

TB_MAIN_V13

SCHEMATICs

- 00. HISTORY
- 01. CONNECTION
- 01. CONNECTION
- 02. STMCU
- 03. QCC CTRL
- 04. POWER
- 05. PEAK DETECTION


REVISION HISTORY

REV_0.1

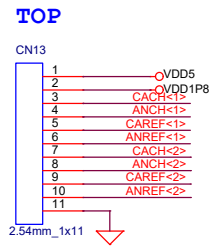
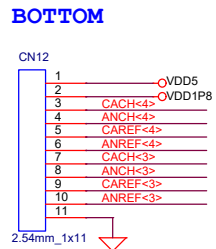
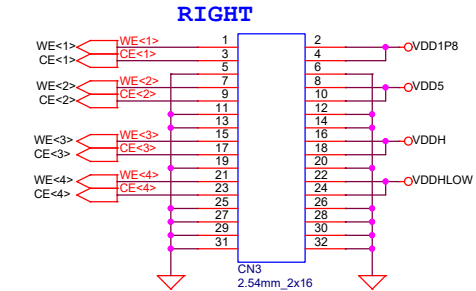
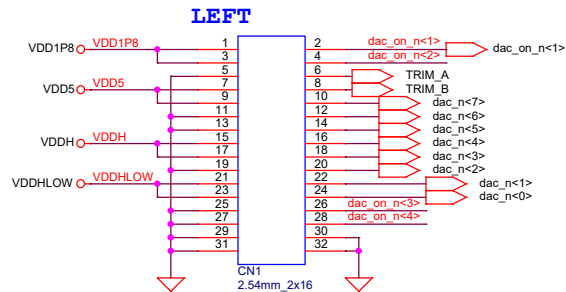
1) 회로도 초안설계

V13

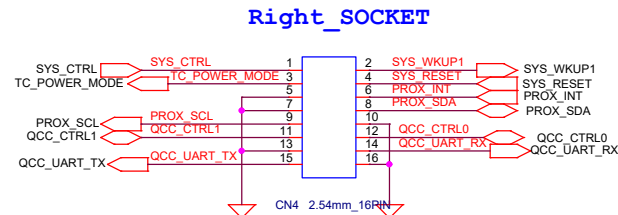
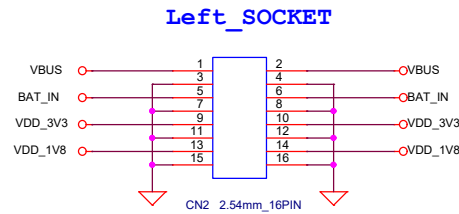
- Change sockets to VENUS
(CN1, CN3, CN12, CN13)

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	allears_Mother_Board		
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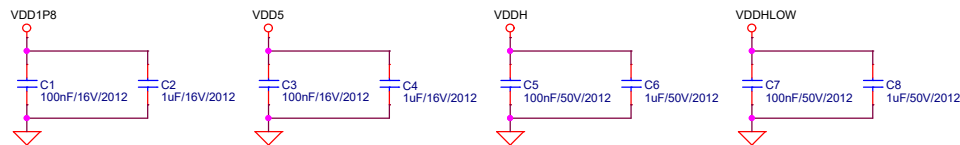
SOCKET to VENUS



SOCKET to QCC3040

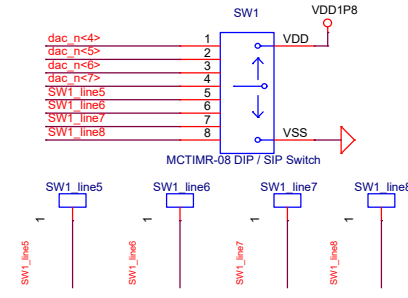


BYPASS_CAP

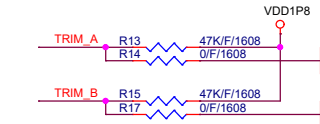


VENUS_T0_Setting

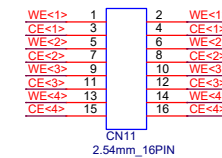
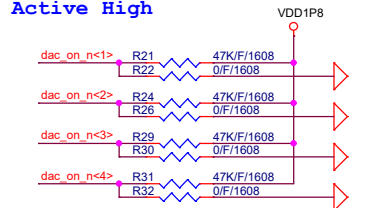
High Bit Setting (dac_n<4~7>) Active Low



