CY8CPROTO-064S1-SB PSoC 64 Secure Boot Prototyping Kit with 1M Flash

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Drawing Numbers	
PCBA	121-60545-01
PCB	600-60545-01
FAB DRW	610-60545-01
ASSY DRW	620-60545-01
SCH DRW	630-60545-01

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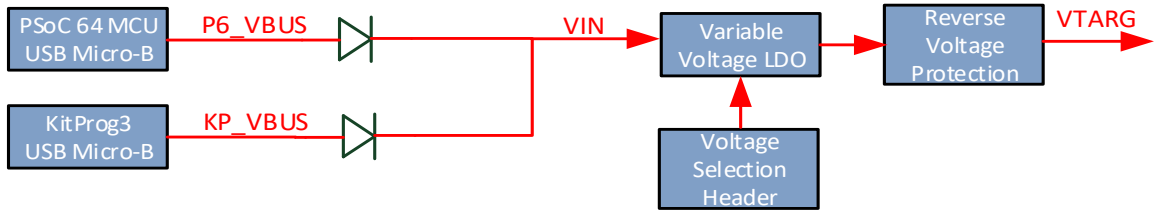
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Page Title : Title Page

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Power Section

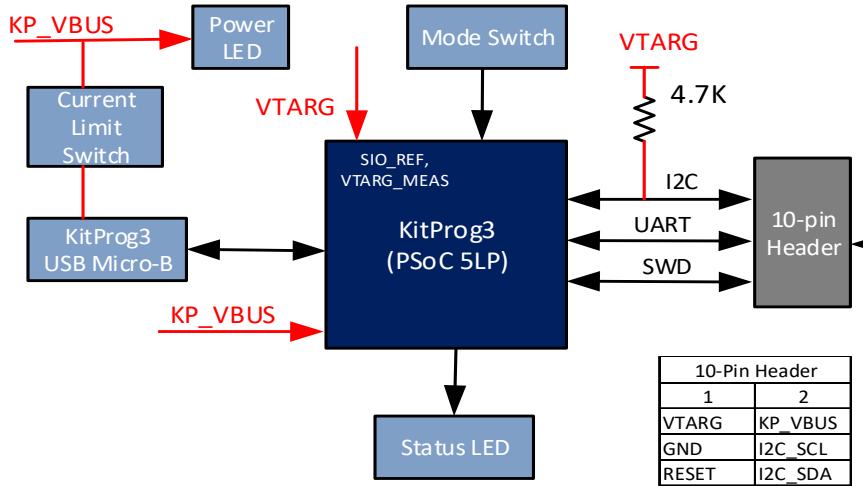


Cypress Parts

Loaded Parts

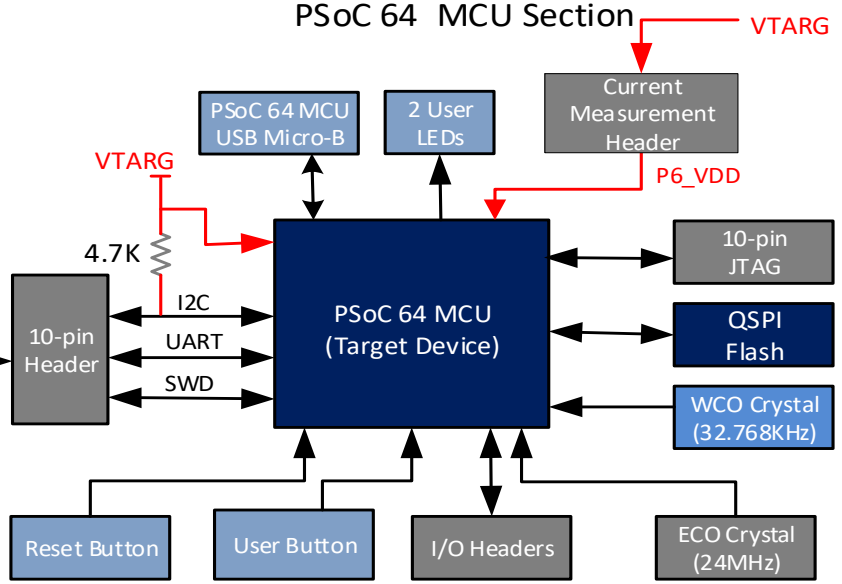
No Load Parts

KitProg3 Section



10-Pin Header	
1	2
VTARG	KP_VBUS
GND	I2C_SCL
RESET	I2C_SDA
SWDCLK	UART_RX
SWDIO	UART_TX

PSoC 64 MCU Section



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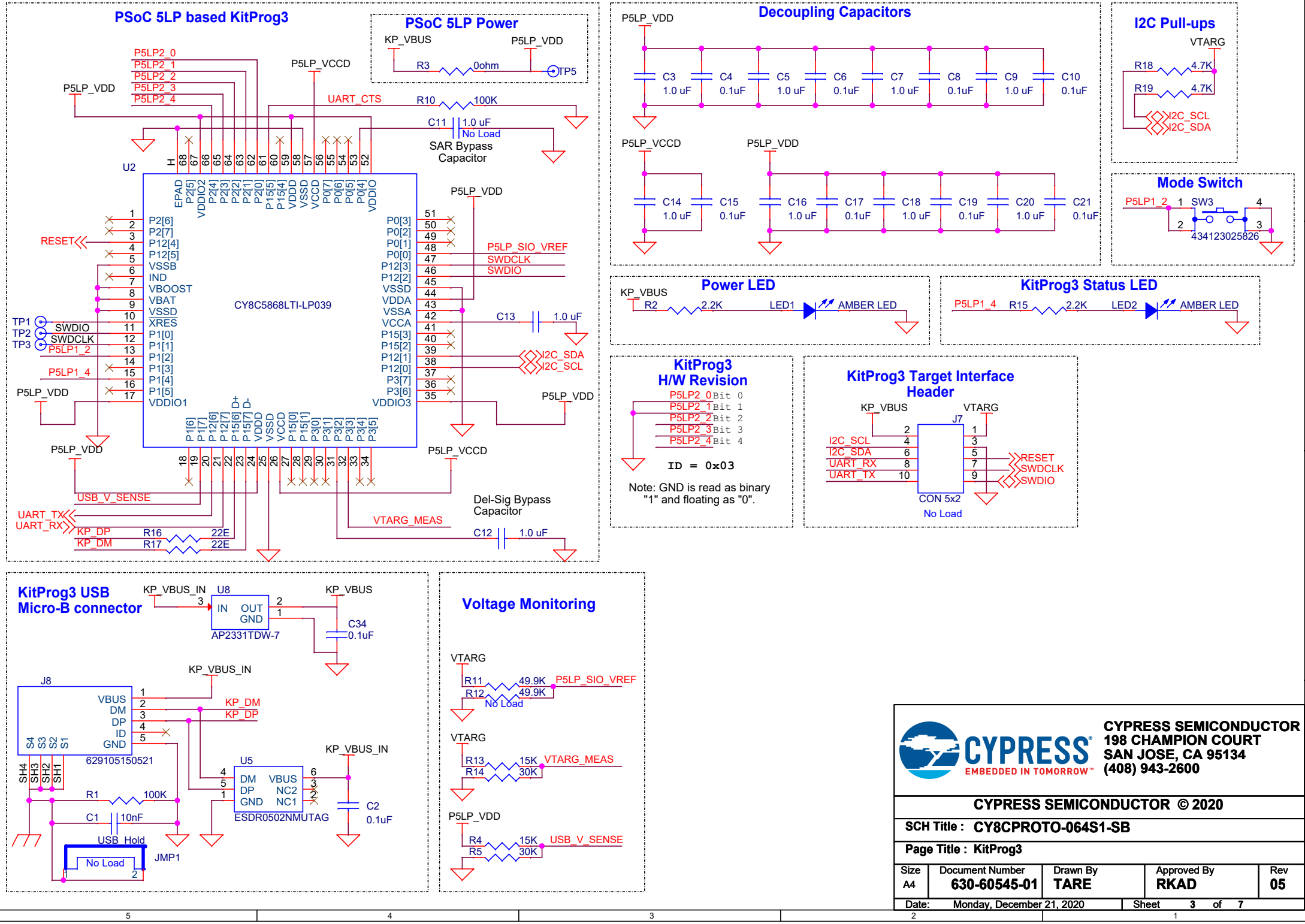
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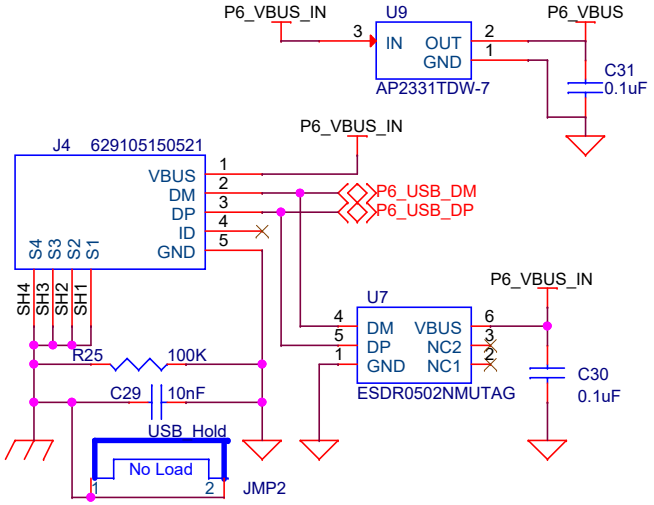
Page Title : Block Diagram

