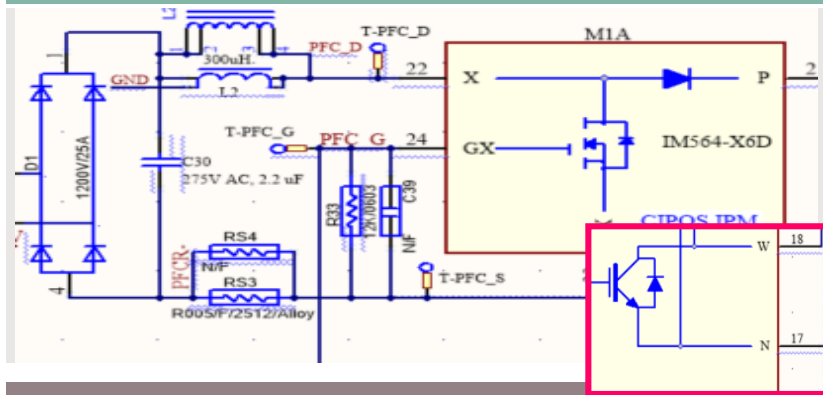


# Old PCB/SCH VS New PCB/SCH for EVAL-M3-IM564-A

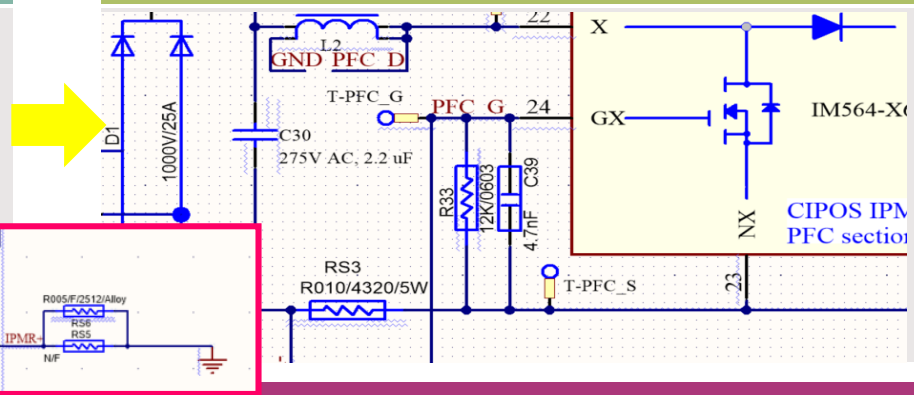
2020-06-12

# Improve Signal to Noise Ratio and reduce swithcing noise

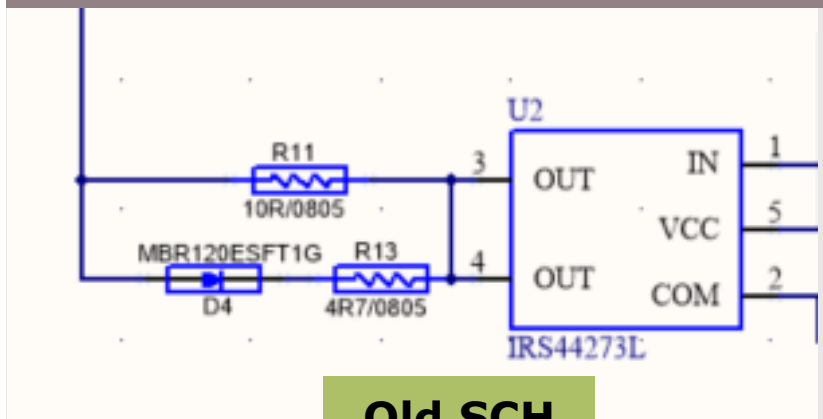
RS3 and RS5 from 5 mohm change to →



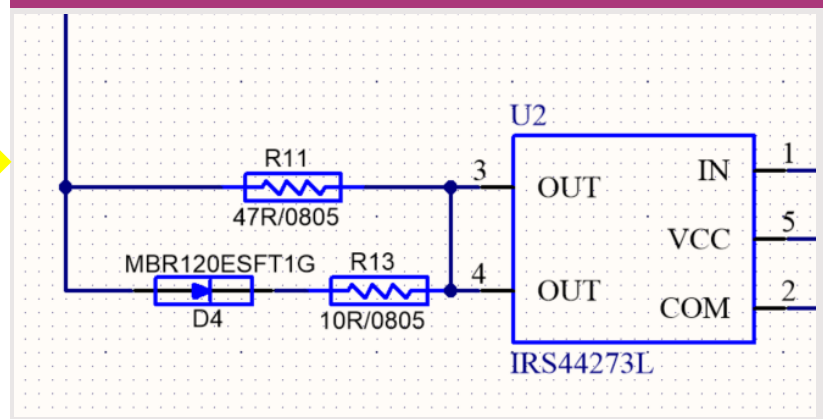
RS3 and RS5=10 mohm and add C39=4.7nF



