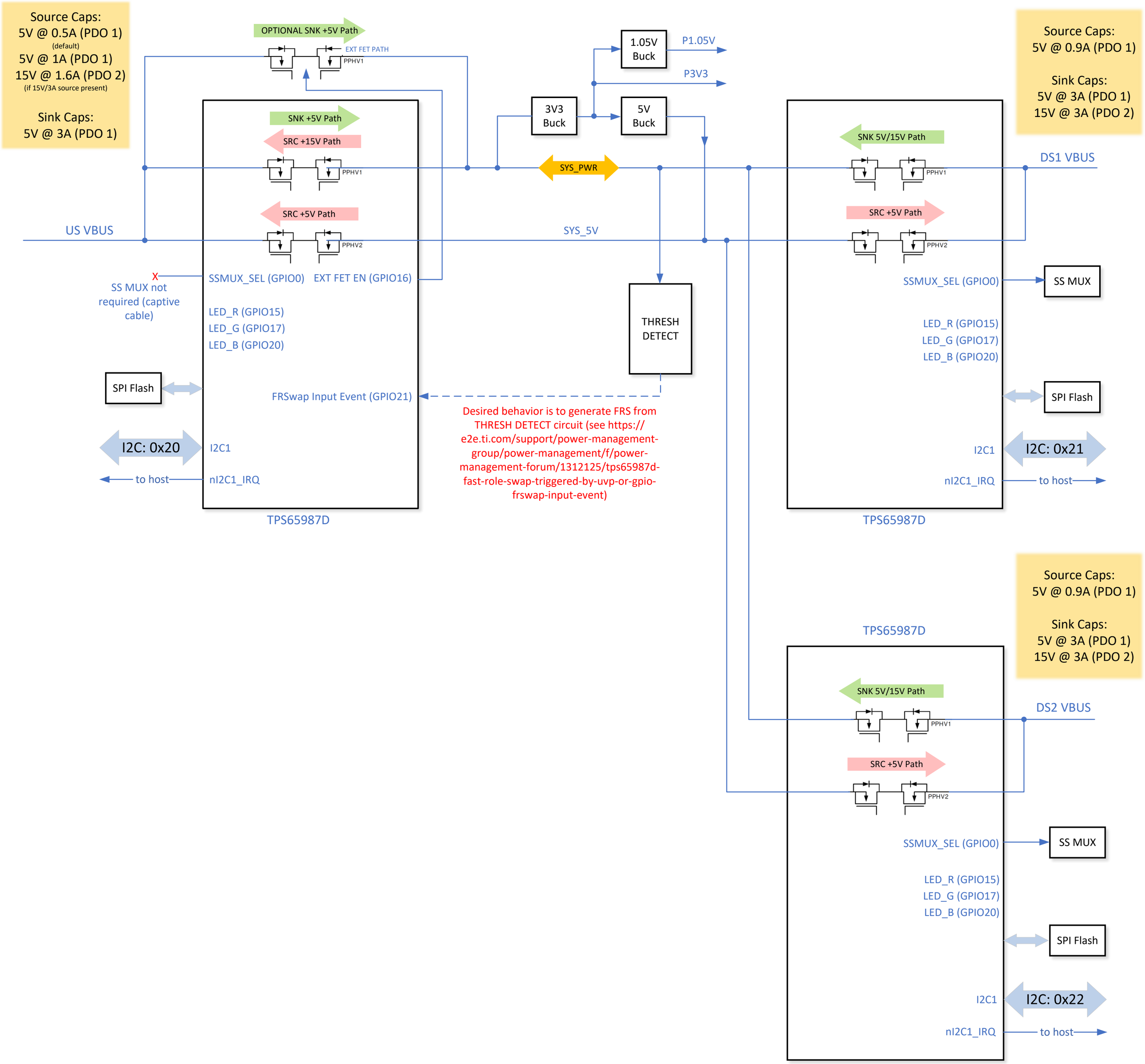
Source Caps:
5V @ 0.5A (PDO 1)
(default)
5V @ 1A (PDO 1)
15V @ 1.6A (PDO 2)
(if 15V/3A source present)
Sink Caps:
5V @ 3A (PDO 1)
OPTIONAL SNK +5V Path
EXT FET PATH
PPHV1
SNK +5V Path
SRC +15V Path
PPHV1
SRC +5V Path
PPHV2
US VBUS
X
SS MUX not required (captive cable)
SSMUX_SEL (GPIO0)
EXT FET EN (GPIO16)
LED_R (GPIO15)
LED_G (GPIO17)
LED_B (GPIO20)
SPI Flash
FRSwap Input Event (GPIO21)
I2C: 0x20
I2C1
to host
nI2C1_IRQ
TPS65987D
1.05V Buck
P1.05V
P3V3
3V3 Buck
5V Buck
SYS_PWR
SYS_5V
THRESH DETECT
Desired behavior is to generate FRS from THRESH DETECT circuit (see https://e2e.ti.com/support/power-management-group/power-management/f/power-management-forum/1312125/tps65987d-fast-role-swap-triggered-by-uvp-or-gpio-frswap-input-event)
Source Caps:
5V @ 0.9A (PDO 1)
Sink Caps:
5V @ 3A (PDO 1)
15V @ 3A (PDO 2)
SNK 5V/15V Path
PPHV1
SRC +5V Path
PPHV2
DS1 VBUS
SSMUX_SEL (GPIO0)
SS MUX
LED_R (GPIO15)
LED_G (GPIO17)
LED_B (GPIO20)
SPI Flash
I2C1
I2C: 0x21
nI2C1_IRQ
to host
TPS65987D
Source Caps:
5V @ 0.9A (PDO 1)
Sink Caps:
5V @ 3A (PDO 1)
15V @ 3A (PDO 2)
TPS65987D
SNK 5V/15V Path
PPHV1
DS2 VBUS
SRC +5V Path
PPHV2
SSMUX_SEL (GPIO0)
SS MUX
LED_R (GPIO15)
LED_G (GPIO17)
LED_B (GPIO20)
SPI Flash
I2C1
I2C: 0x22
nI2C1_IRQ
to host