

P
R
E
L
I
M
I
N
A
R
Y

A
N
D

S
U
B
J
E
C
T

T
O

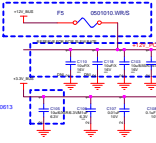
C
H
A
N
G
E

TABLE OF CONTENTS

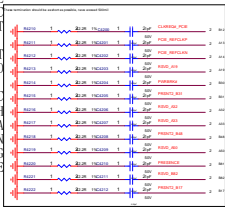
SHEET NO.	SHEET NAME	SHEET NO.	SHEET NAME
1	TOC	26	SMALL RAIL REGULATORS
2	NAI10 PCN Interface	27	NAI10 DECAPS
3	NAI10 GPCL	28	NAI10 POWER
4	NAI10 XTAL	29	NAI10 GND
5	NAI10 MEM CHVB	30	POWER MANAGEMENT
6	NAI10 MEM CHCD	31	SIG & BIASING
7	NAI10 MEM CHEF	32	MECHANICAL & THERMAL
8	NAI10 MEM CHSH	33	DEBUG
9	GDOR0 MEM CHVB	34	BLOCK DIAGRAM
10	GDOR0 MEM CHCD	35	REVISION HISTORY
11	GDOR0 MEM CHEF		
12	GDOR0 MEM CHSH		
13	NAI10 TMDPFL - DP		
14	NAI10 TMDPFC - HDMI		
15	NAI10 TMDPEF - DP DP		
16	GF1X SOC CONTROLLER		
17	VDDCR_GF1X PHASES 2 and 3		
18	VDDCR_GF1X PHASES 1 and 4		
19	VDDCR_GF1X PHASES 5 and 6		
20	VDDCR_GF1X PHASES 4 and VDDCR_SOC		
21	MIDD_VDD0 CONTROLLER		
22	REG MIDD		
23	REG VDD0		
24	REG 8 TRV		
25	REG 1 BV		

Place these components close to the connector pins

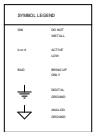
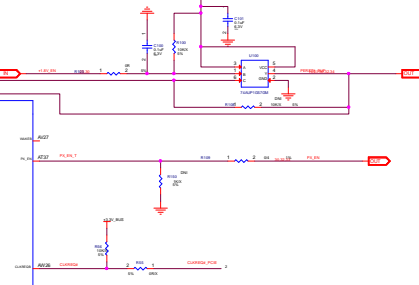
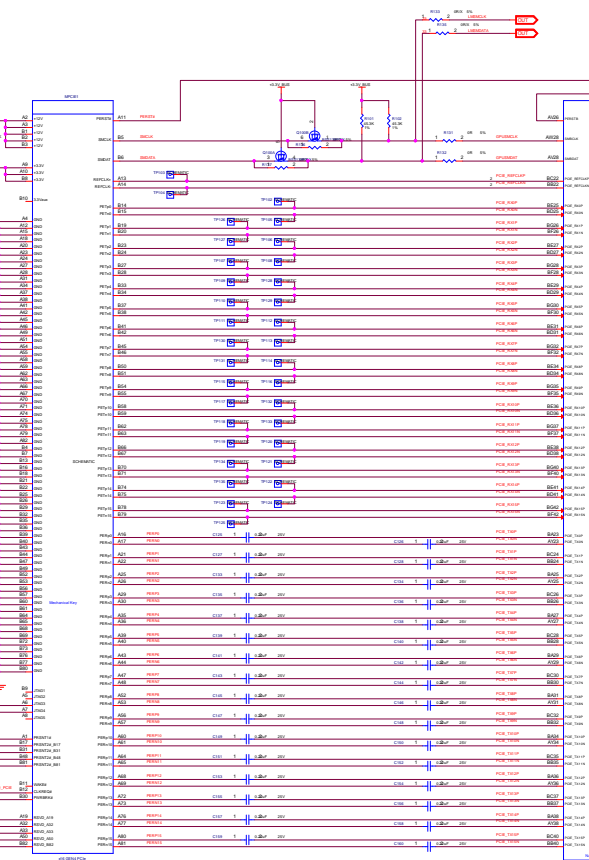
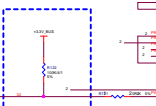
Add Low Ohm 2019014

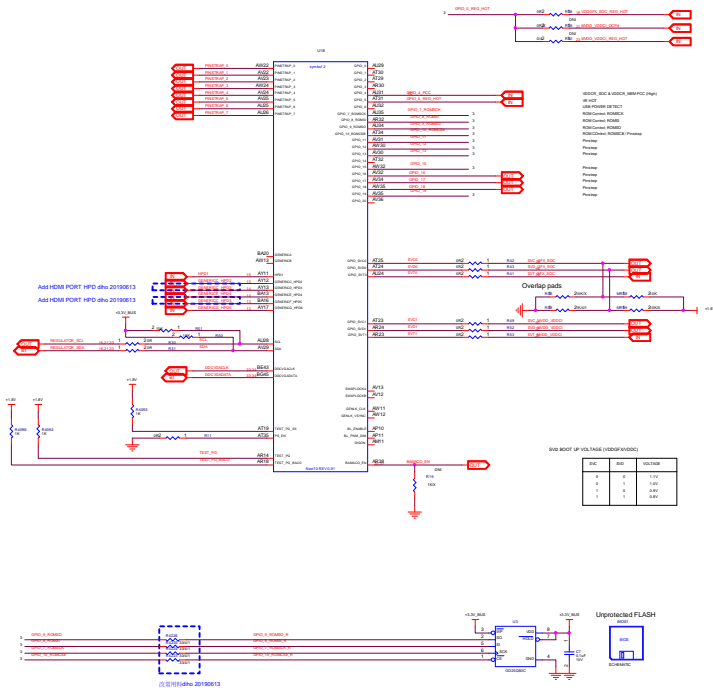


Add Low Ohm 2019013



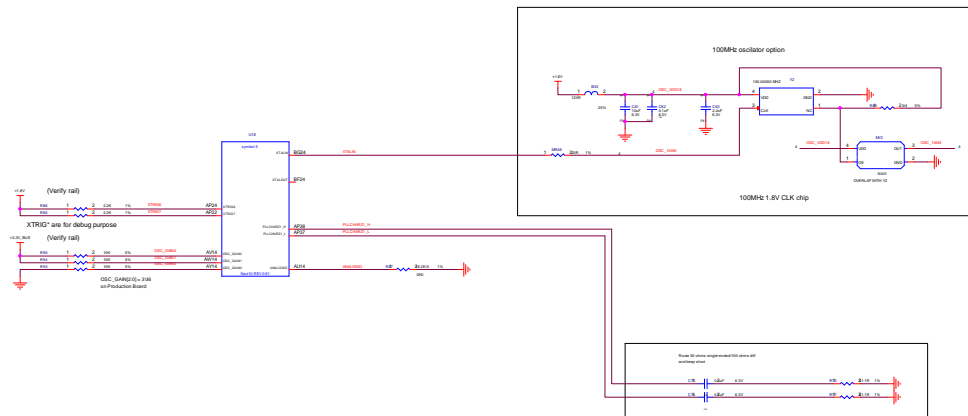
Add PCI follow AMD DG1 update by dhs 2019022

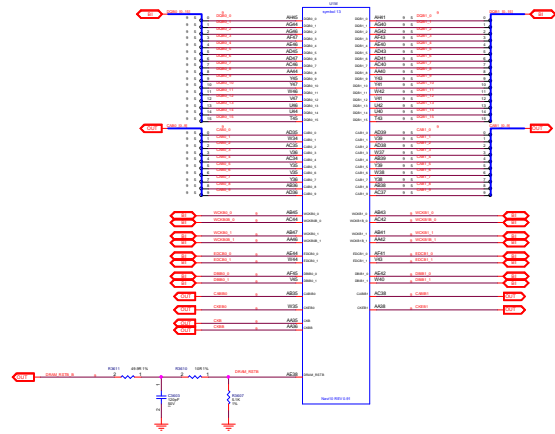
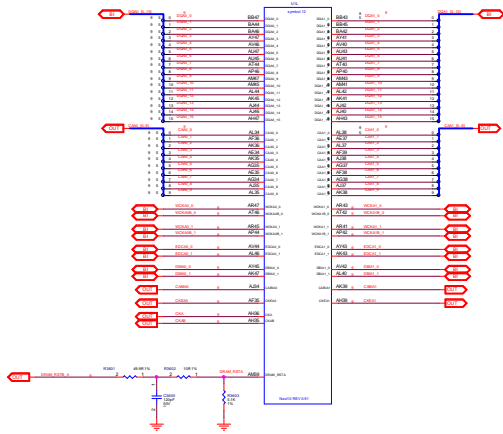


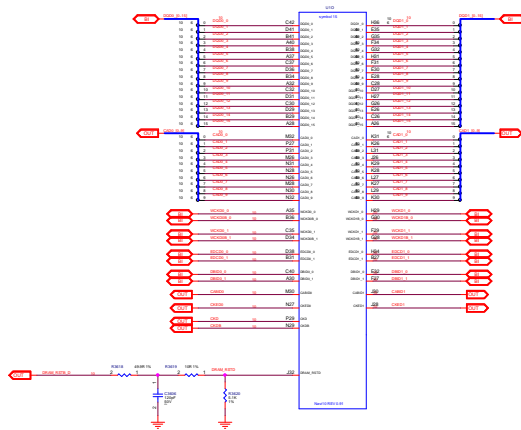
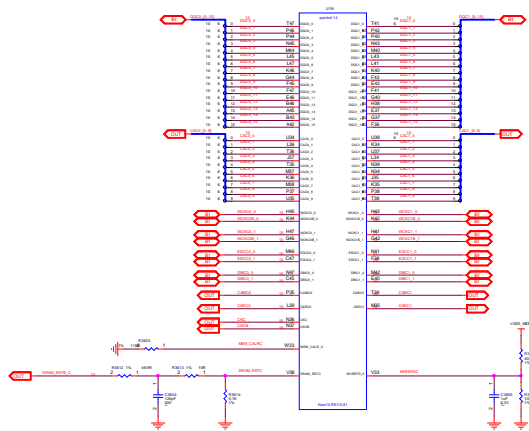


Note: Internal GPIOs in GPIO pad 6 - 64h enough in 16-bit string (0x)

User	Internal Default Value	Definition
BIF	0	STRAP_BIF_GENA_DIS_A 0: BIF is supported 1: BIF is unsupported
	0	PINSTRAP_BIF_CLK_PM_EN 0: CLKTRIP power management is disabled 1: CLKTRIP power management is enabled
	0	PINSTRAP_BIF_LC_TX_SWING 1: The device will be swapped on the system's SW controller
DCE	0	PINSTRAP_AUD_PORT_CONN[0] Number of audio capacitor display options 0: 0 capacitors connected 1: 1 capacitor connected 2: 2 capacitors connected 3: 3 capacitors connected
	0	PINSTRAP_AUD[0] 0: Audio for DisplayPort is not enough to be detected 1: Audio for DisplayPort is enough to be detected 2: Audio for DisplayPort is not supported
	0	
Platform	0	
	0	
	0	
SMU	1	PINSTRAP_SMBUS_ADDR 0: SMU 1: SMU
	1	PINSTRAP_BIOS_ROM_EN 0: Disabled BIOS ROM 1: Enabled BIOS ROM
	1	