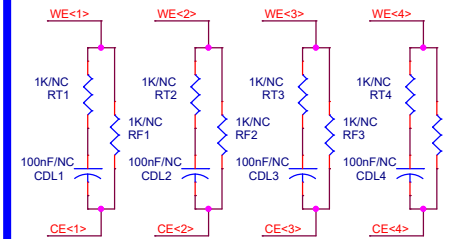
Trim Setting Active Low



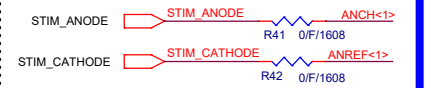
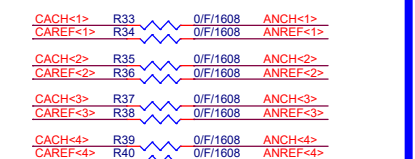
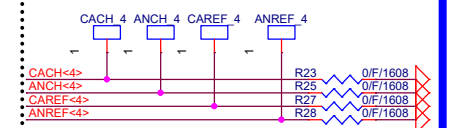
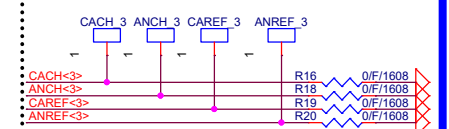
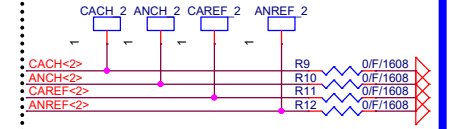
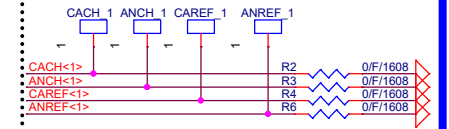
dac_on_n Setting Active High