R11=10 ohm and R13=4.7 ohm →



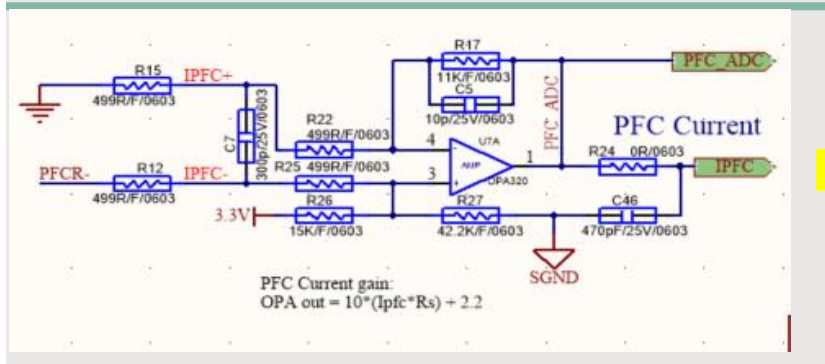
R11=47 ohm and R13=10 ohm



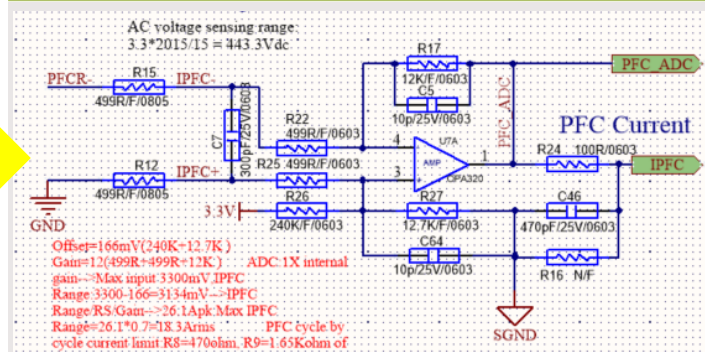
**Old SCH**

# Improve Signal to Noise Ratio of OPA

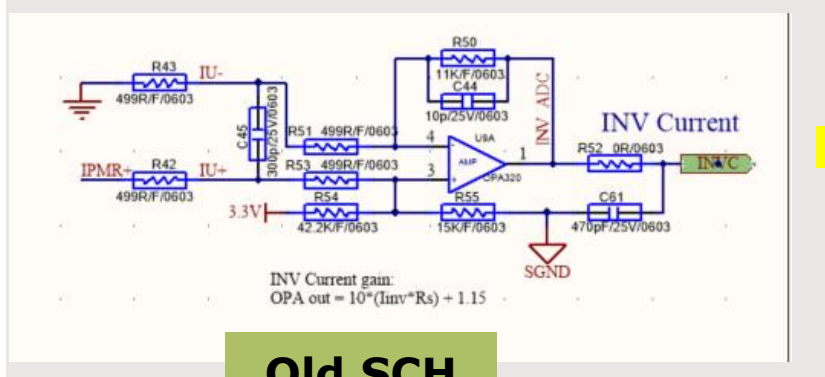
PFC OPA inverting Gain=11 change to →



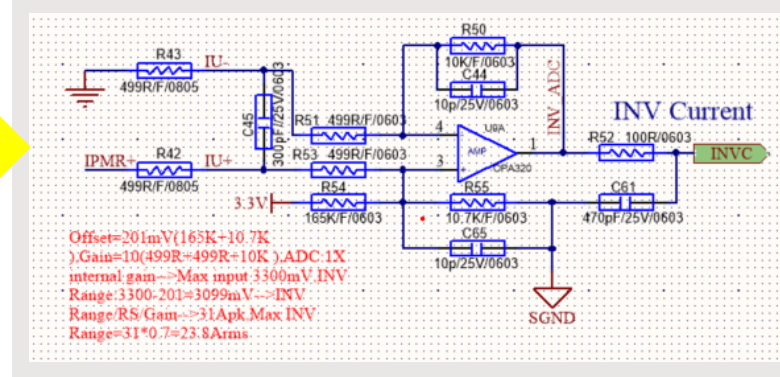
OPA non-inverting Gain=12 and add C54=10pF