NAVI 10 MEM INTERFACE CH E/F

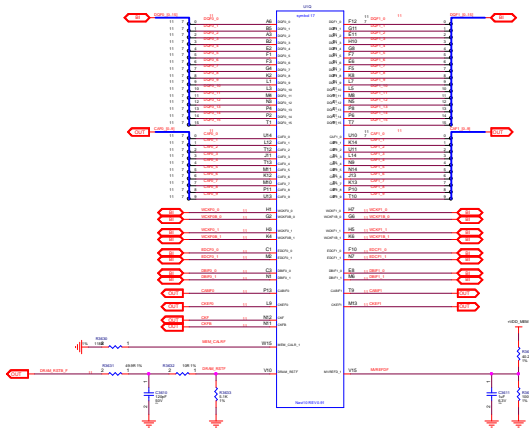
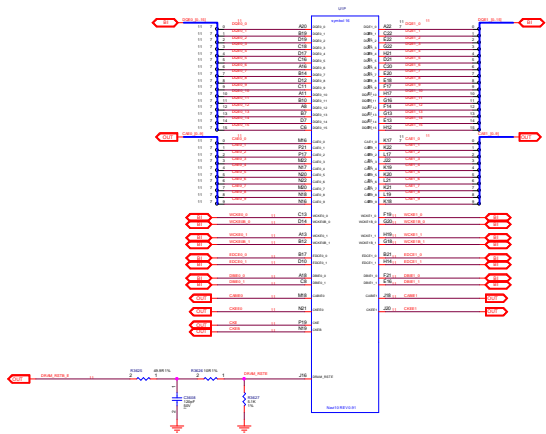
P
R
E
L
I
M
I
N
A
R
Y

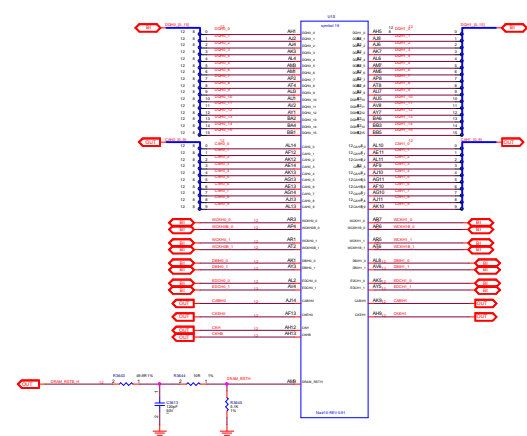
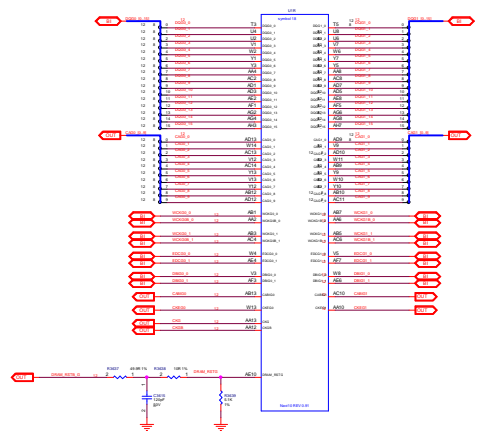
A
N
D

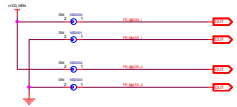
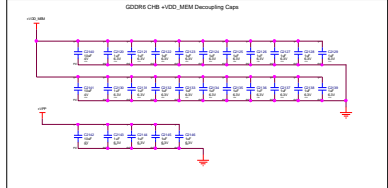
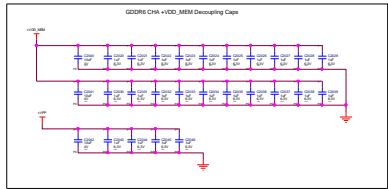
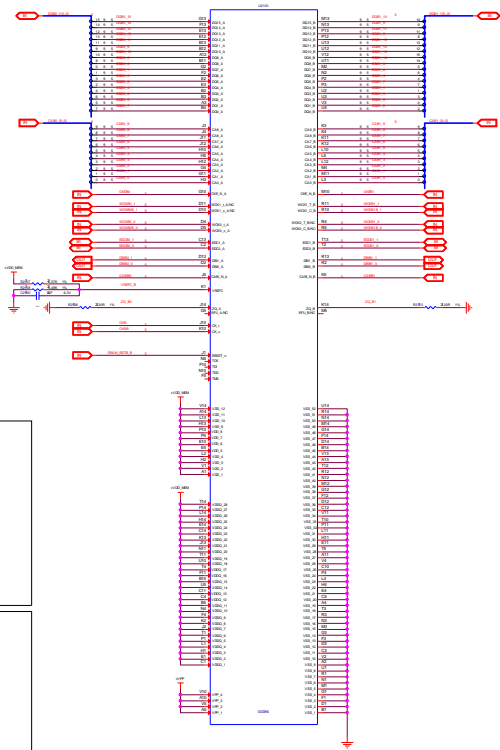
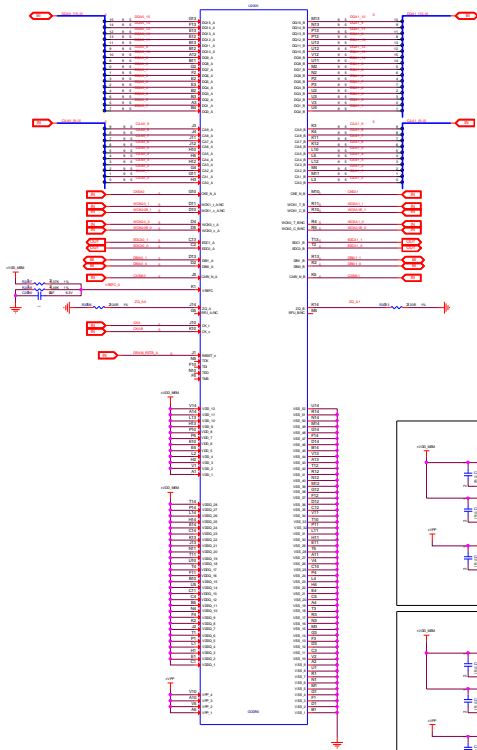
S
U
B
J
E
C
T

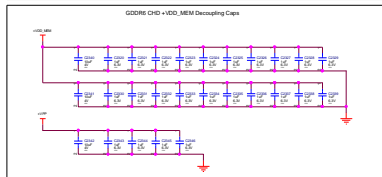
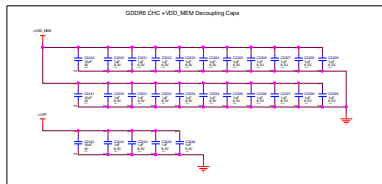
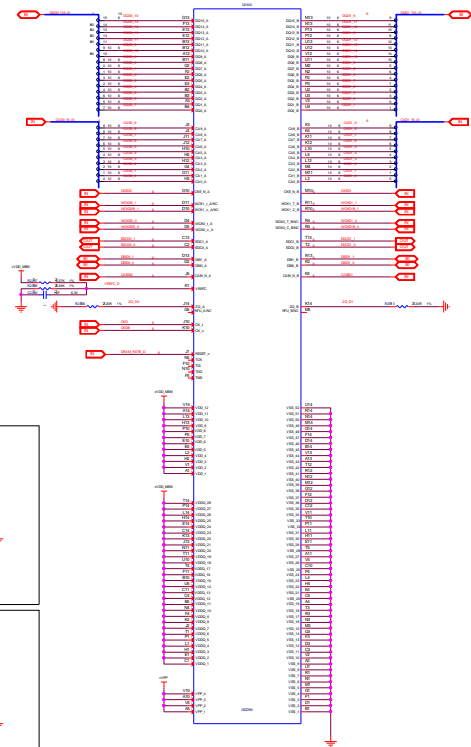
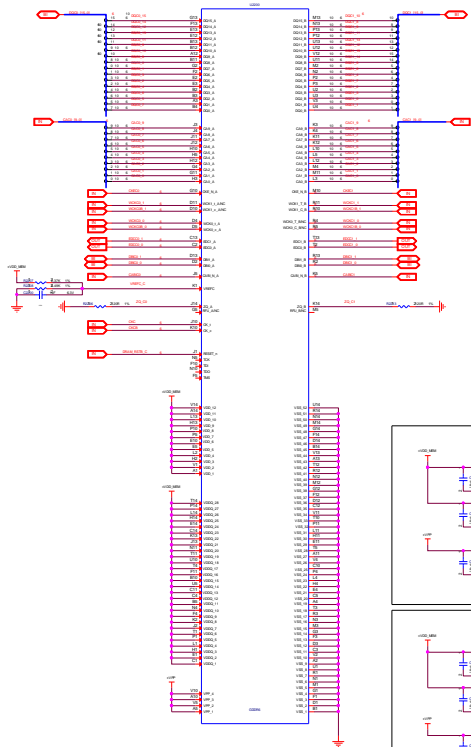
T
O