IMPEDANCE COMPONENTS

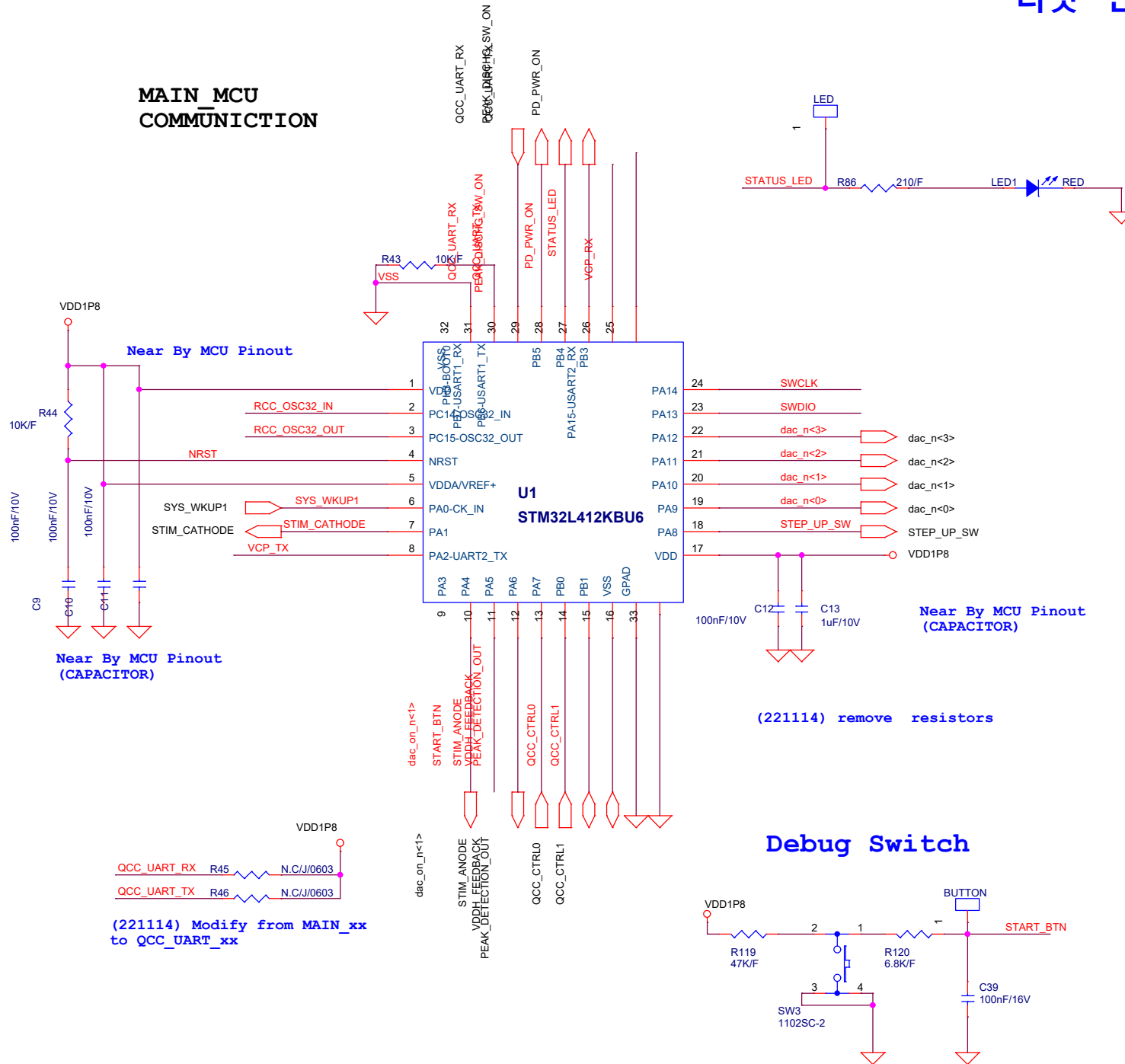


AN/CA ON/OFF Active High

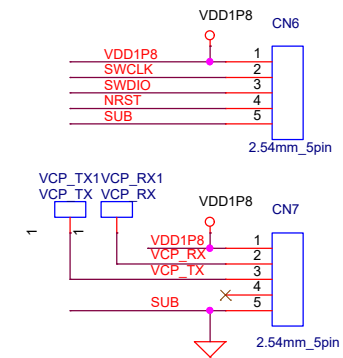


리셋 인잇 확인하고 포트처리 확인

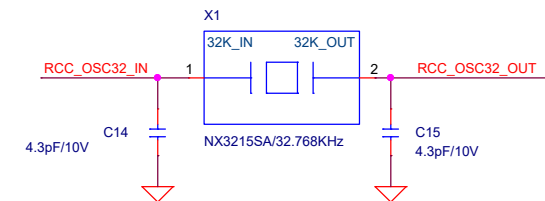
MAIN MCU
COMMUNIC^{ION}



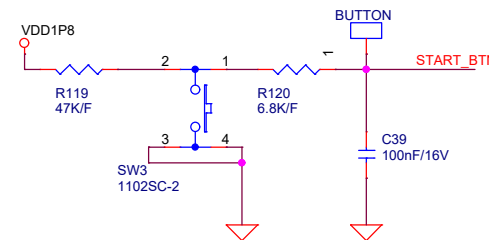
MCU_F/W_Download




