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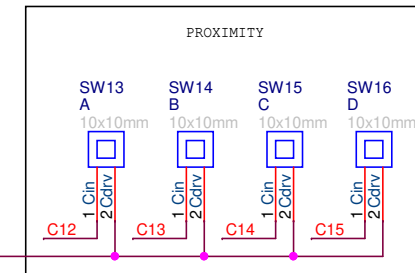
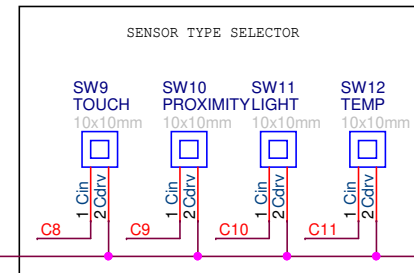
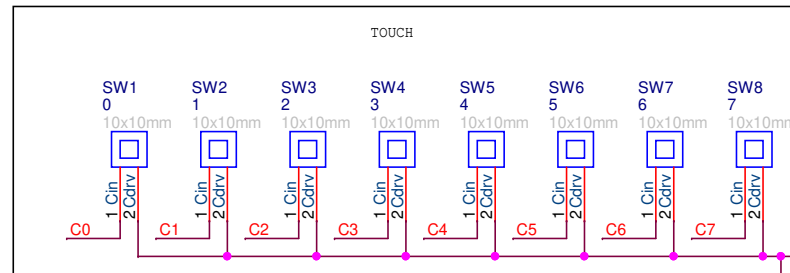
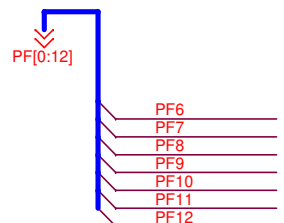
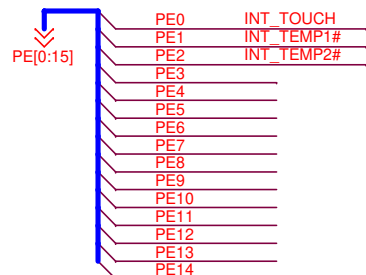
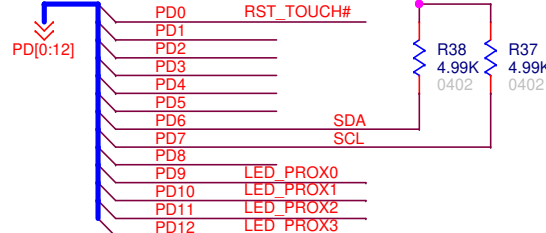
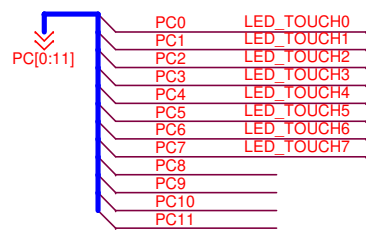
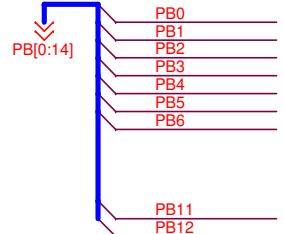
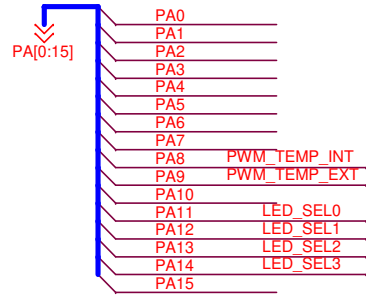
Strata Sensors STR-SENSORS-GEVK

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Strata Sensors

PCB BUTTONS
 - TOP = nothing except LEDs
 - L2 = buttons + CDRV
 - L3 = CIN
 - L4 = nothing
 - L5 = GND
 - BOTTOM = anything

