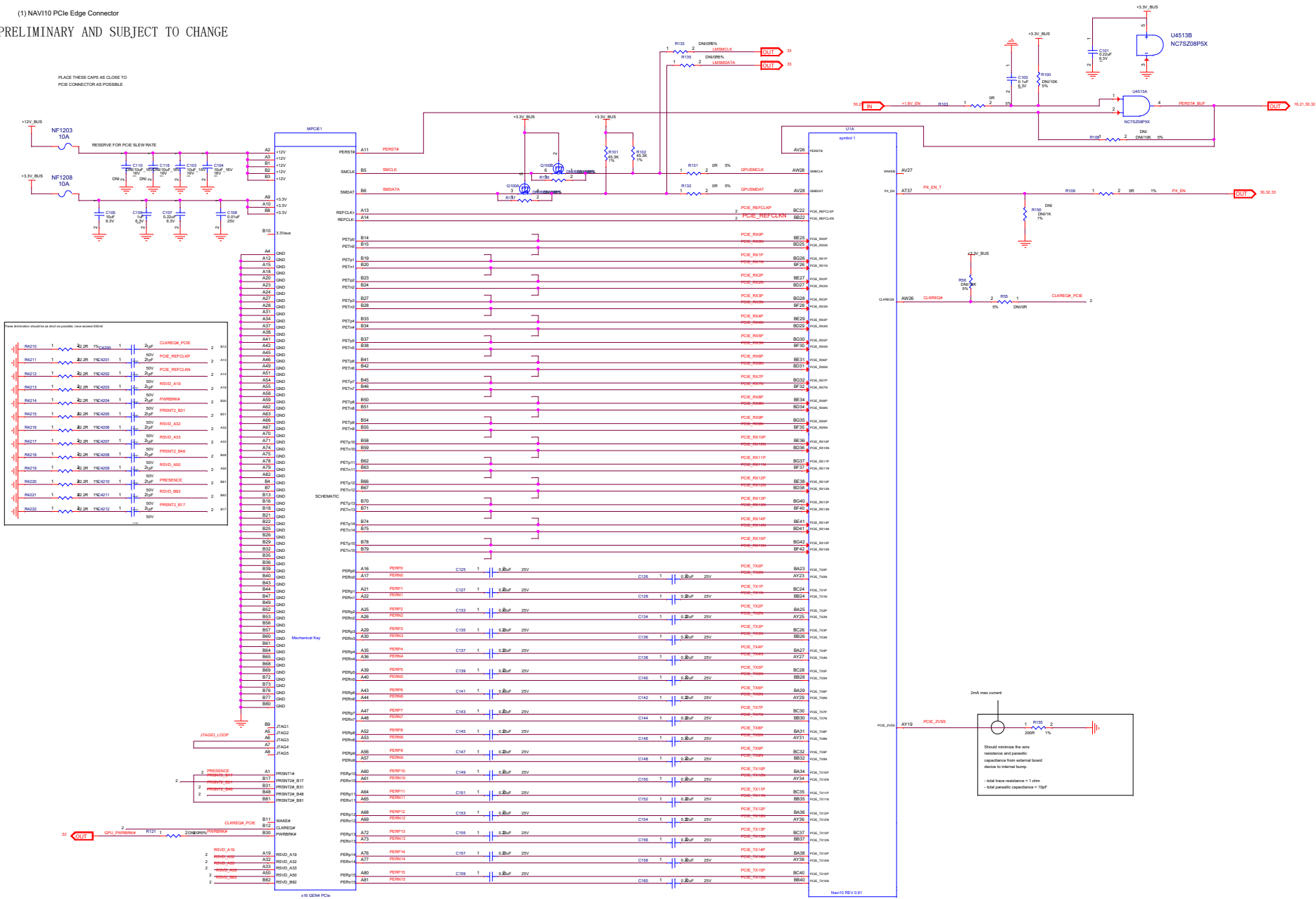


PRELIMINARY AND SUBJECT TO CHANGE

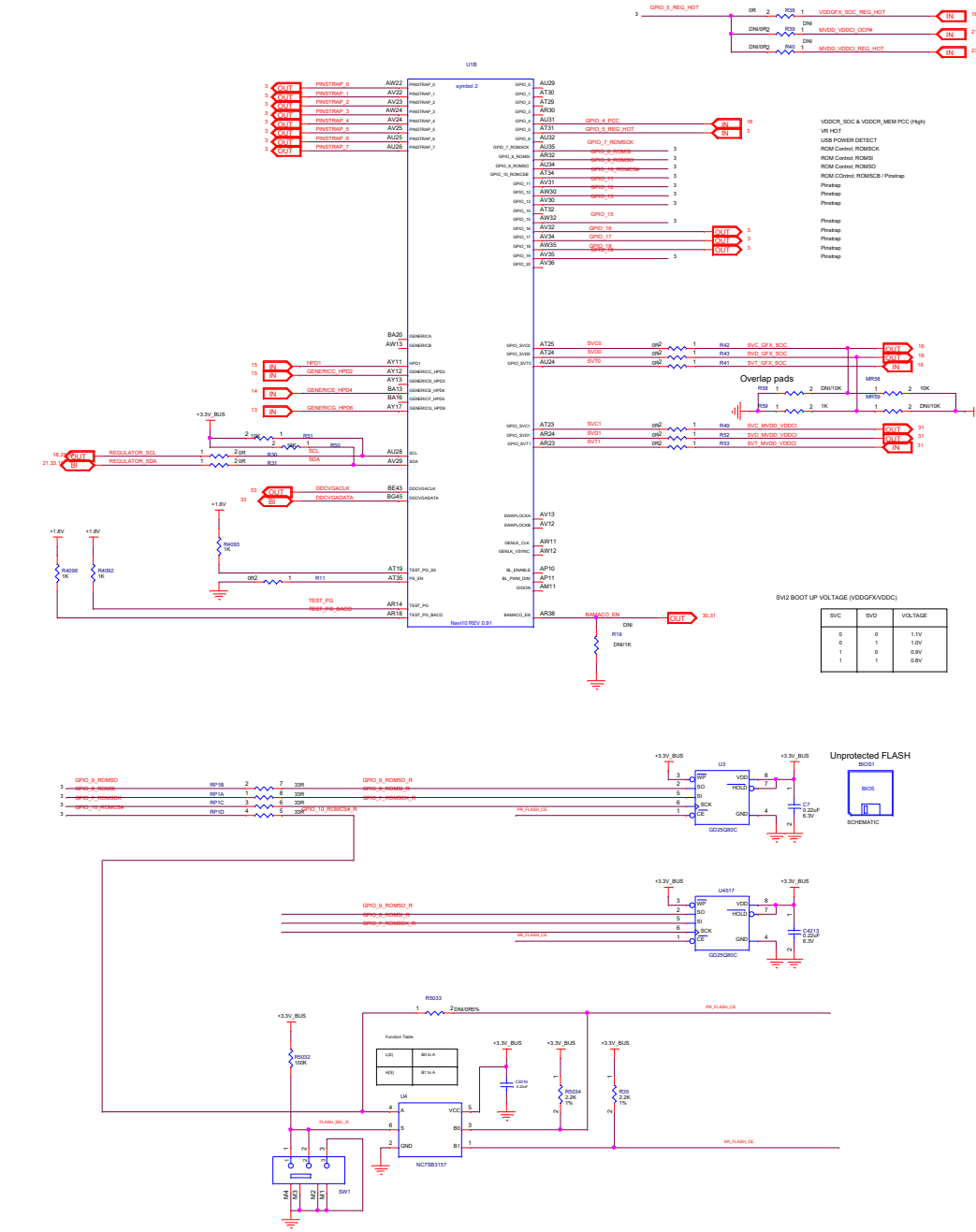
TABLE OF CONTENTS

SHEET NO.	SHEET NAME	SHEET NO.	SHEET NAME
1	TOC	26	SMALL RAIL REGULATORS
2	NAV110 PCIe Interface	27	NAV110 DECAPS
3	NAV110 GPIOs	28	NAV110 POWER
4	NAV110 XTAL	29	NAV110 GND
5	NAV110 MEM CHAB	30	POWER MANAGEMENT
6	NAV110 MEM CHCD	31	SVI2 & BAMACO
7	NAV110 MEM CHEF	32	MECHANICAL & THERMAL
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10	GDDR6 MEM CHCD	35	REVISION HISTORY
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13	NAV110 TMDPA - DP		
14	NAV110 TMDPC - HDMI		
15	NAV110 TMDPEF - DP DP		
16	GFX & SOC CONTROLLER		
17	VDDCR_GFX PHASES 2 and 5		
18	VDDCR_GFX PHASES 1 and 4		
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20	VDDCR_GFX PHASES 6 and VDDCR_SOC		
21	MVDD_VDDCI CONTROLLER		
22	REG MVDD		
23	REG VDDCI		
24	REG 0.75V		
25	REG 1.8V		