Near By MCU Pinout
Top, Bot 다른 신호선 배치금지



Debug Switch



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	Custom	STM32L412KBU6	V0.1	
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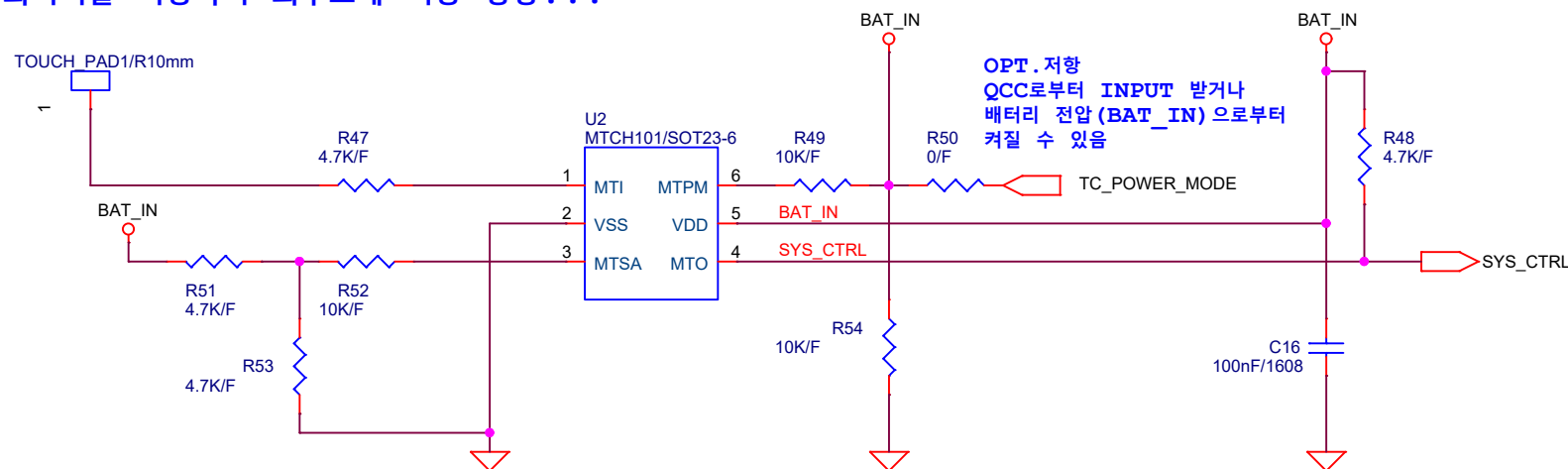
터치 패드 구현 필요

1) Mother Board 동박패턴

2) 와이어를 이용하여 외부도체 이용 등등...