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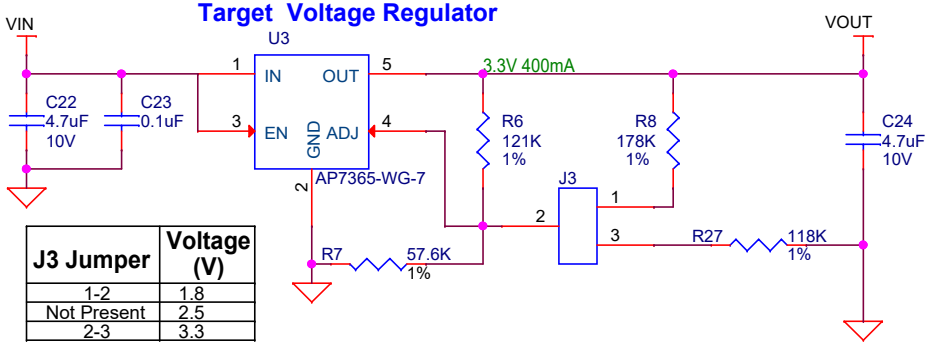
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PSoC 5LP based KitProg3
PSoC 5LP Power
KP_VBUS
P5LP_VDD
R3
0ohm
TP5
P5LP_VCCD
UART_CTS
R10
100K
C11
1.0 uF
No Load
SAR Bypass Capacitor
U2
CY8C5868LTI-LP039
RESET
SWDIO
SWDCLK
P5LP1_2
P5LP1_4
P5LP_SIO_VREF
I2C_SDA
I2C_SCL
C13
1.0 uF
USB_V_SENSE
UART_TX
UART_RX
KP_DP
KP_DM
R16
R17
22E
VTARG_MEAS
C12
Del-Sig Bypass Capacitor
Decoupling Capacitors
C3 1.0 uF
C4 0.1uF
C5 1.0 uF
C6 0.1uF
C7 1.0 uF
C8 0.1uF
C9 1.0 uF
C10 0.1uF
C14 1.0 uF
C15 0.1uF
C16 1.0 uF
C17 0.1uF
C18 1.0 uF
C19 0.1uF
C20 1.0 uF
C21 0.1uF
I2C Pull-ups
VTARG
R18 4.7K
R19 4.7K
Mode Switch
SW3
Power LED
R2 2.2K
LED1
AMBER LED
KitProg3 Status LED
R15 2.2K
LED2
KitProg3 H/W Revision
P5LP2_0 Bit 0
P5LP2_1 Bit 1
P5LP2_2 Bit 2
P5LP2_3 Bit 3
P5LP2_4 Bit 4
ID = 0x03
Note: GND is read as binary "1" and floating as "0".
KitProg3 Target Interface Header
J7
CON 5x2
No Load
KitProg3 USB Micro-B connector
U8
AP2331TDW-7
C34 0.1uF
J8
629105150521
U5
ESDR0502NMUTAG
C2 0.1uF
R1 100K
C1 10nF
USB_Hold
JMP1
Voltage Monitoring
R11 49.9K
R12 49.9K
R13 15K
R14 30K
R4 15K
R5 30K
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PSoC 64 MCU USB Device Micro-B connector