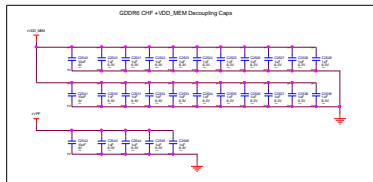
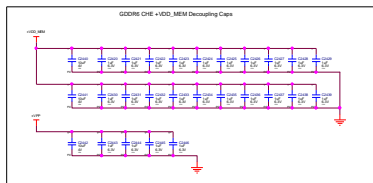
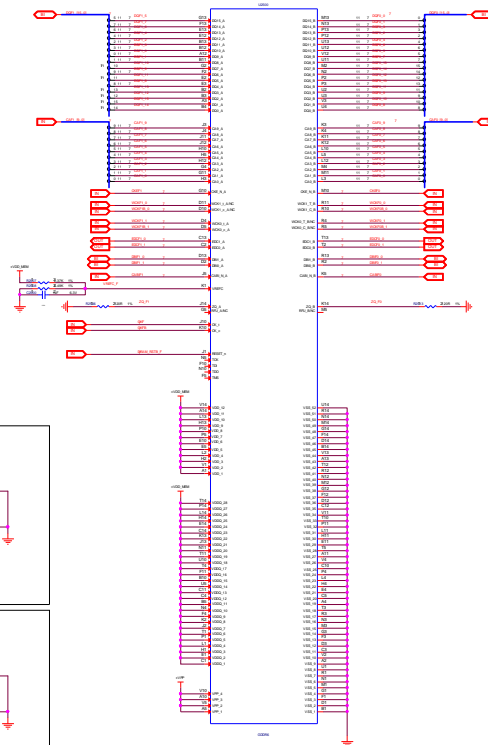
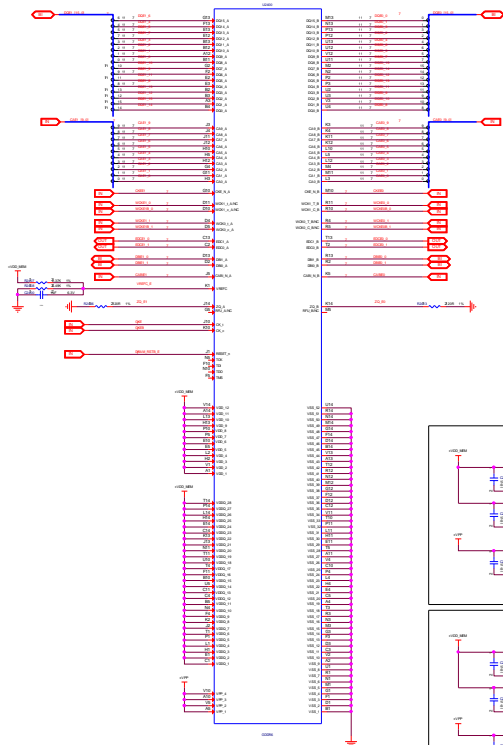
C
H
A
N
G
E







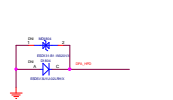
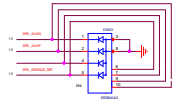
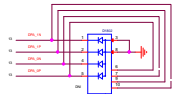
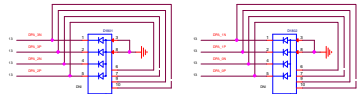
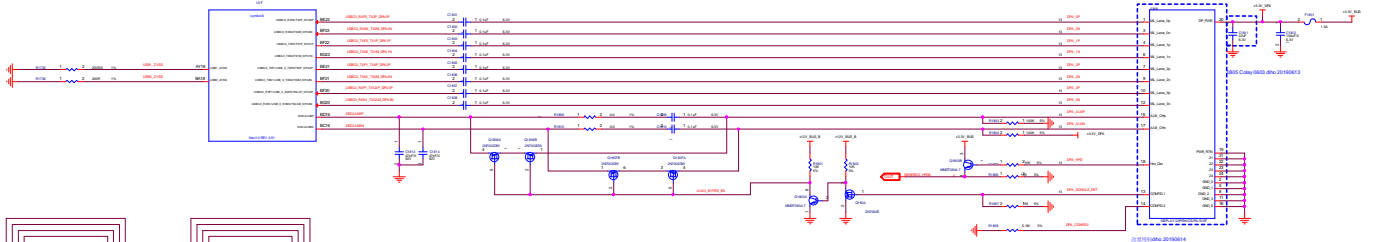
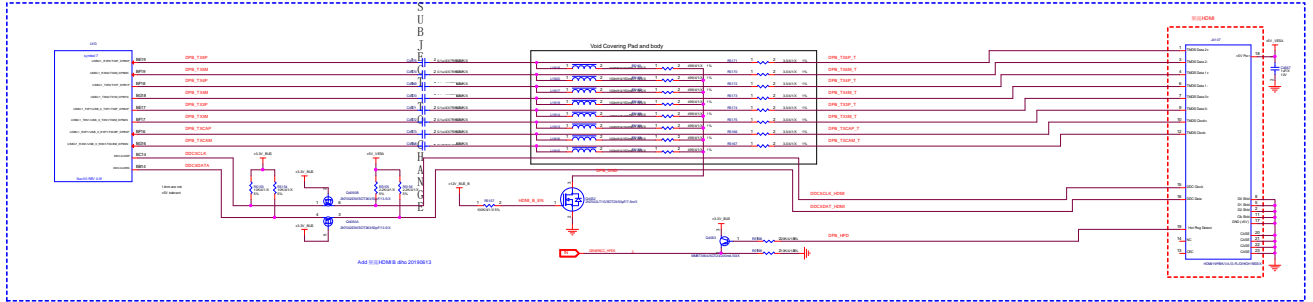
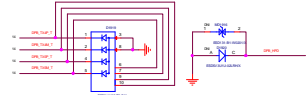
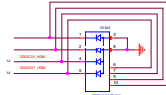
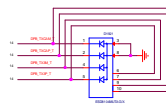
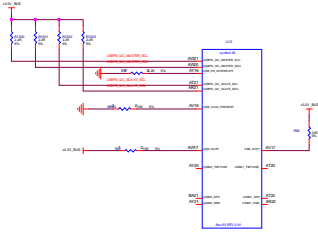




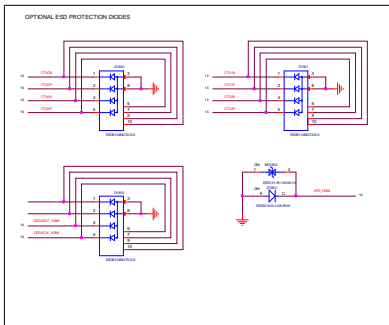
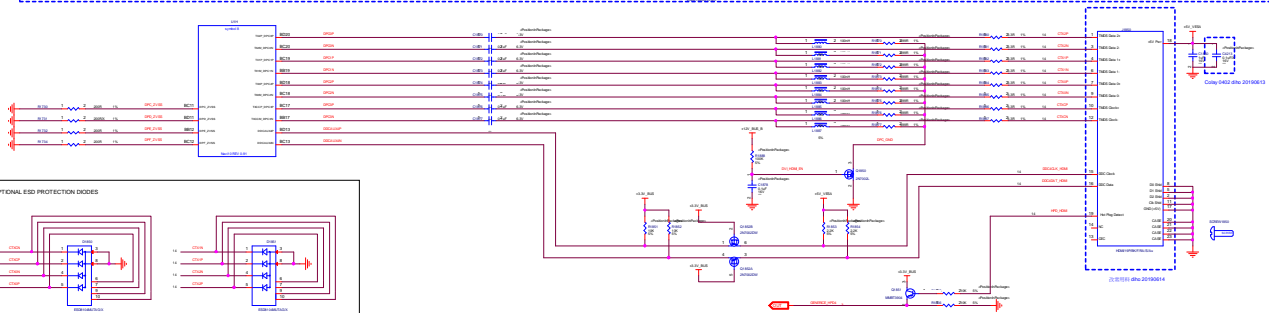
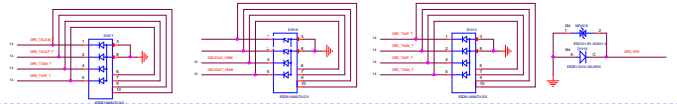
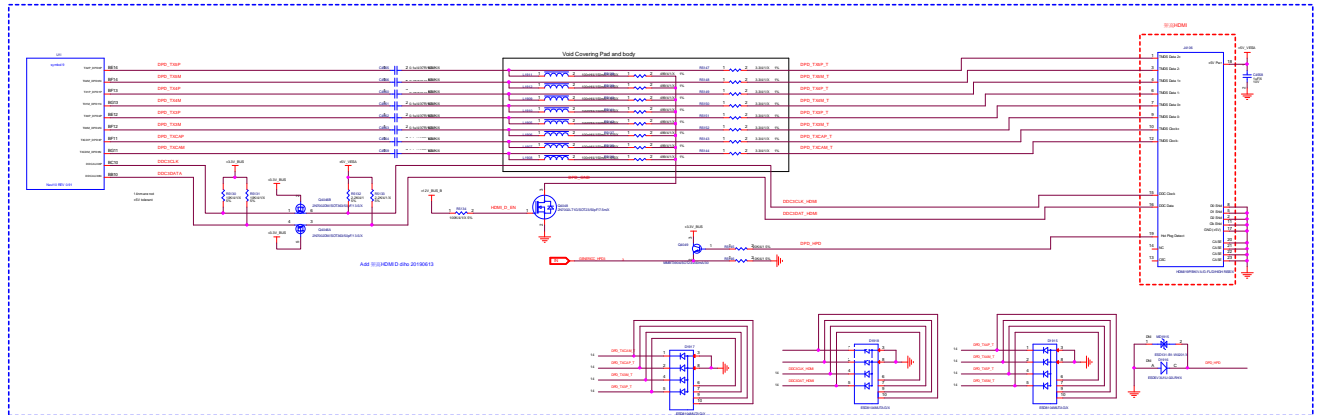
NAV110 TMDP A/B

P
R
E
L
I
M
I
N
A
R
Y

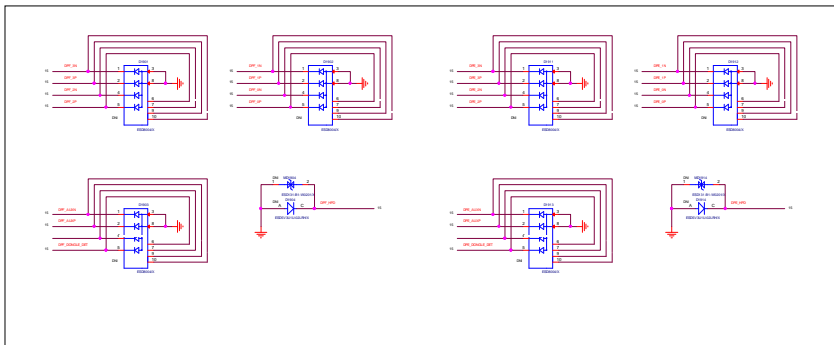
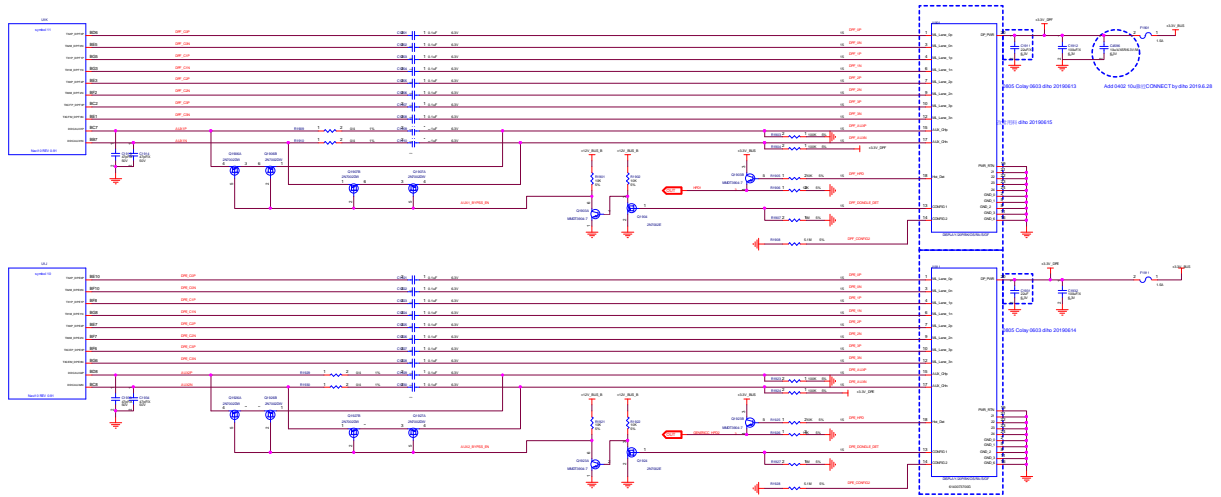
S
U
B
J
E
C
T