TOUCH IC

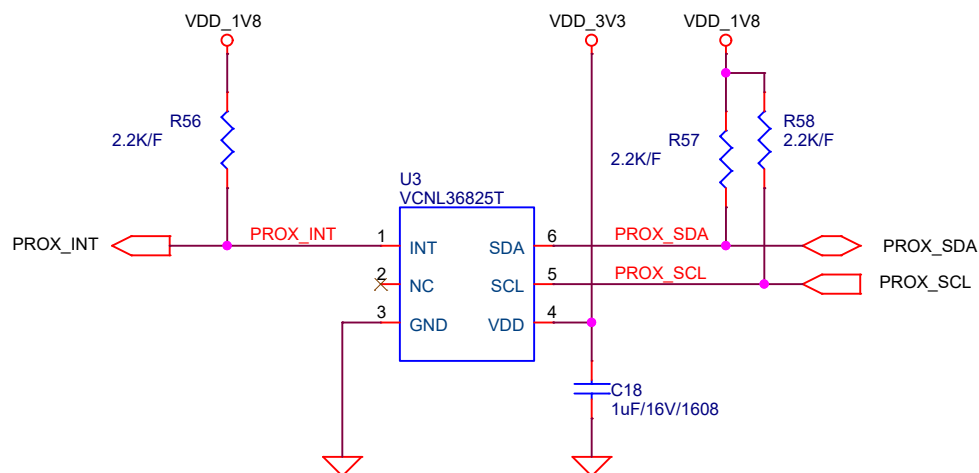
MTCH101



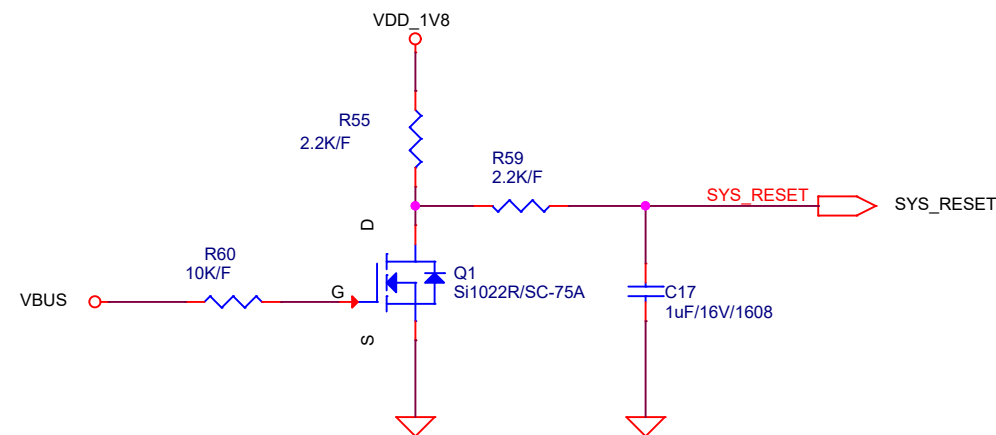
OPT. 저항
QCC로부터 INPUT 받거나
배터리 전압 (BAT_IN) 으로부터
켜질 수 있음

