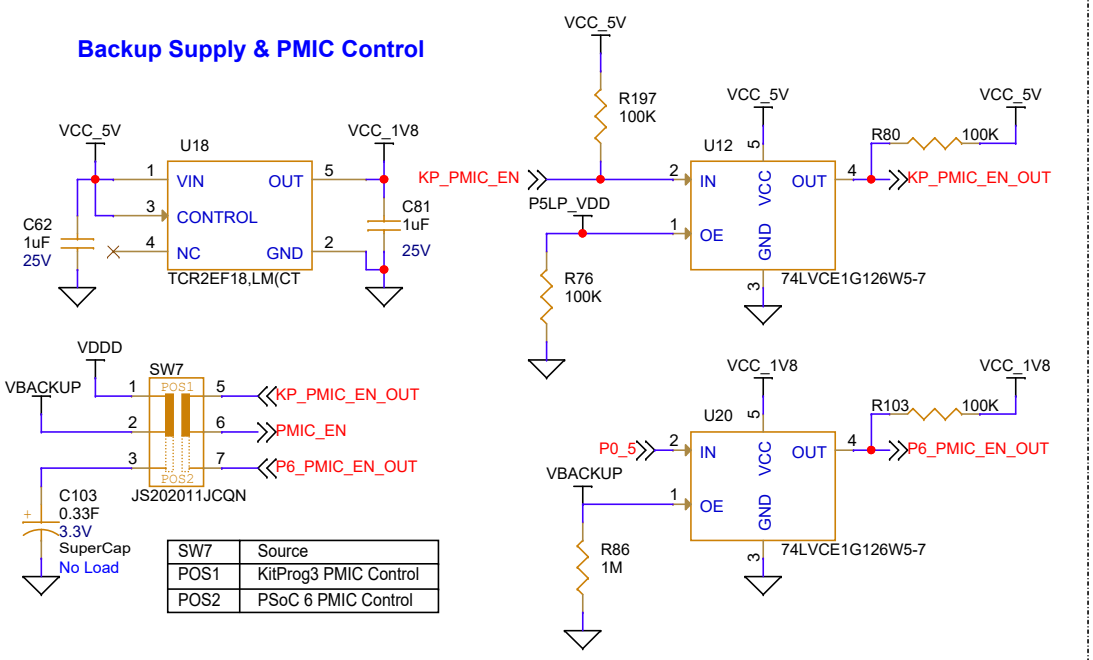
ECO



User Button / Hibernate Wakeup



Backup Supply & PMIC Control



SW7	Source
POS1	KitProg3 PMIC Control
POS2	PSoC 6 PMIC Control

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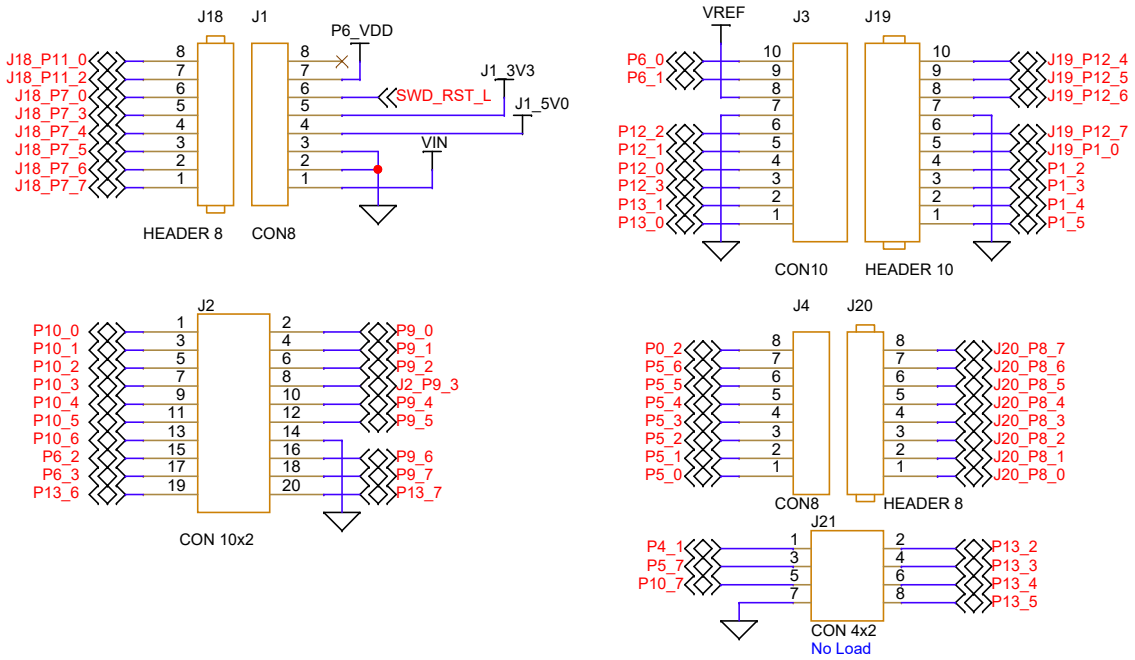
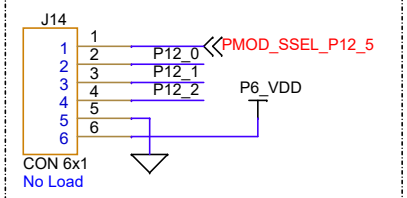
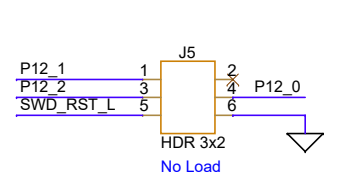
Arduino & Extended Headers