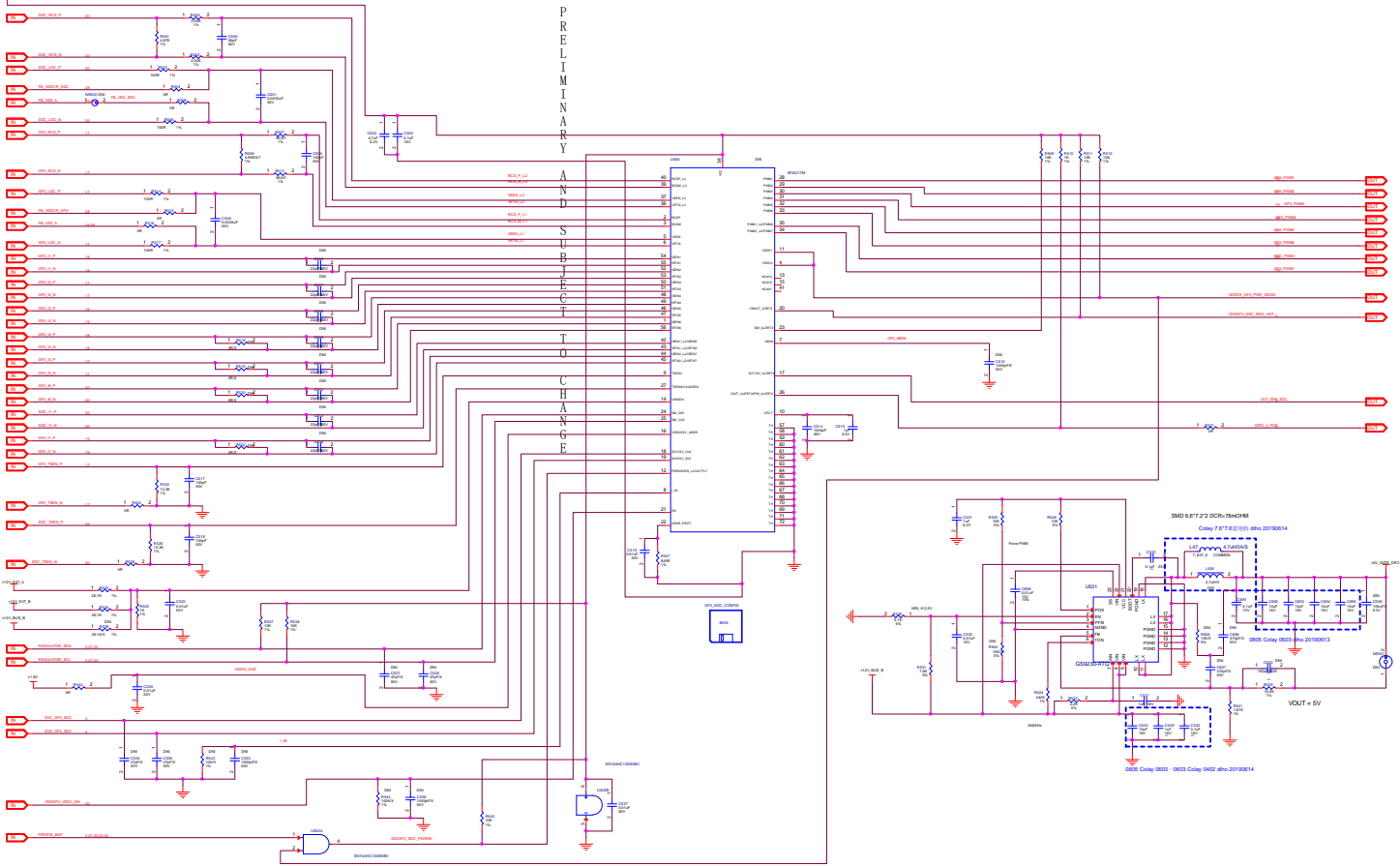


NAVI10 TMDP C/D



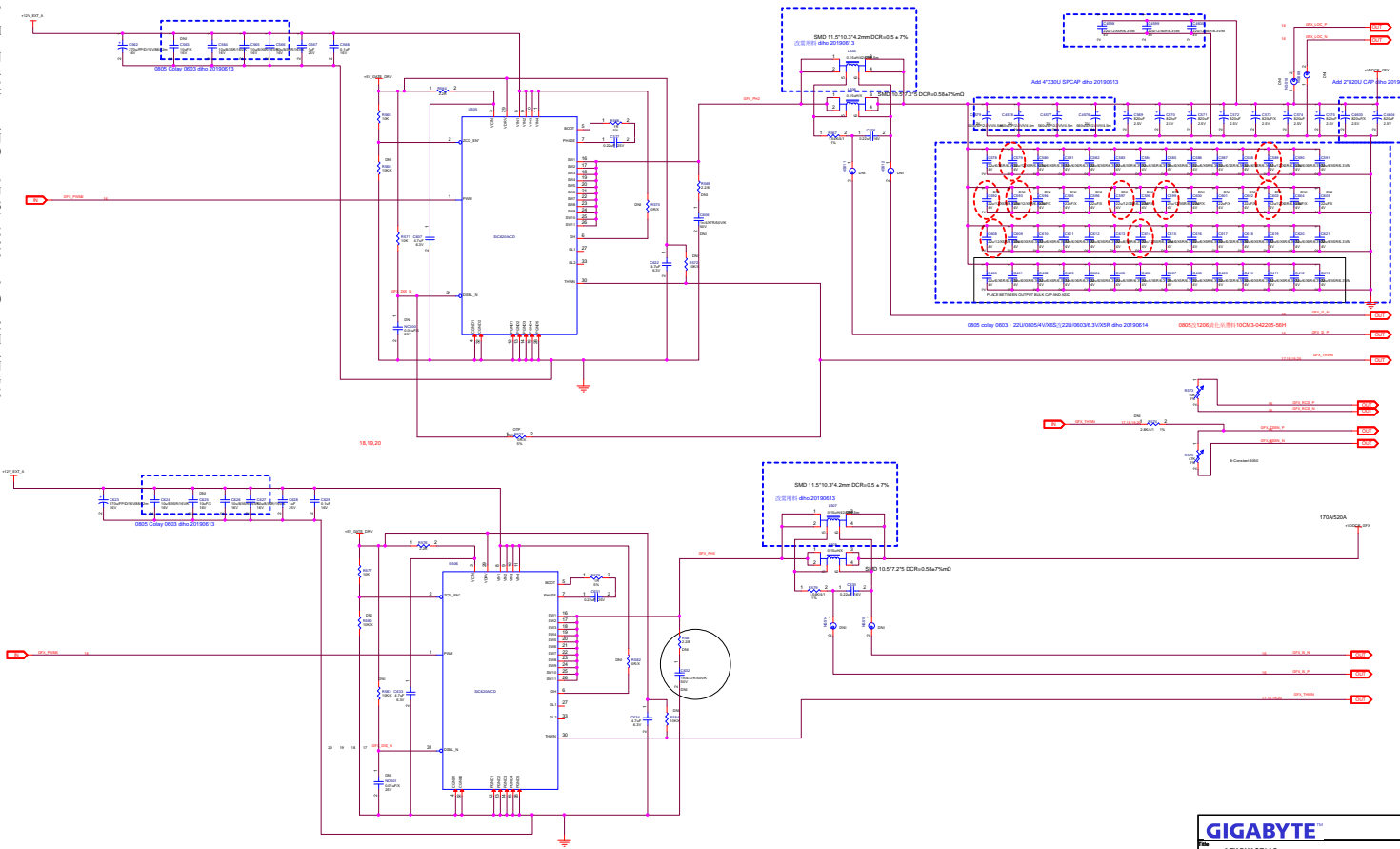
(9) NAVI10 TMDP E/F





PRELIMINARY AND SUBJECT TO CHANGE

Pin	Function
1	NC
2	NC
3	NC
4	NC
5	NC
6	NC
7	NC
8	NC
9	NC
10	NC
11	NC
12	NC
13	NC
14	NC
15	NC
16	NC
17	NC
18	NC
19	NC
20	NC
21	NC
22	NC
23	NC
24	NC
25	NC
26	NC
27	NC
28	NC
29	NC
30	NC
31	NC
32	NC
33	NC
34	NC
35	NC
36	NC