Proximity Sensor

VCNL36825T



System_RESET

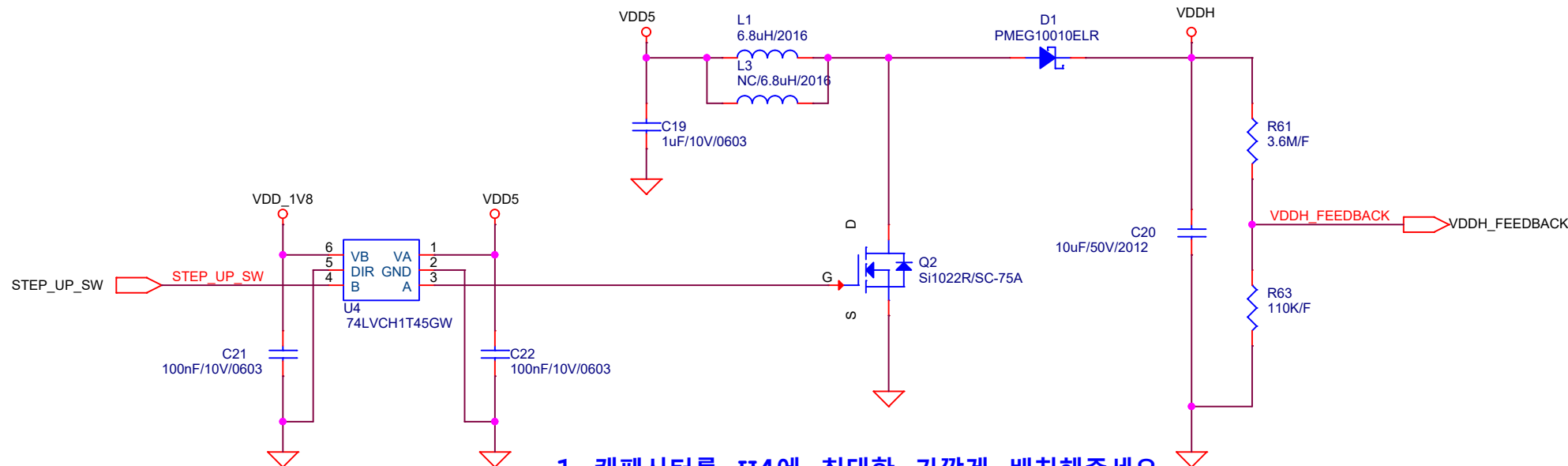


VBUS 타이밍과 겹치지않게 시정수를 이용하여 천천히 올린다
FET 낮은사양으로 검토 진행중

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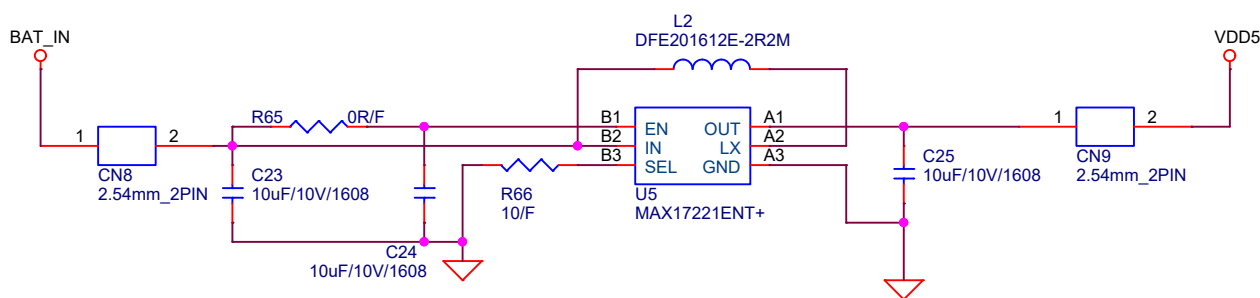
STEP_UP

Fixed Voltage : 40 Vdc



1. 캐패시터를 U4에 최대한 가깝게 배치해주세요
2. U4와 Q2 사이를 최대한 가깝게 배치해주세요 (같은 층에 배치)
3. Q2, U4, L1, D1, C20을 모두 같은 층에 배치해주세요