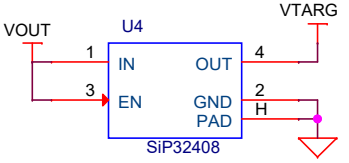


Target Voltage Regulator

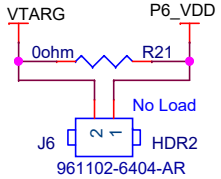


J3 Jumper	Voltage (V)
1-2	1.8
Not Present	2.5
2-3	3.3

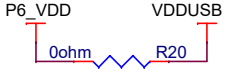
Reverse Voltage Protection



Current Measurement Header

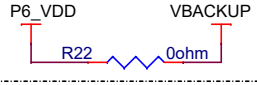


PSoC 64 MCU USB Voltage

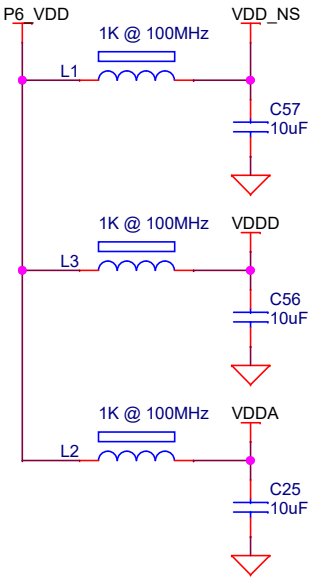


Note: USB functionality will work only at 3.3V.