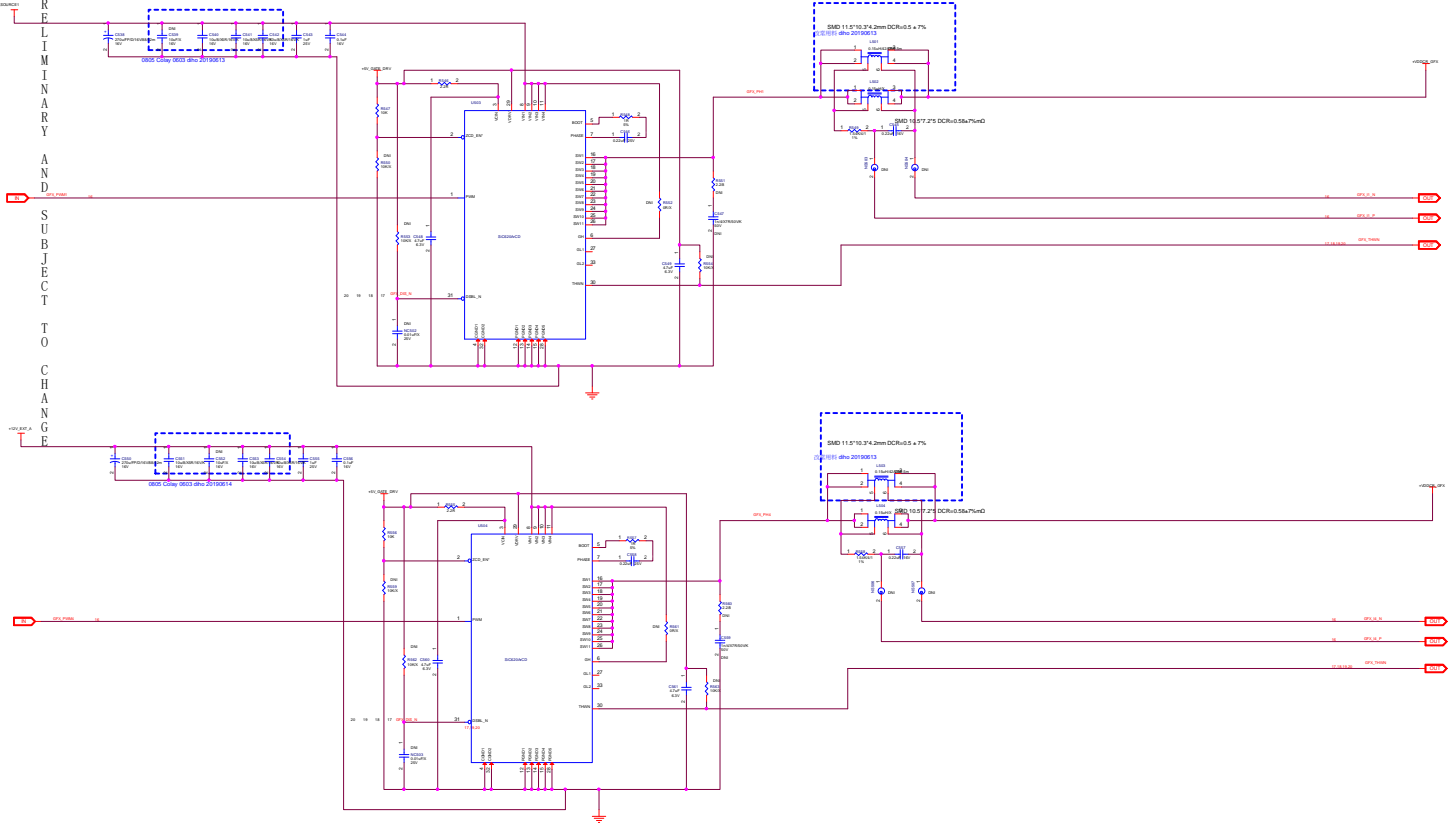
P
R
E
L
I
M
I
N
A
R
Y

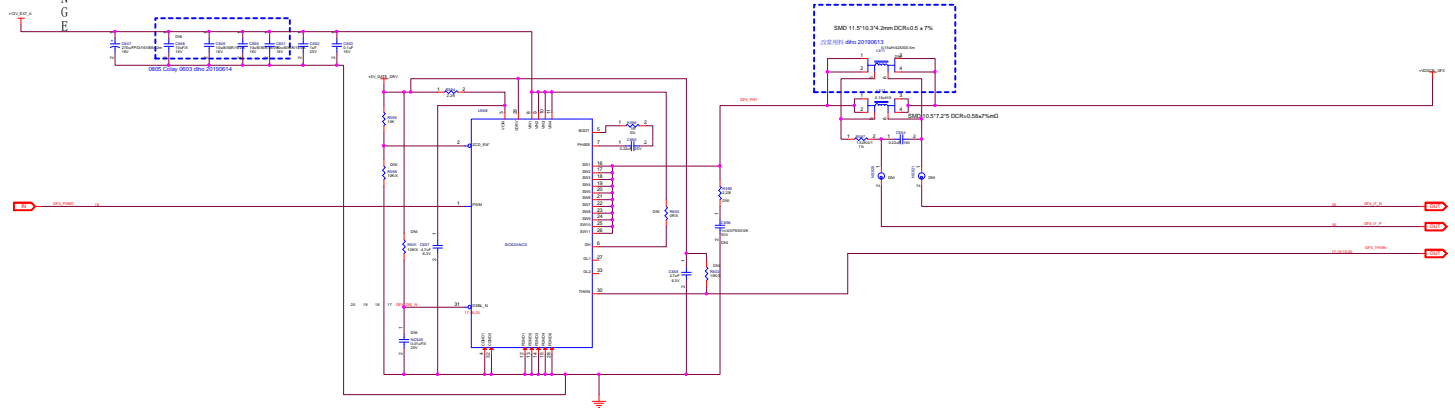
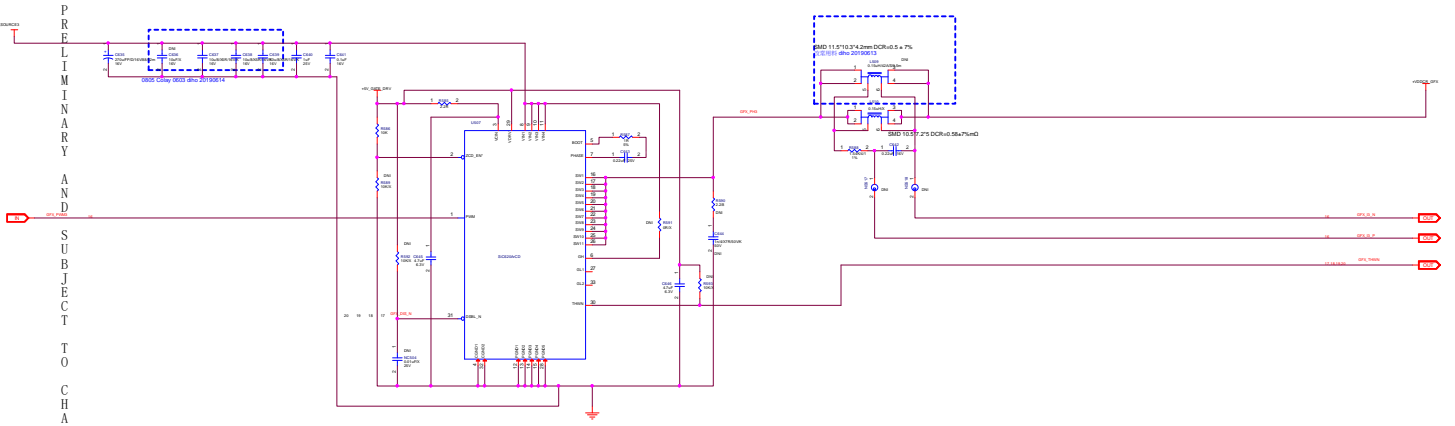
A
N
D