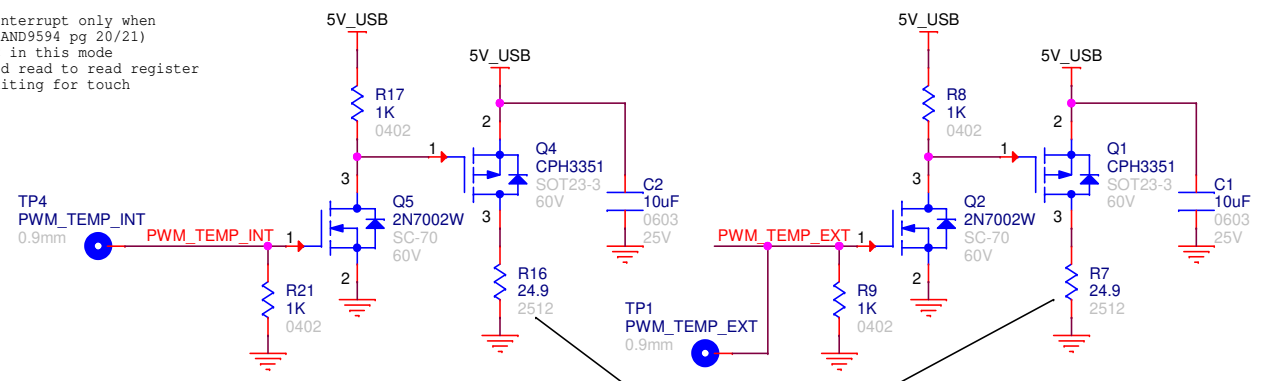
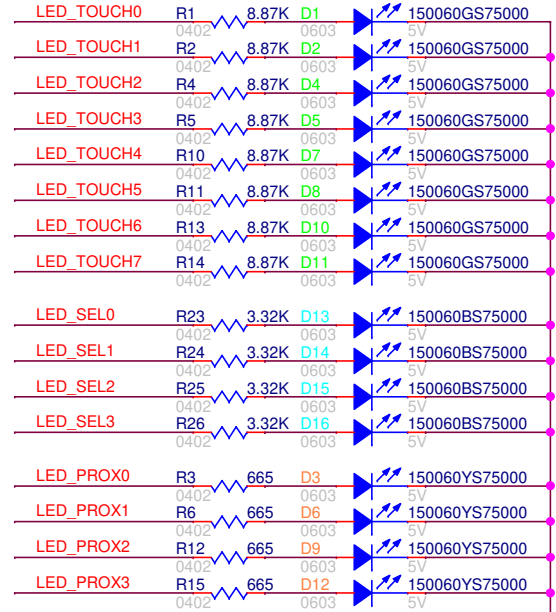
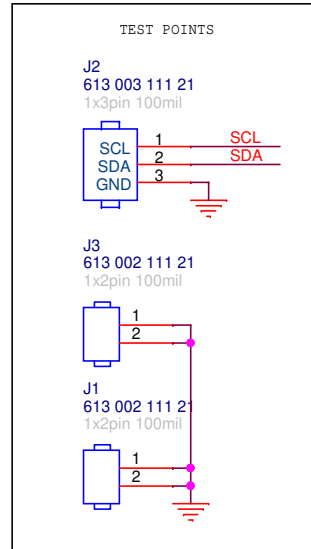
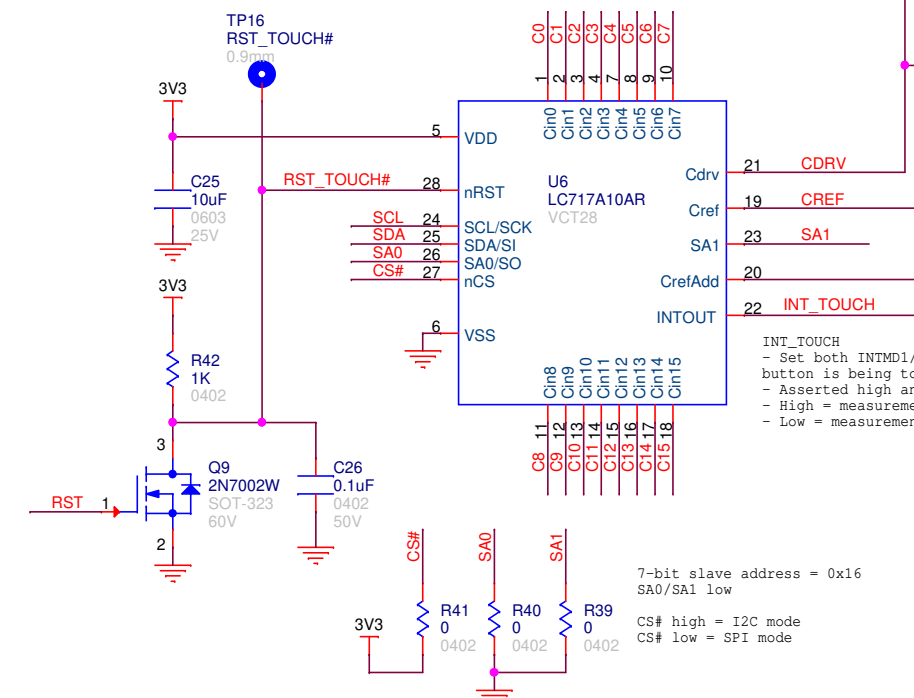