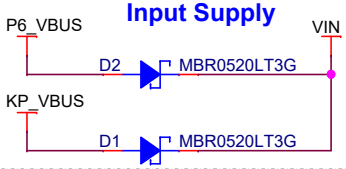
VBACKUP



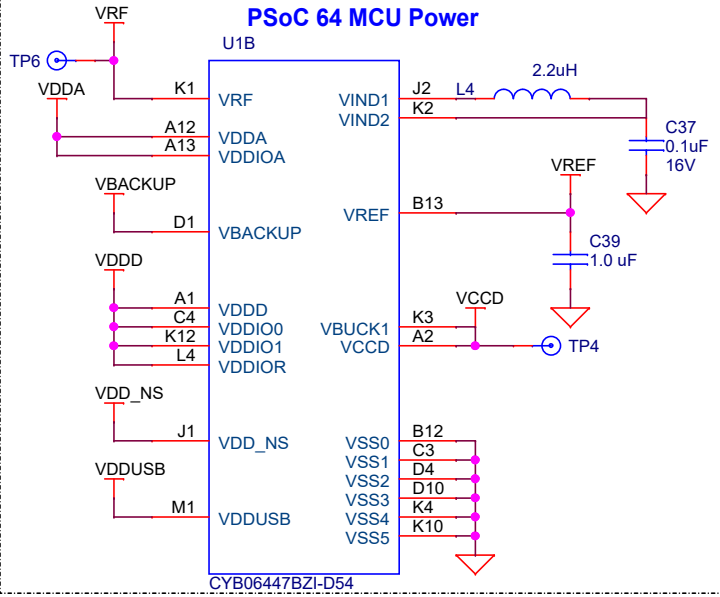
PSoC 64 MCU Power IN



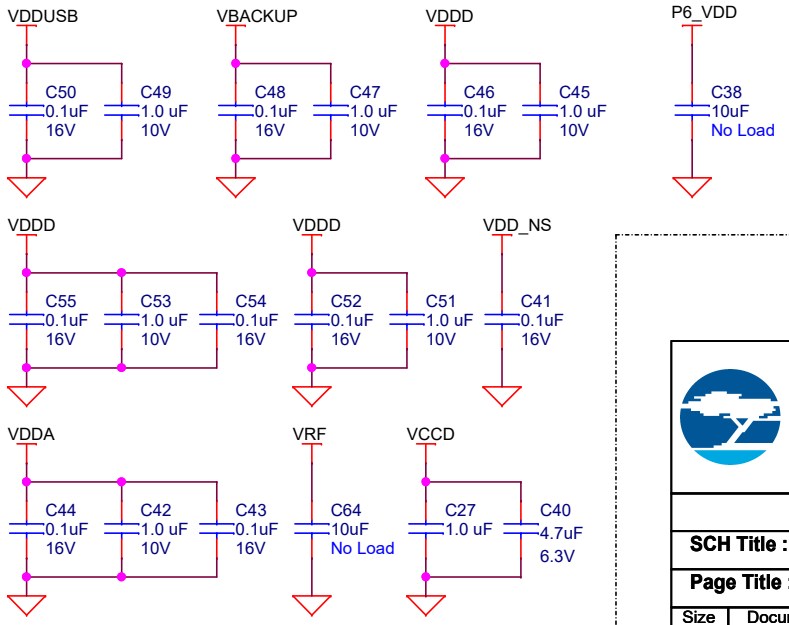
Input Supply



PSoC 64 MCU Power