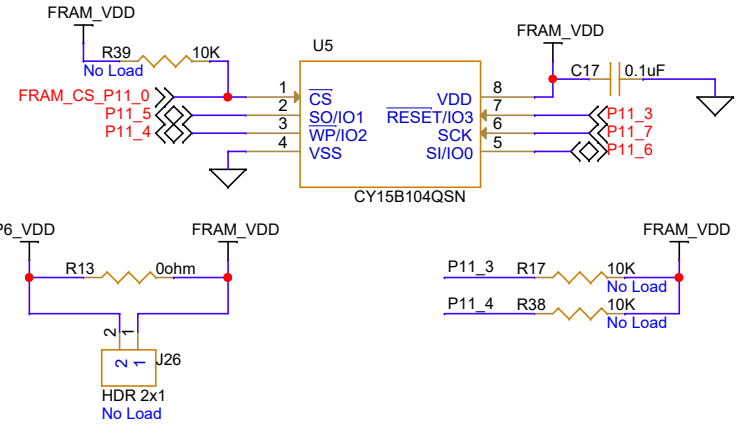
PMOD Header



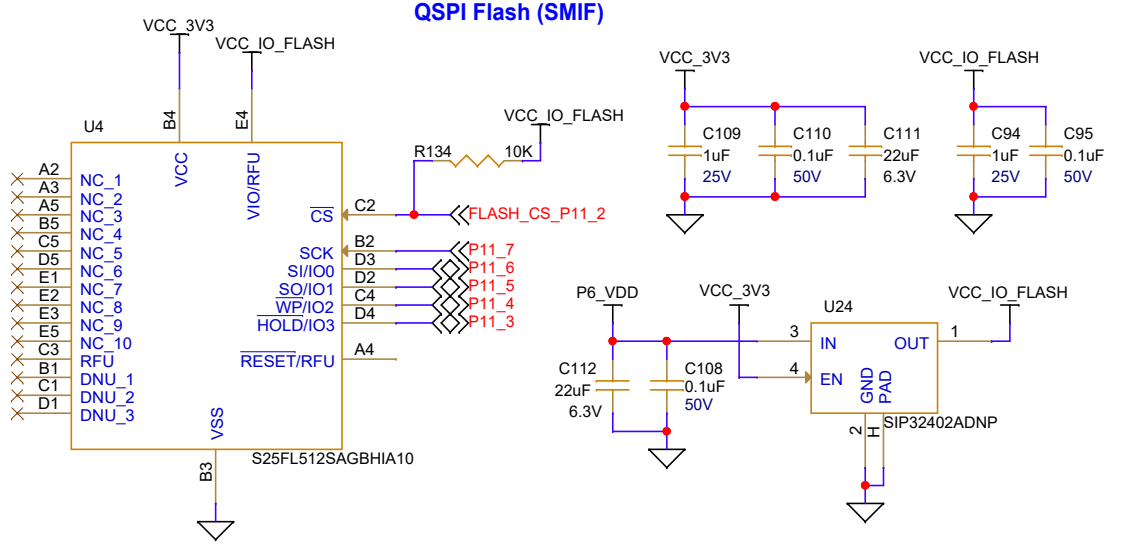
ICSP Header



FRAM



QSPI Flash (SMIF)