CDRV/CREF/CIN
 - 0.5pF for A=2mm, B=3mm, C=1mm pattern w/ ~1mm airgap
 - 0.5 + 1.0pF = 1.0pF for additional gain
 However, C value will vary with CDRV shape size.

LC717A10R
 - Will need reprogramming based on PROXIMITY, TOUCH, or TEMP
 TOUCH + PROXIMITY
 - Disable C12-15 (TOUCH), C0-C7 (PROXIMITY)
 - Set appropriate 1st and 2nd gain registers (0x02-0x09)
 - Set appropriate threshold registers (0x0A-0x19)
 TEMP
 - Disable C12-15 and C0-C7

INT_TOUCH
 - Set both INTMD1/2 = 1 for interrupt only when button is being touched (see AND9594 pg 20/21)
 - Asserted high and low by LC in this mode
 - High = measurement completed read to read register
 - Low = measurement active/waiting for touch

7-bit slave address = 0x16
 SA0/SA1 low
 CS# high = I2C mode
 CS# low = SPI mode



HEAT GENERATION
 - Internal temperature resistor
 - Use small planes on GND to get heat into temp sensor
 - PWM preliminary results (positive duty cycle):
 20%=59C, 40%=95C, 60%=95C, 80%=165C, 100%=217C

THERM# (INT_TEMP1#)
 Low = Internal or external temp exceeds/equals set THERM# limit (registers 0x19,0x20)
 High = Normal operation
 Reset automatically when temperature is back into THERM# limits with hysteresis (0x21)

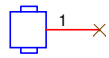
THERM2# (INT_TEMP2#)
 If enabled, THERM2# acts like ALERT# but 1) only checks high limits (0x05,0x07,0x13) and 2) resets automatically like THERM#

ALERT# (INT_TEMP2#)
 Low = Internal or external temp exceeds/equals set temp high or low limits (registers 0x05,0x06,0x07,0x08,0x13,0x14)
 High = External temp connection fault
 Low = Normal operation
 Reset by master I2C device

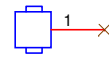
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Mounting Holes and Nuts

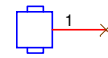
J9
971100365
M3 10MM



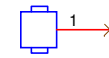
J13
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M3 10MM



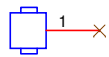
J12
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M3 10MM



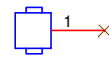
J8
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M3 10MM