PSoC 64 MCU Decoupling Capacitors



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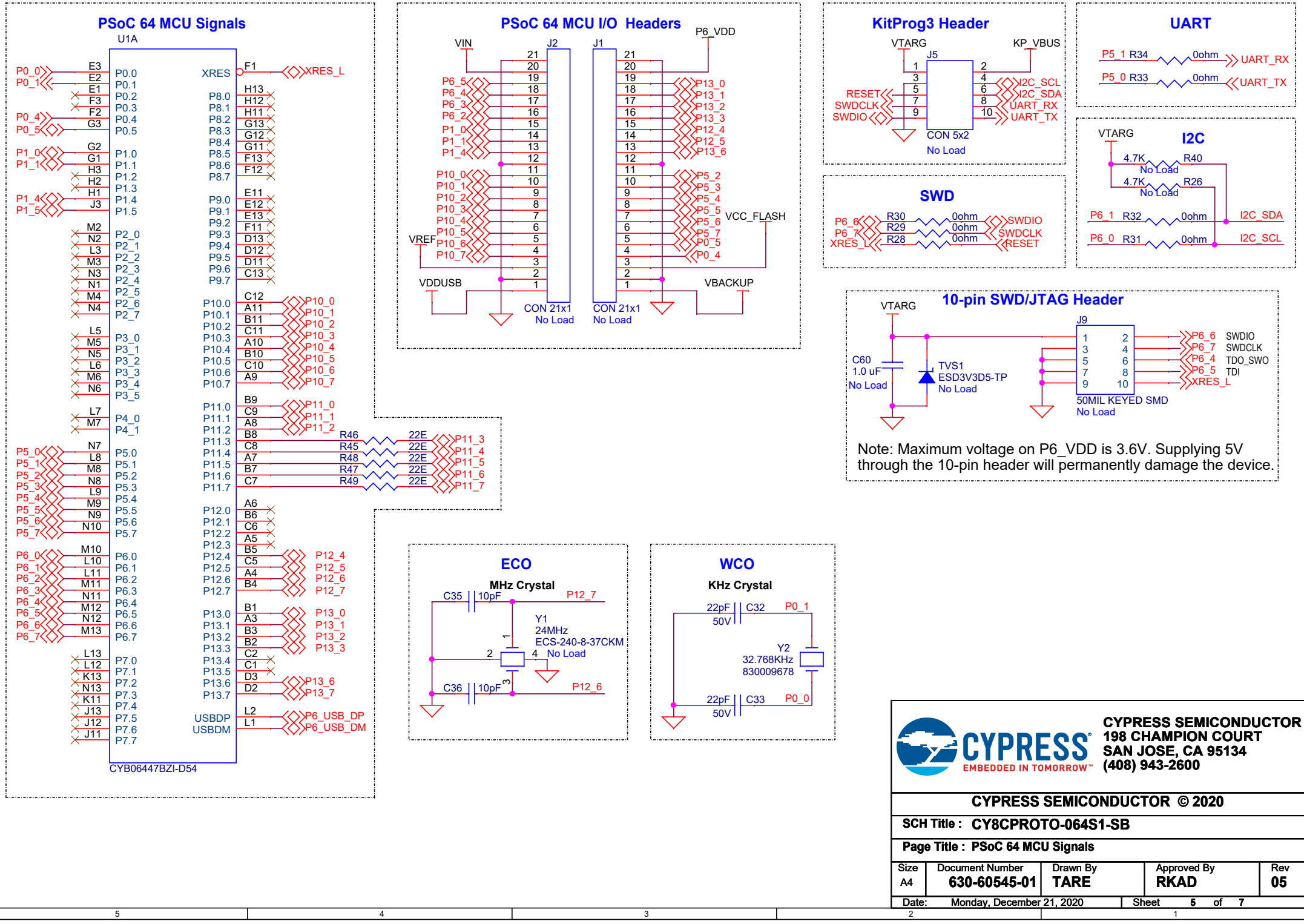
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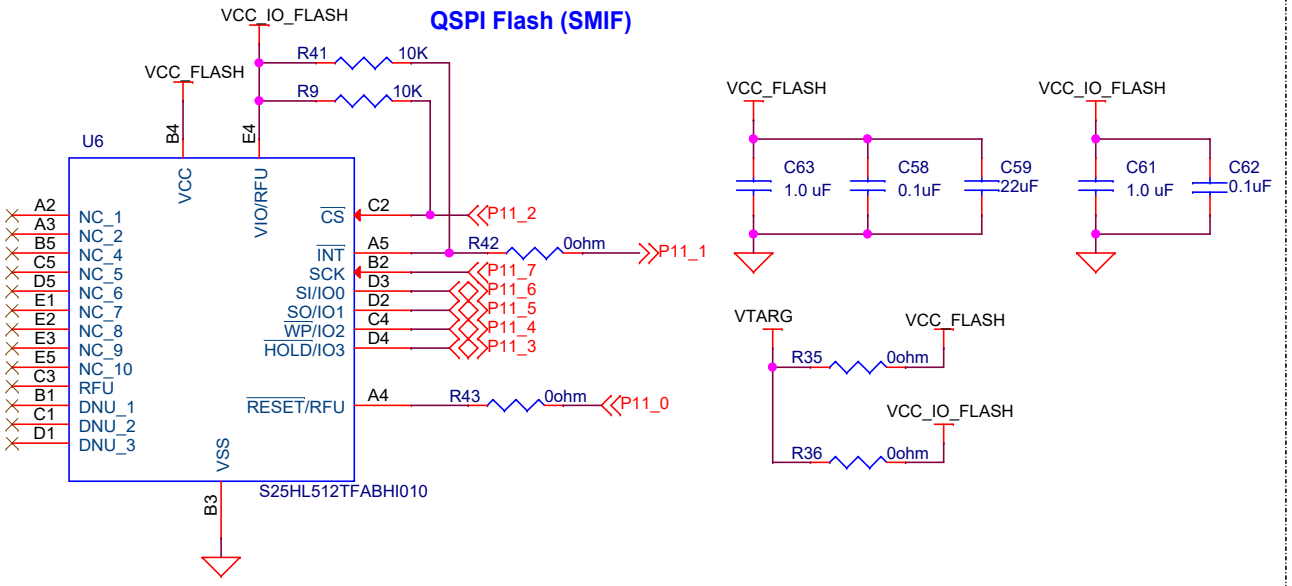