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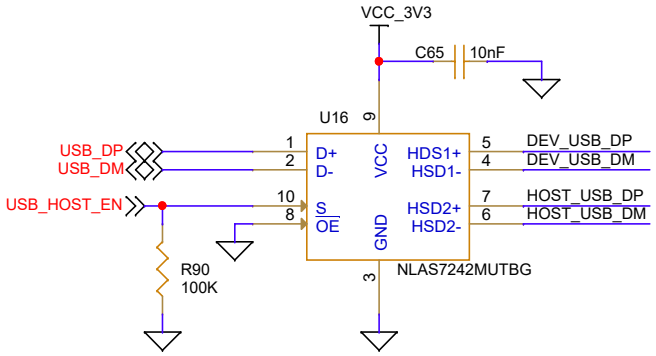
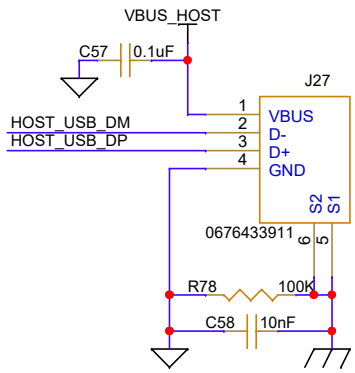
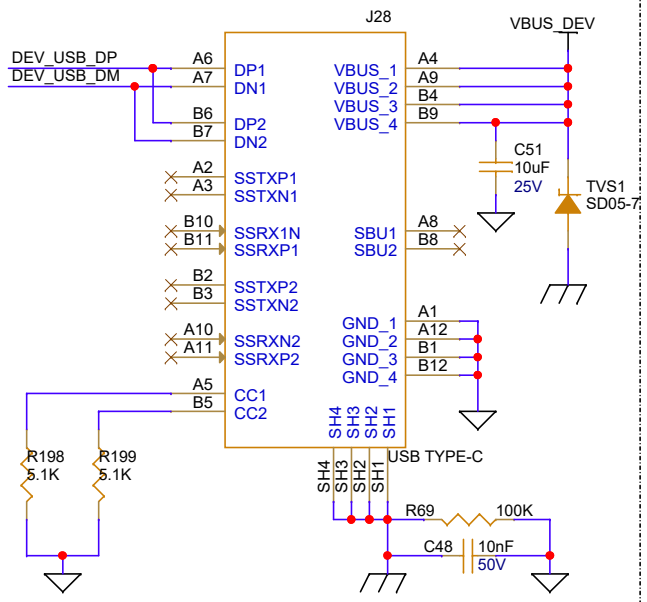
USB Multiplexer



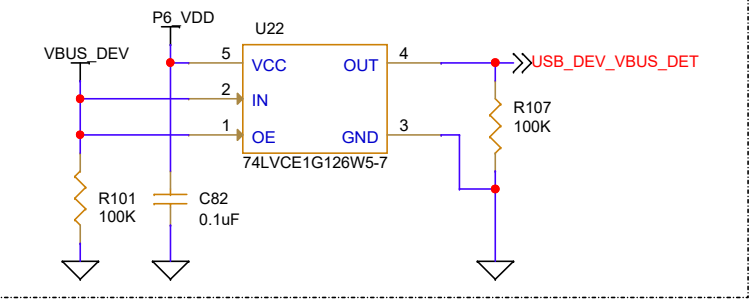
USB Type-A Receptacle (Host)