S
U
B
J
E
C
T

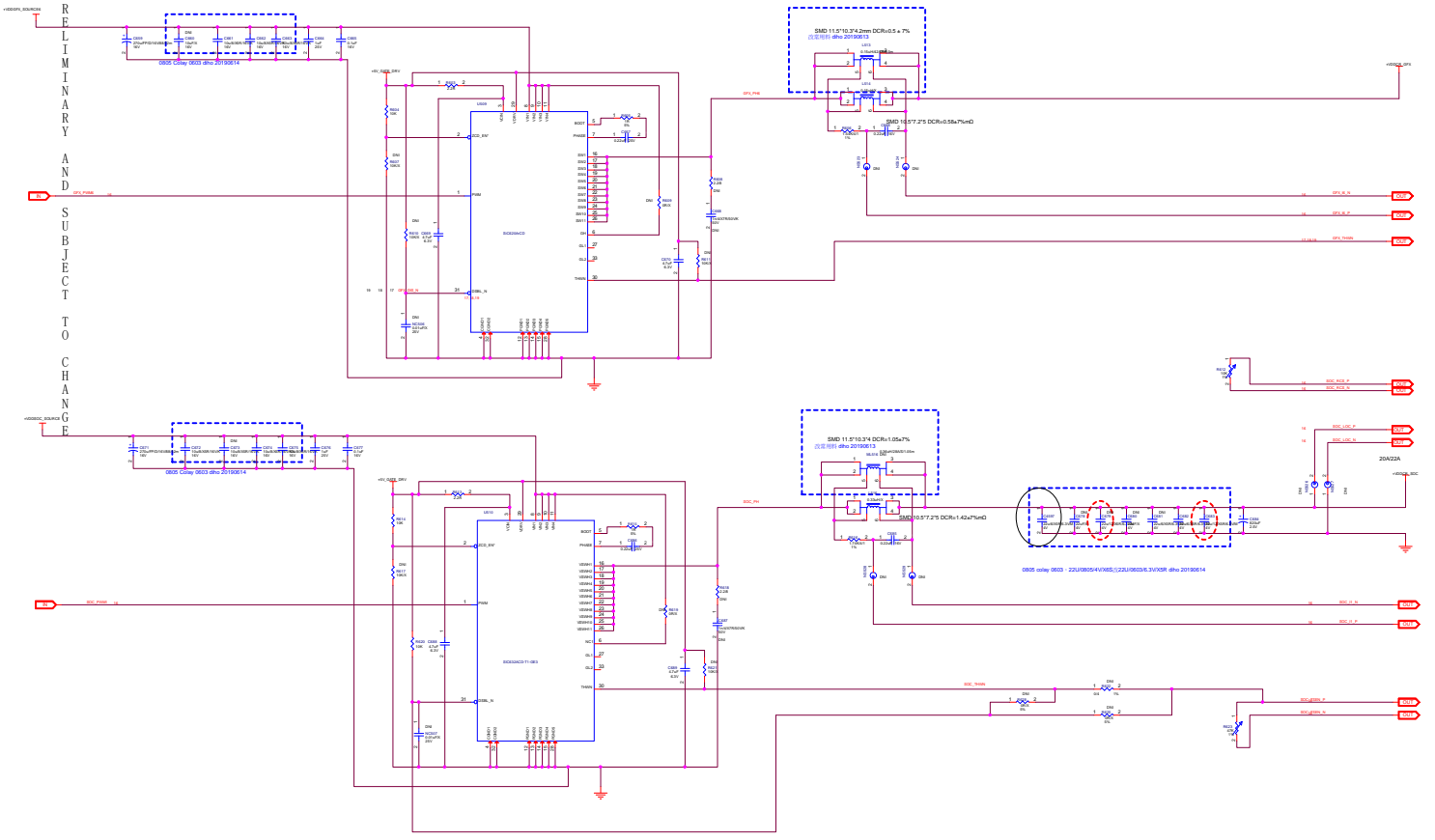
T
O

C
H
A
N
G
E





PRELIMINARY
 AND
 SUBJECT
 TO
 CHANGE





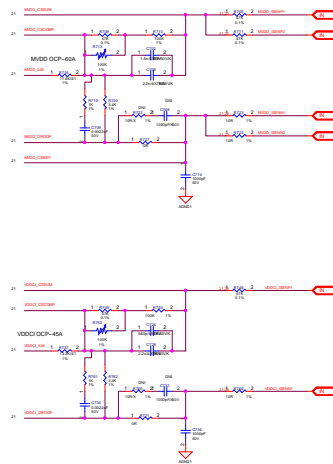
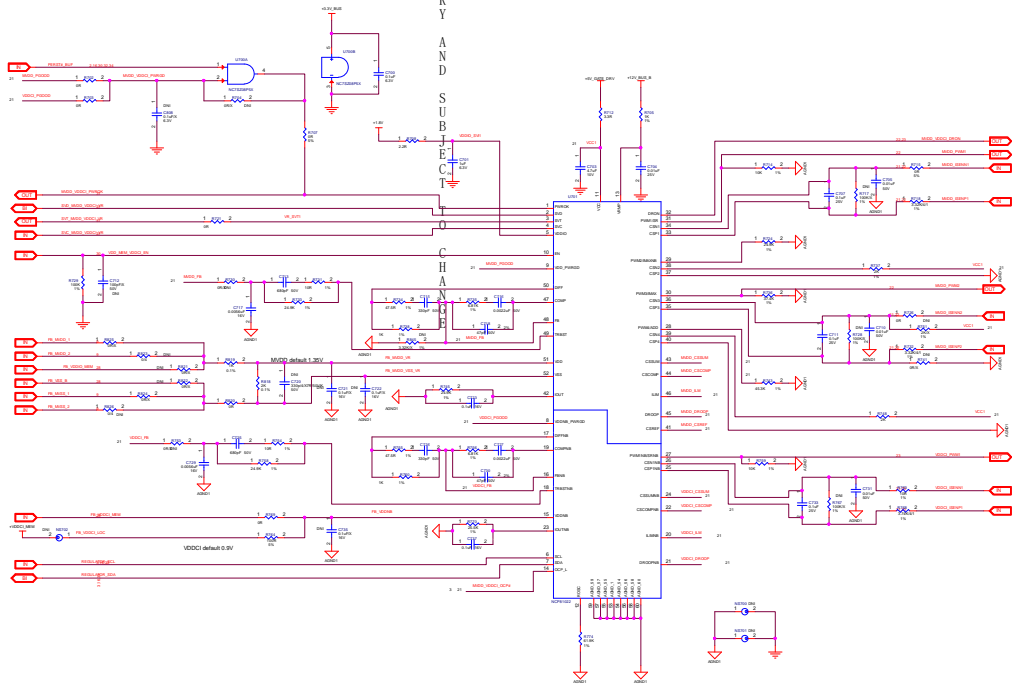
P
R
E
L
I
M
I
N
A
R
Y

A
N
D

S
U
B

E
C
K
E
T

C
H
A



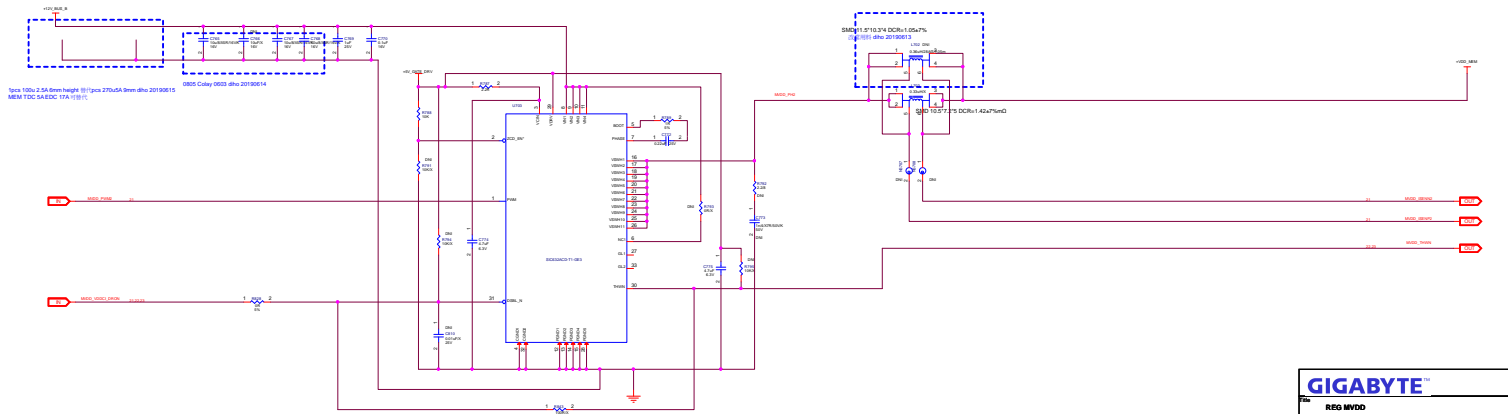
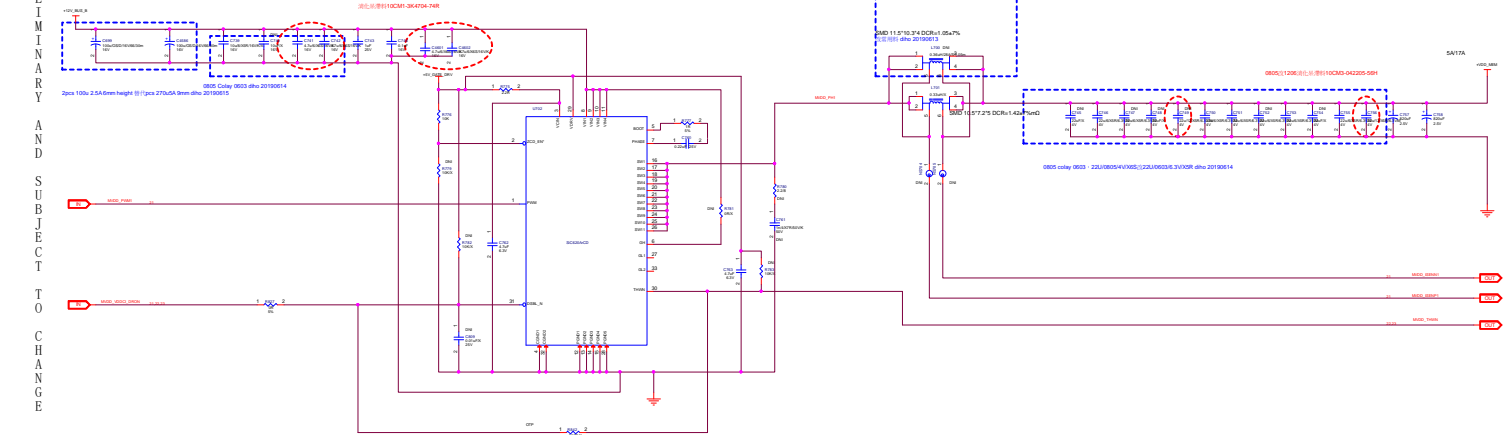
GIGABYTE