Motor OPA Gain=11 change to →



OPA Gain=10 and add C65=10pF

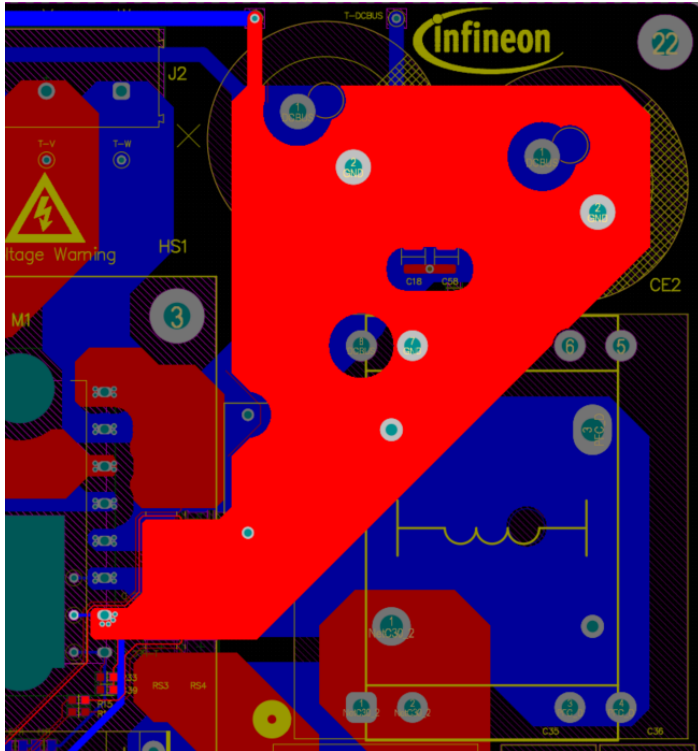


Old SCH

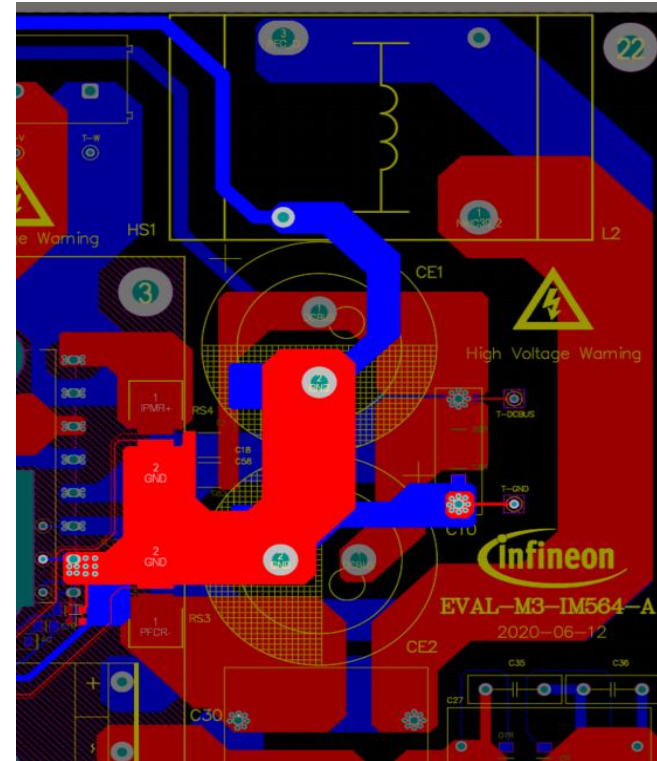
# Reduce noise of ground loop

GND of BUS CAP change to →

GND of BUS CAP close to RS3&RS4