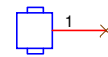
J4
709940300
M3 Nut



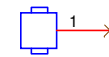
J7
709940300
M3 Nut



J6
709940300
M3 Nut

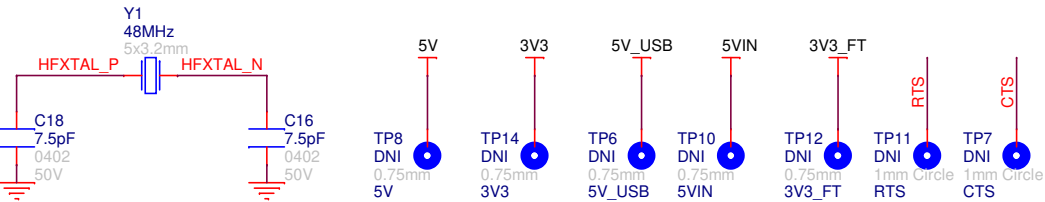
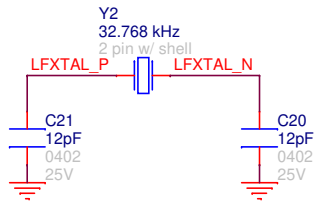
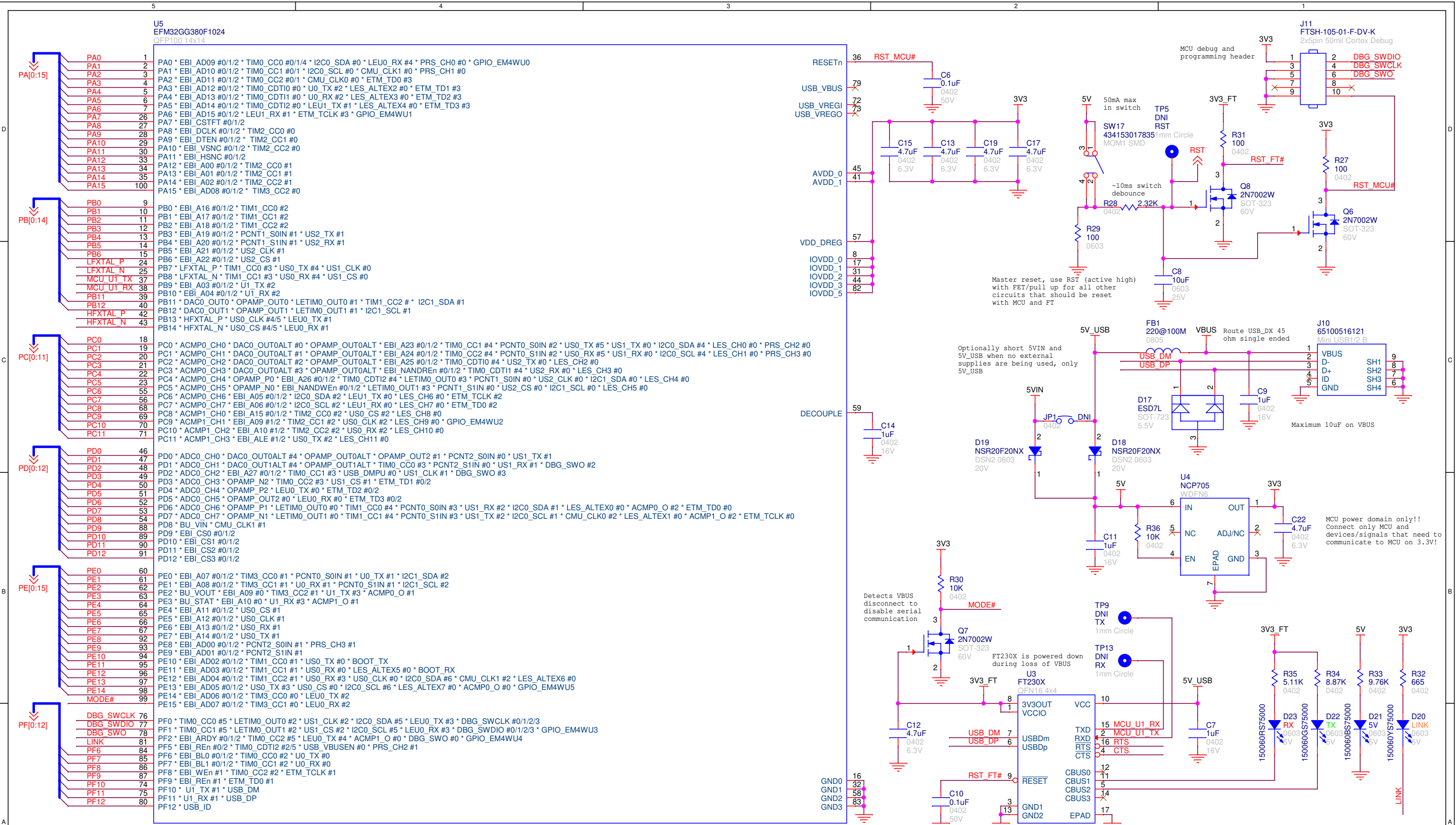


J5
709940300
M3 Nut



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