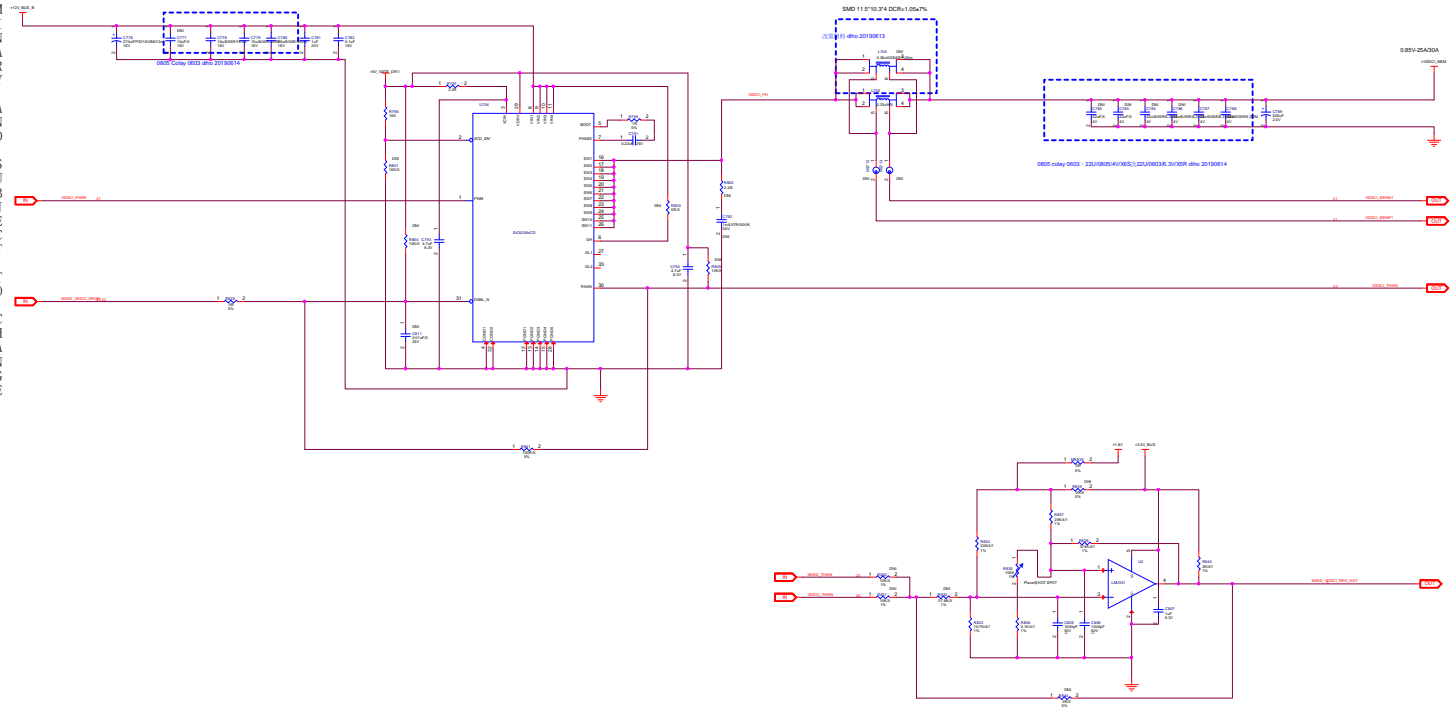
File: MDDAVDDCI CONTROLLER

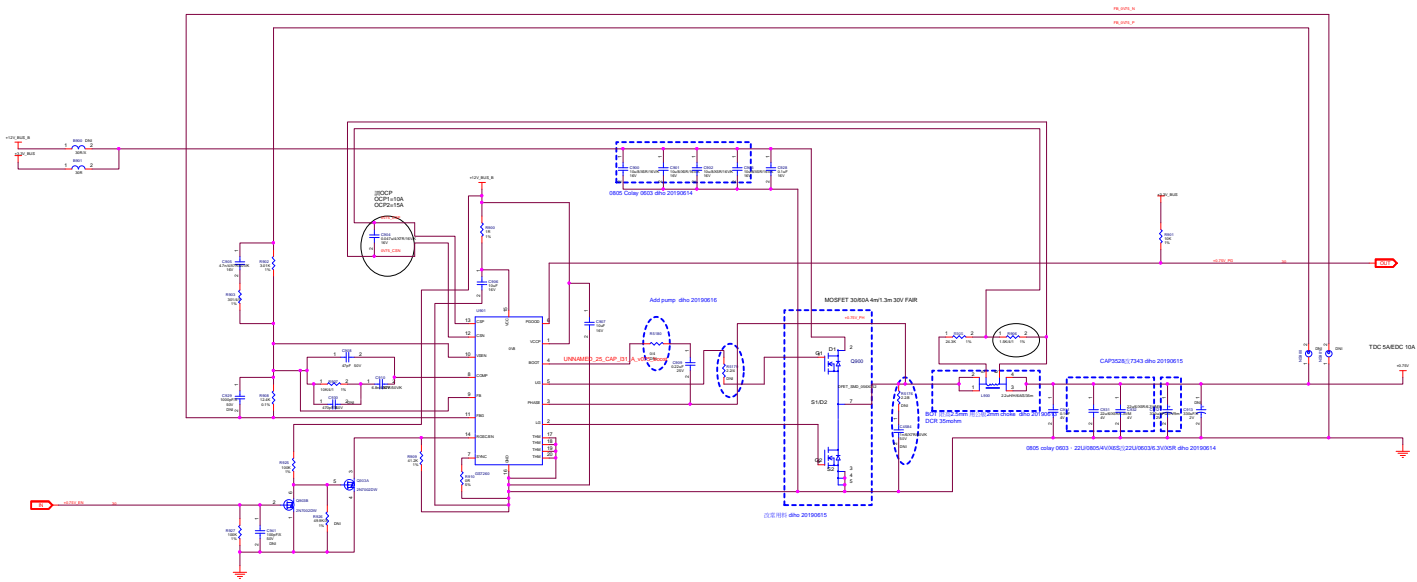
Doc: GV-R5XTGAMING-R0D

Ver: 1.0

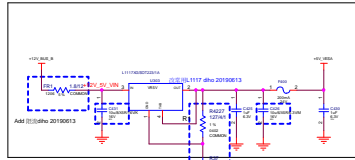
Page: 21 of 21



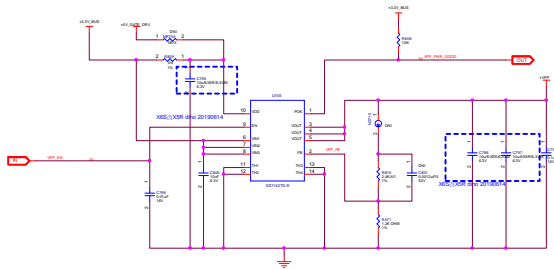


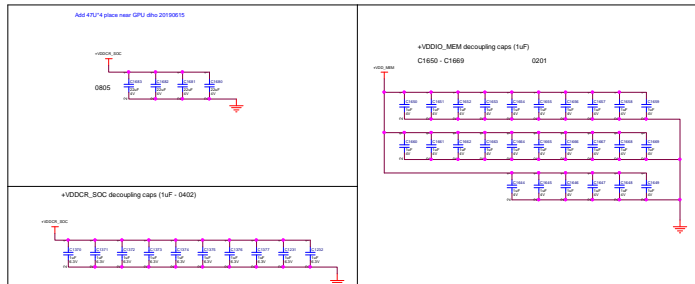
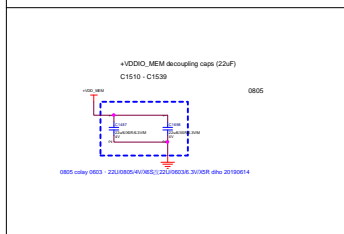
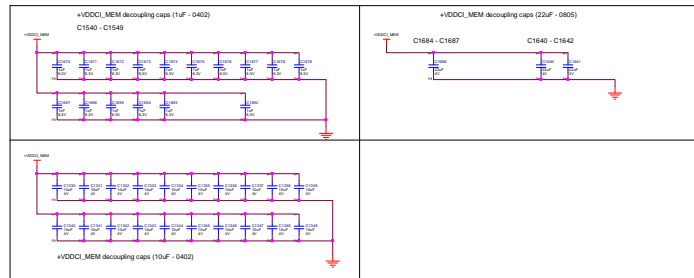
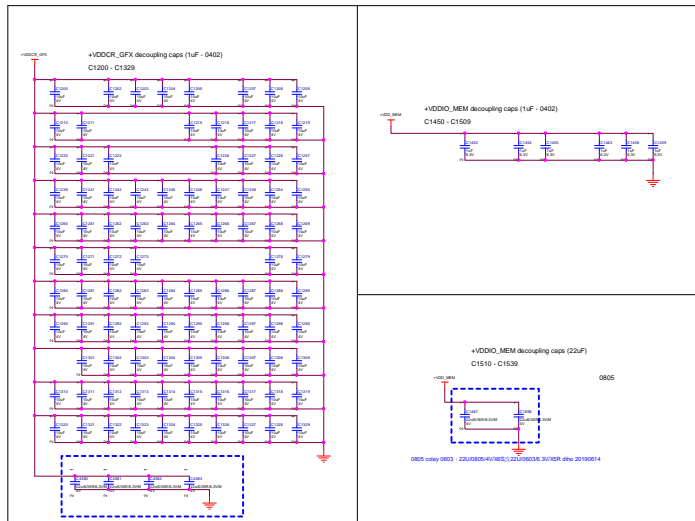


REGULATOR FOR +5V RAILS
I_{OUT} = 500mA

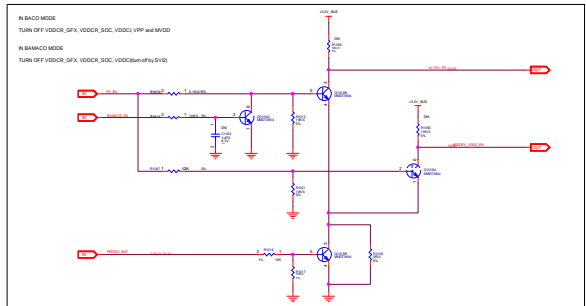
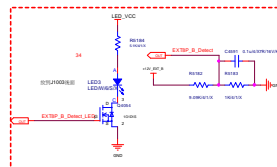
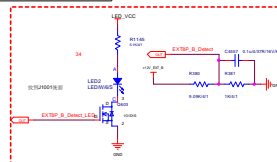
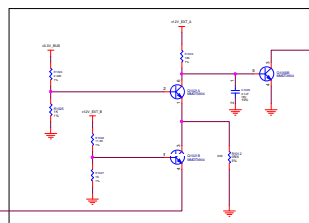
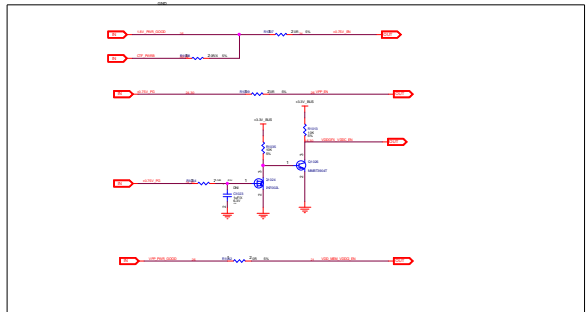
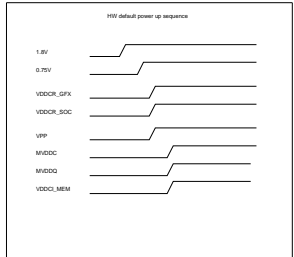
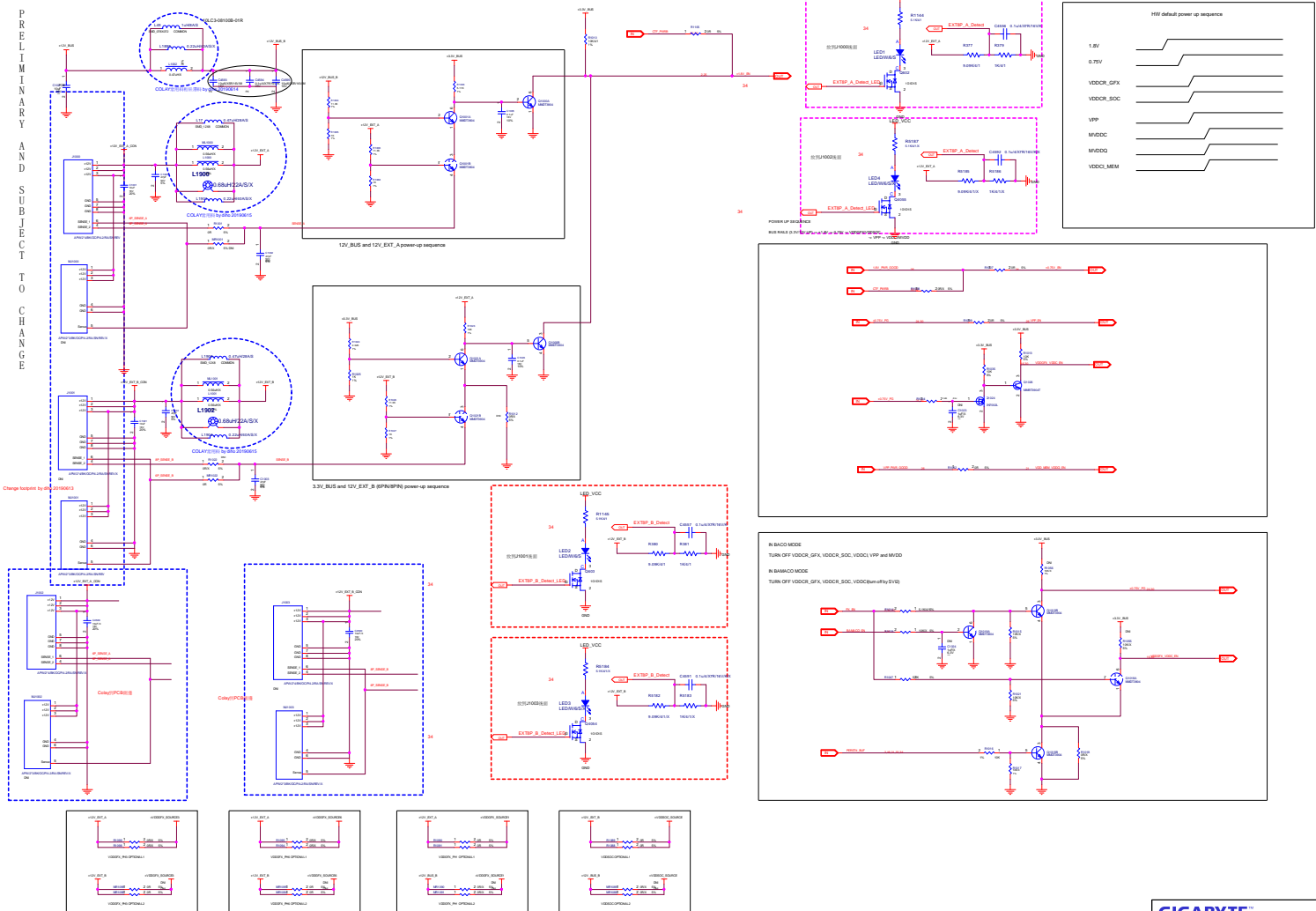


$$V_{OUT} = 1.25V \times (1 + R2/R1) = 1.25 \times (1 + 383/127) = 5.02V$$

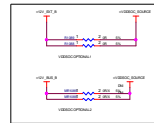
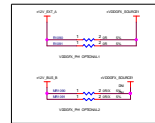
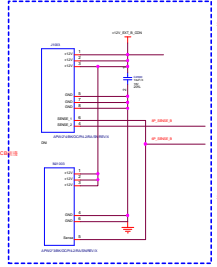
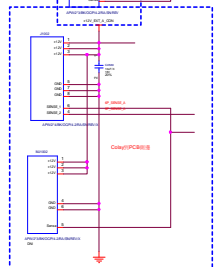