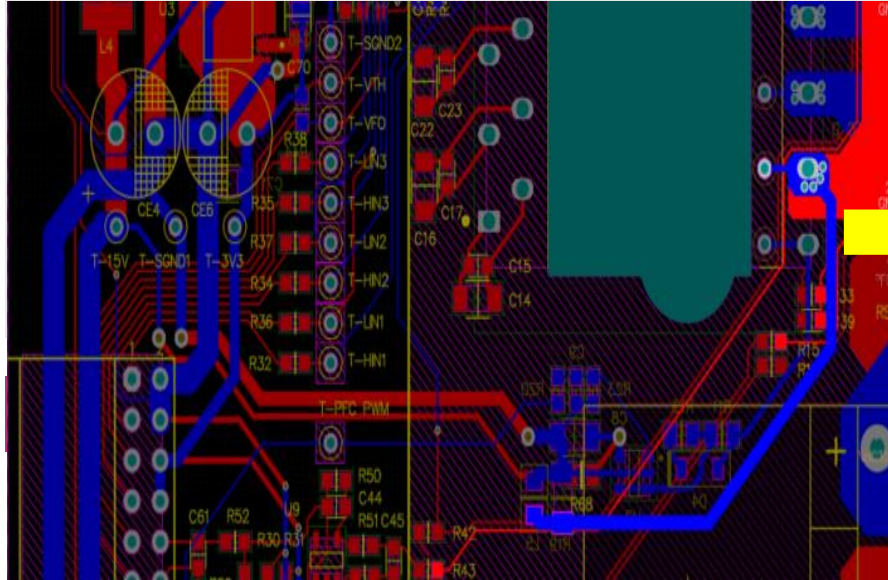


**Old PCB**



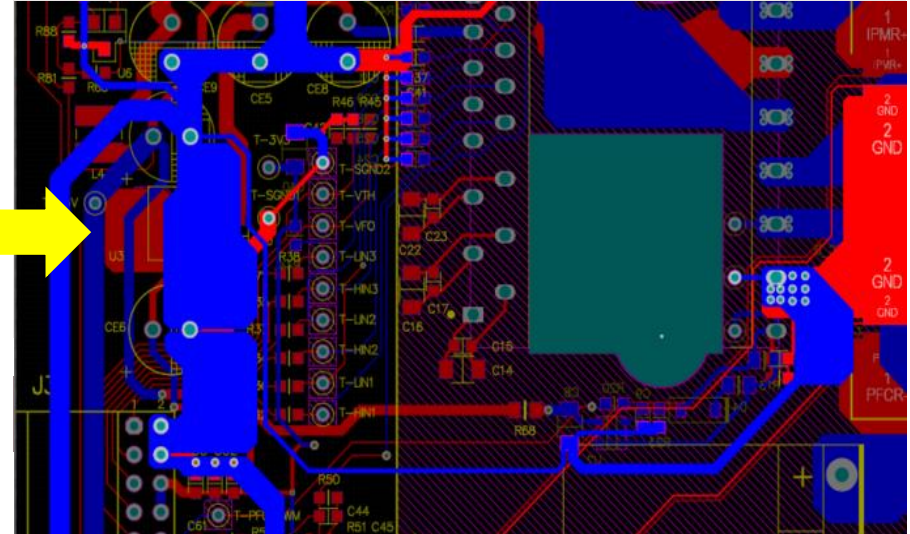
# Reduce noise of ground loop

Delete L5 and R19 →



**Old PCB**

Connect directly to the ground



And single point grounding





Part of your life. Part of tomorrow.