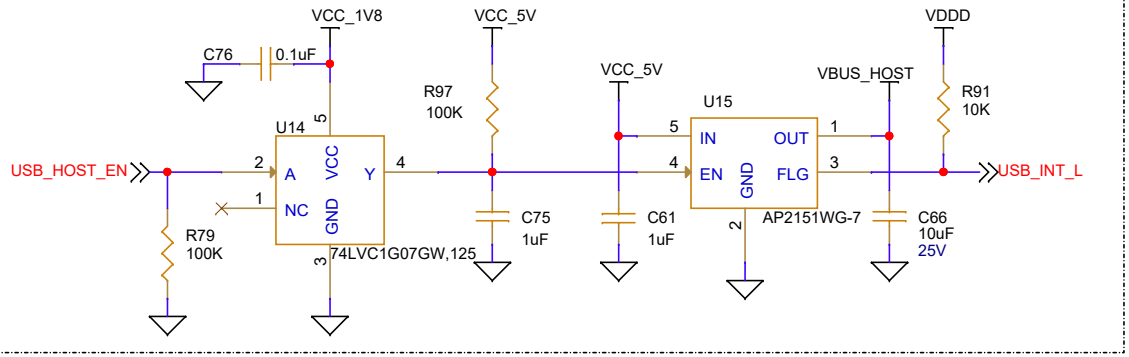
USB Type-C Connector (Device)



USB Device Port VBUS Detect



USB Host VBUS Enable



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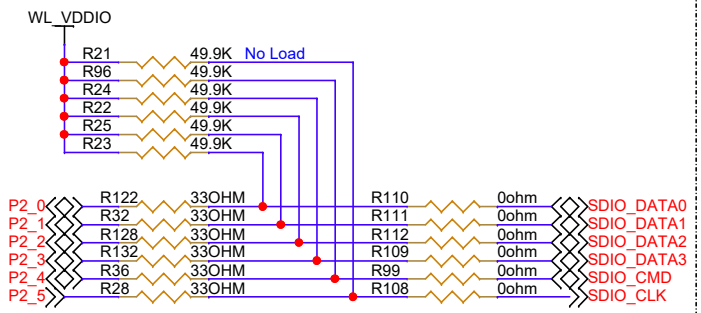
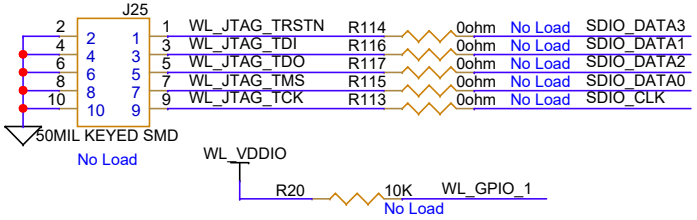
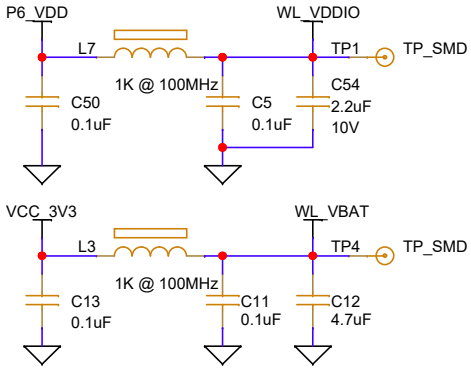
WiFi Interface with PSoC 6