5VDC_BOOST_IC

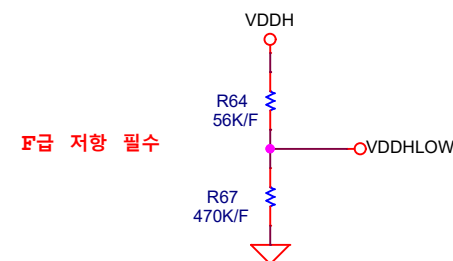


EN_PIN CAP은 필요시 부착

1. L2, U5, C24, C25 같은 층 및 최대한 가깝게 배치해주세요

VDDHLOW

VDDH 대비 -5Vdc 유지 필요



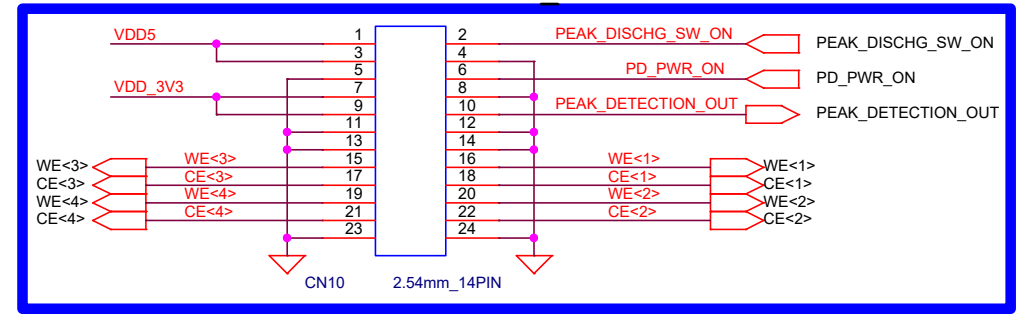
F급 저항 필수



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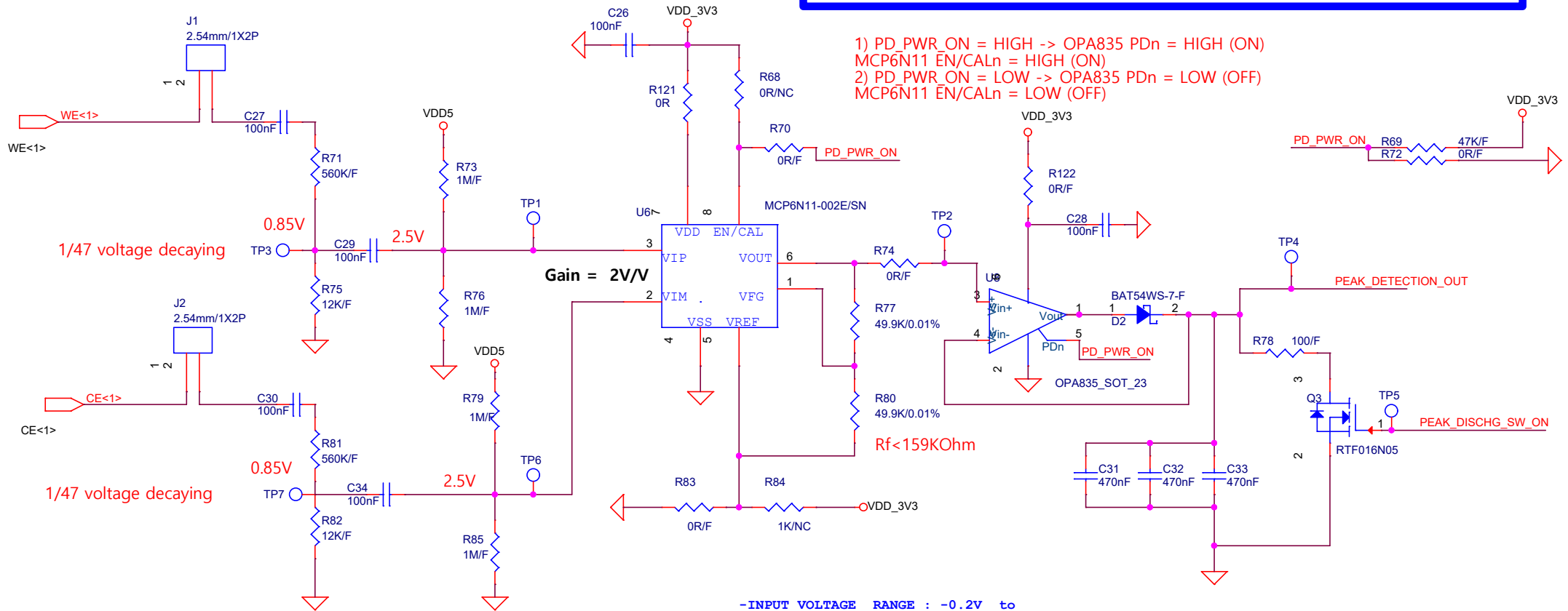
PEAK DETECTION

PEAK DETECTION INPUT/OUTPUT



R121 / R122 전류 체크용

- 1) PD_PWR_ON = HIGH -> OPA835 PDn = HIGH (ON)
MCP6N11 EN/CALn = HIGH (ON)
- 2) PD_PWR_ON = LOW -> OPA835 PDn = LOW (OFF)
MCP6N11 EN/CALn = LOW (OFF)



-INPUT VOLTAGE RANGE : -0.2V to 3.9V(5V Supply)
-SUPPLY VOLTAGE : 2.5V to 5.5V
-2.90 mm x 1.60 mm
-PD : INPUT , Amplifier Power Down, low = low-power mode, high = normal operation (PIN MUST BE DRIVEN)



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