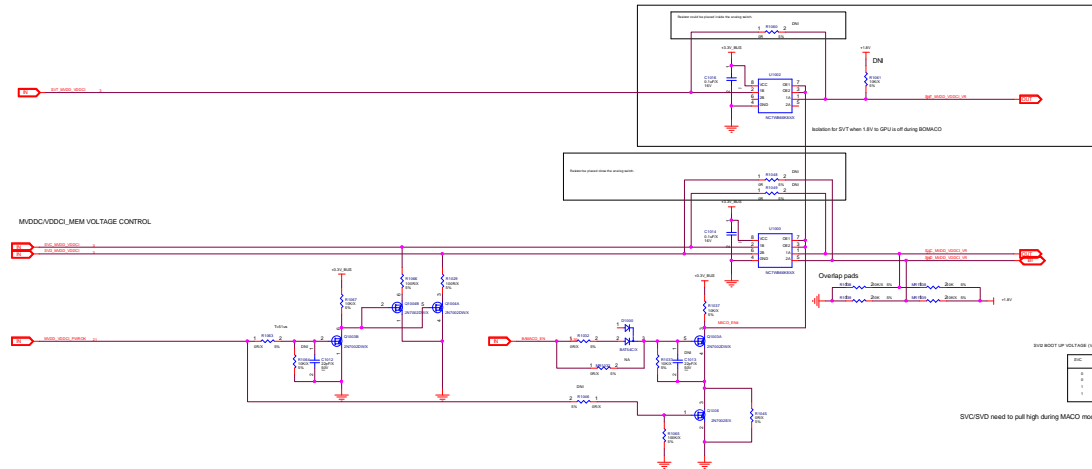






Change topology by HW (000001)



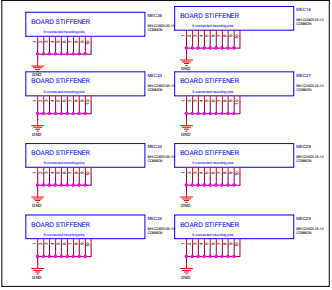
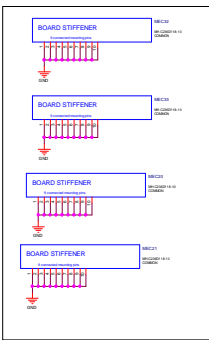


SVT/SVD need to pull high during MDDC mode

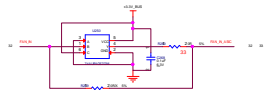
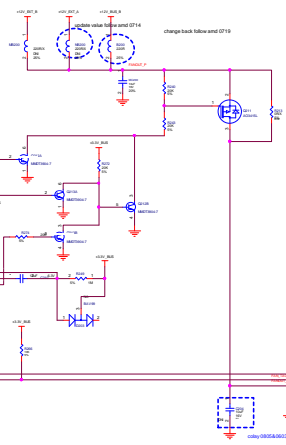
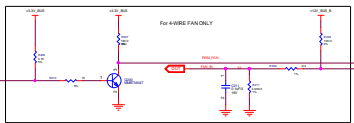
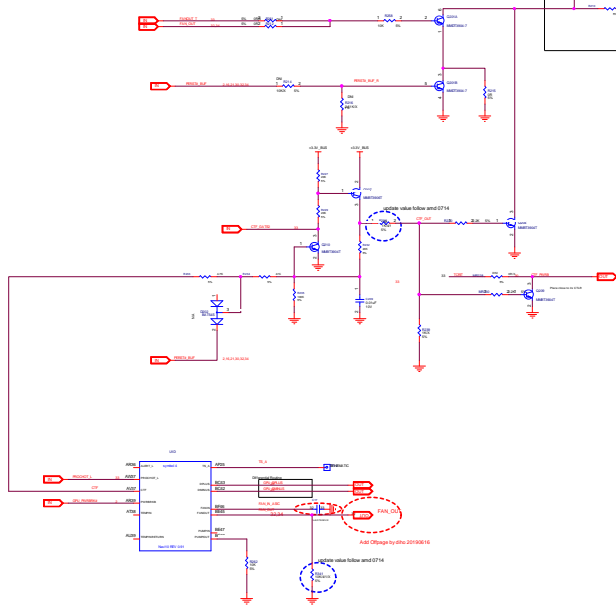
BKT SINK

20190616 by diho 20190619

GPU SINK



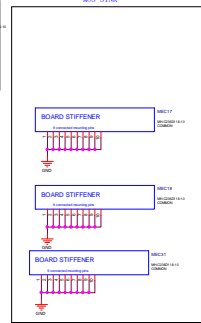
USB external GPU
temperature sensor



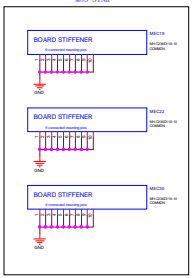
IK

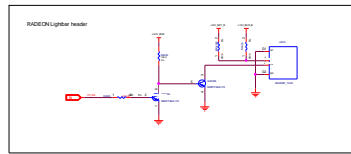
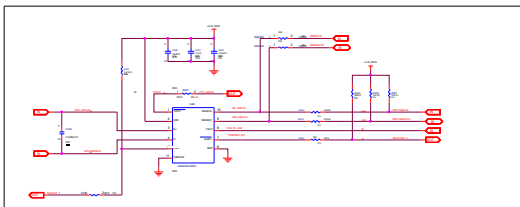
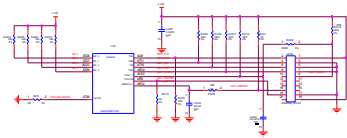
改常用螺絲孔 by diho 20190619

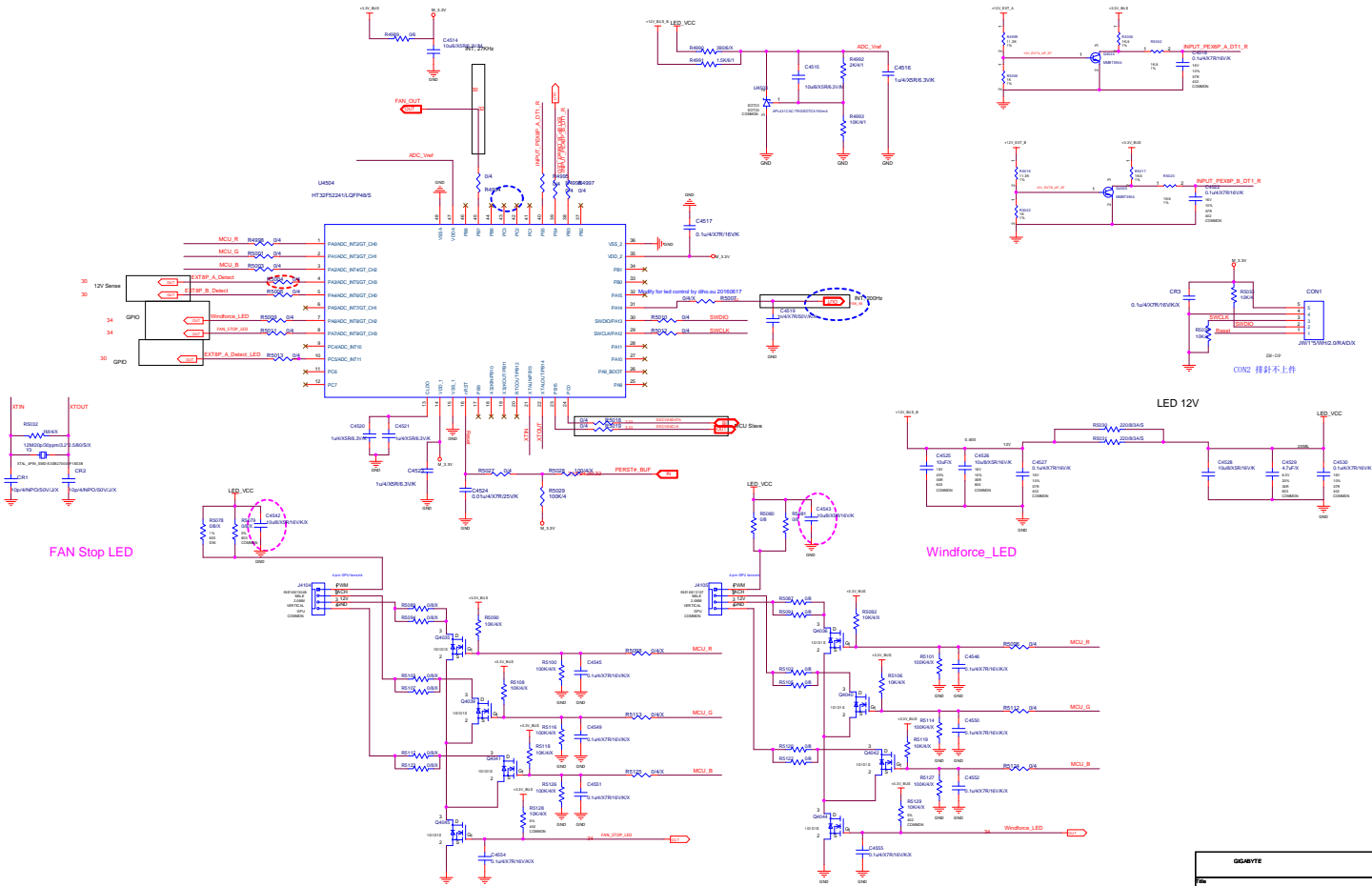
MS SINK



MS SINK







FAN Stop LED

Windforce_LED

LED 12V

CIN2 焊好不上件

GDMYTE	
Doc	
Doc Number	GV-807X16MG-ADD
Rev	1.0
File Path	Folder: February 11, 2025
Sheet	38 of 38