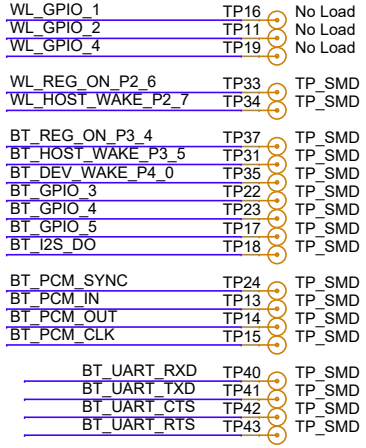
Optional JTAG Interface



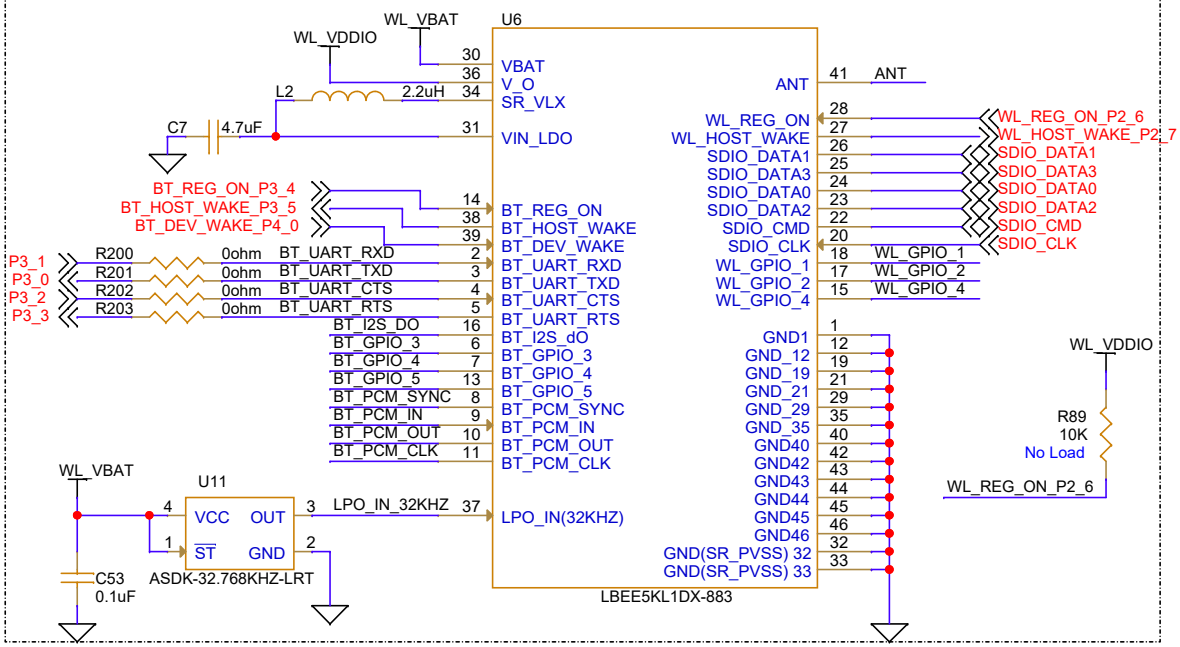
Supply for WiFi Module



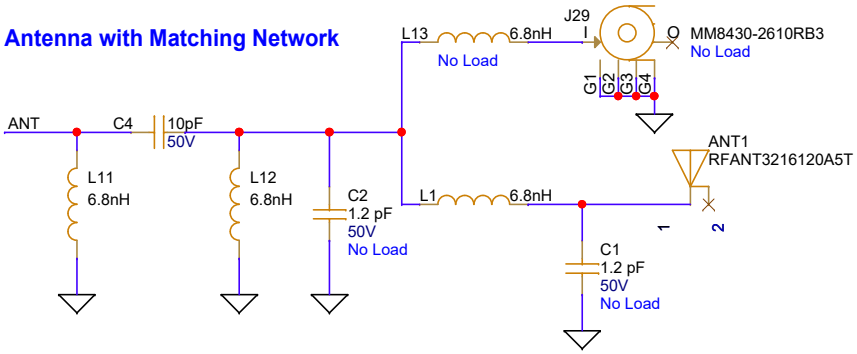
Testpoints



WiFi / BT Module



Antenna with Matching Network



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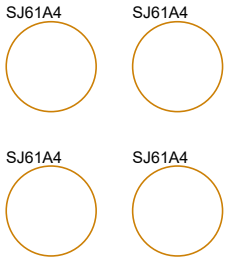
Accessories

Cylindrical Bumper

SJ61A4 SJ61A4

SJ61A4 SJ61A4

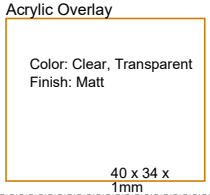


Acrylic Overlay

Acrylic Overlay

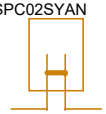
Color: Clear, Transparent
Finish: Matt

40 x 34 x 1mm



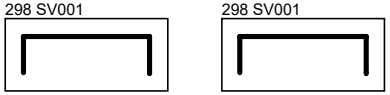
Jumper Shut

SPC02SYAN



USB Type-C Connector Brackets

298 SV001 298 SV001



PCBA label

LBL PCA Label LBL QR Code

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REVISION HISTORY

REV	DESCRIPTION OF CHANGE	DATE
01	Internal Release	2017/03/13
02	Internal Release	2017/09/01
03	Initial Release	2017/10/20
04	Changed WCO load capacitors C85 and C86	2020/01/29
05	Removed C103 (SuperCap) from assembly	2023/12/22

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