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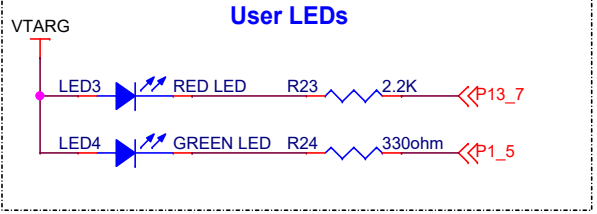
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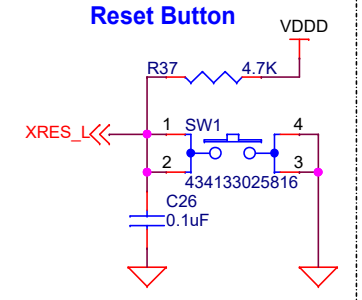
QSPI Flash (SMIF)



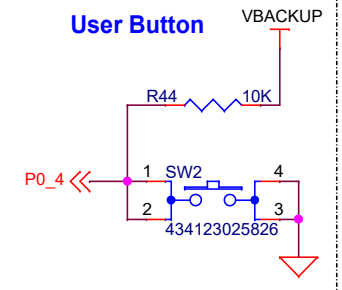
User LEDs



Reset Button



User Button



Accessories

PCBA label

LBL PCA Label

Bump-ons

RBS-27 RBS-27 RBS-27 RBS-27

Jumper Shunt

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REVISION HISTORY

REV	DESCRIPTION OF CHANGE	DATE
01	Initial Internal Release	2019/01/04
02	Internal Release	2019/01/24
03	Internal Release	2019/03/28
04	Internal Release	2019/09/23
05	Initial Release	2020/03/17

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