Figure for the question 1 & 2.

Figure for the question 3

ISO_12V_L

R2 DNP
2.05

D1
GB01SLT06-214

20k 100V/ns
70k 50V/ns

ISO_12V_H

R1
0

5V_H

VNEG_H

U1

46 VDD
53 LDO5V

D6
5V_H

C1
10uF

16V
SW

0.22μF

C2

SW

C3
25V
2.2uF

42 VNEG
41 VNEG

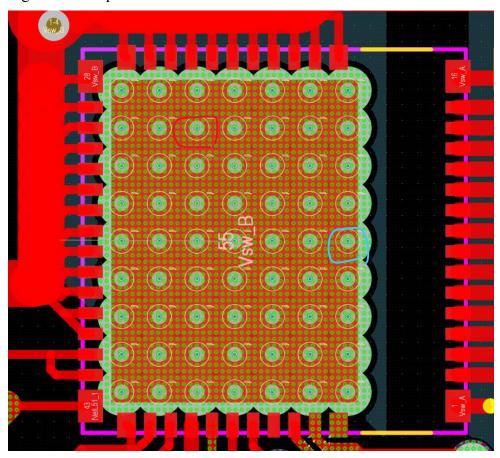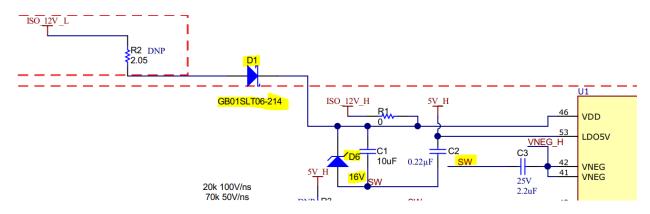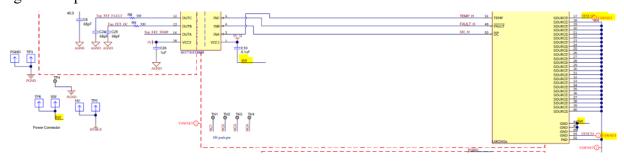## Figure for question 4

Figure for question 5 &6

Figure for question 7