PRELIMINARY AND SUBJECT TO CHANGE

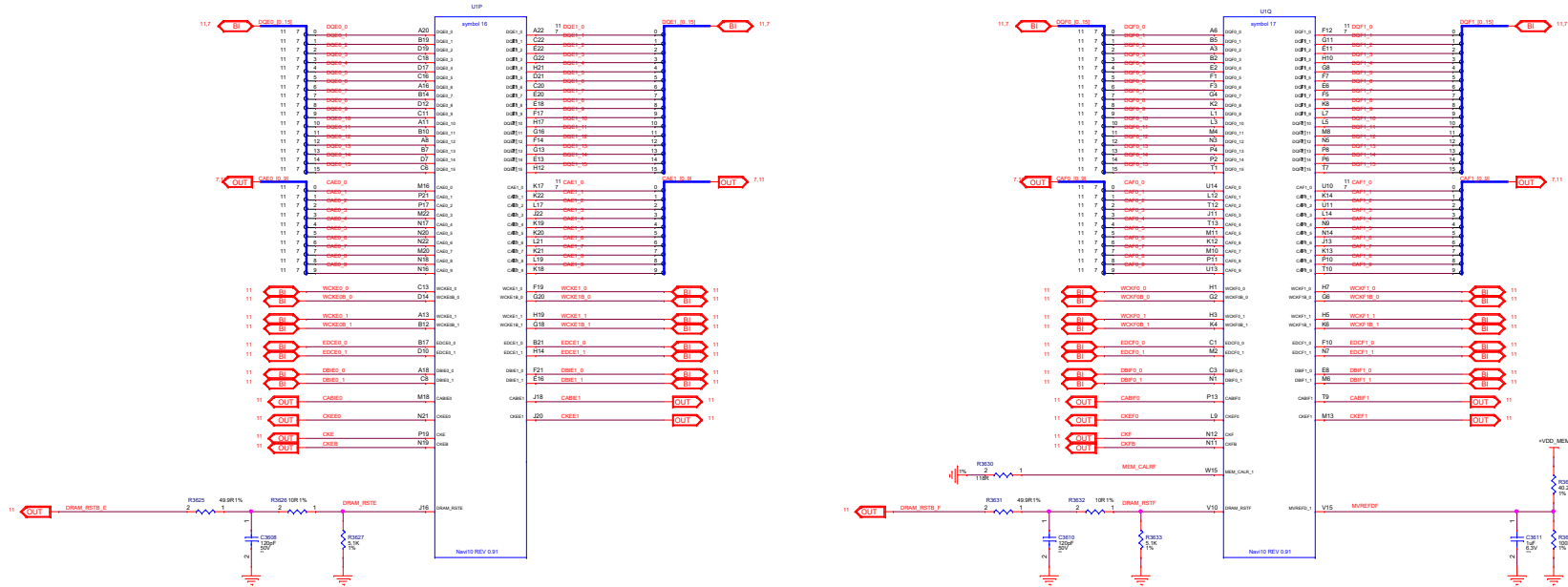


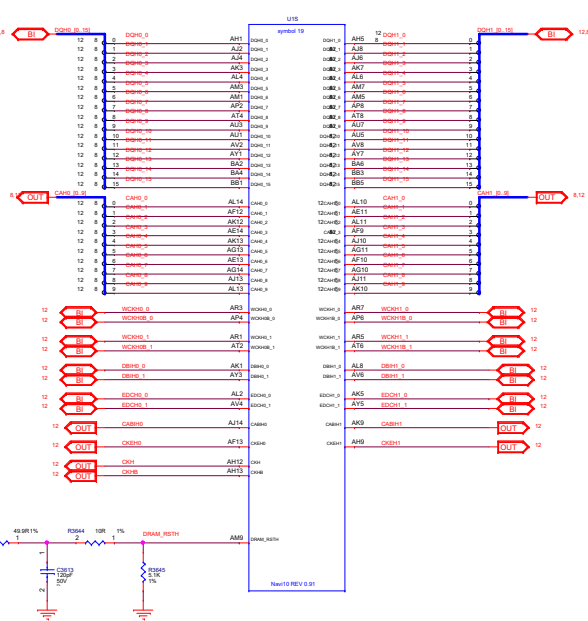
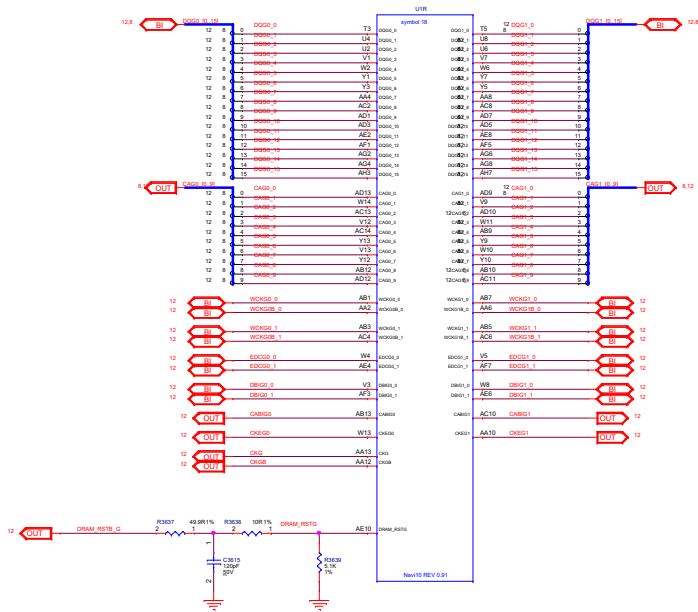
SYMBOL LEGEND	
DO NOT	DO NOT
INSTALL	INSTALL
ACTIVE	ACTIVE
LOW	LOW
DRIVE UP	DRIVE UP
ONLY	ONLY
DIGITAL	DIGITAL
ANALOG	ANALOG
GROUND	GROUND

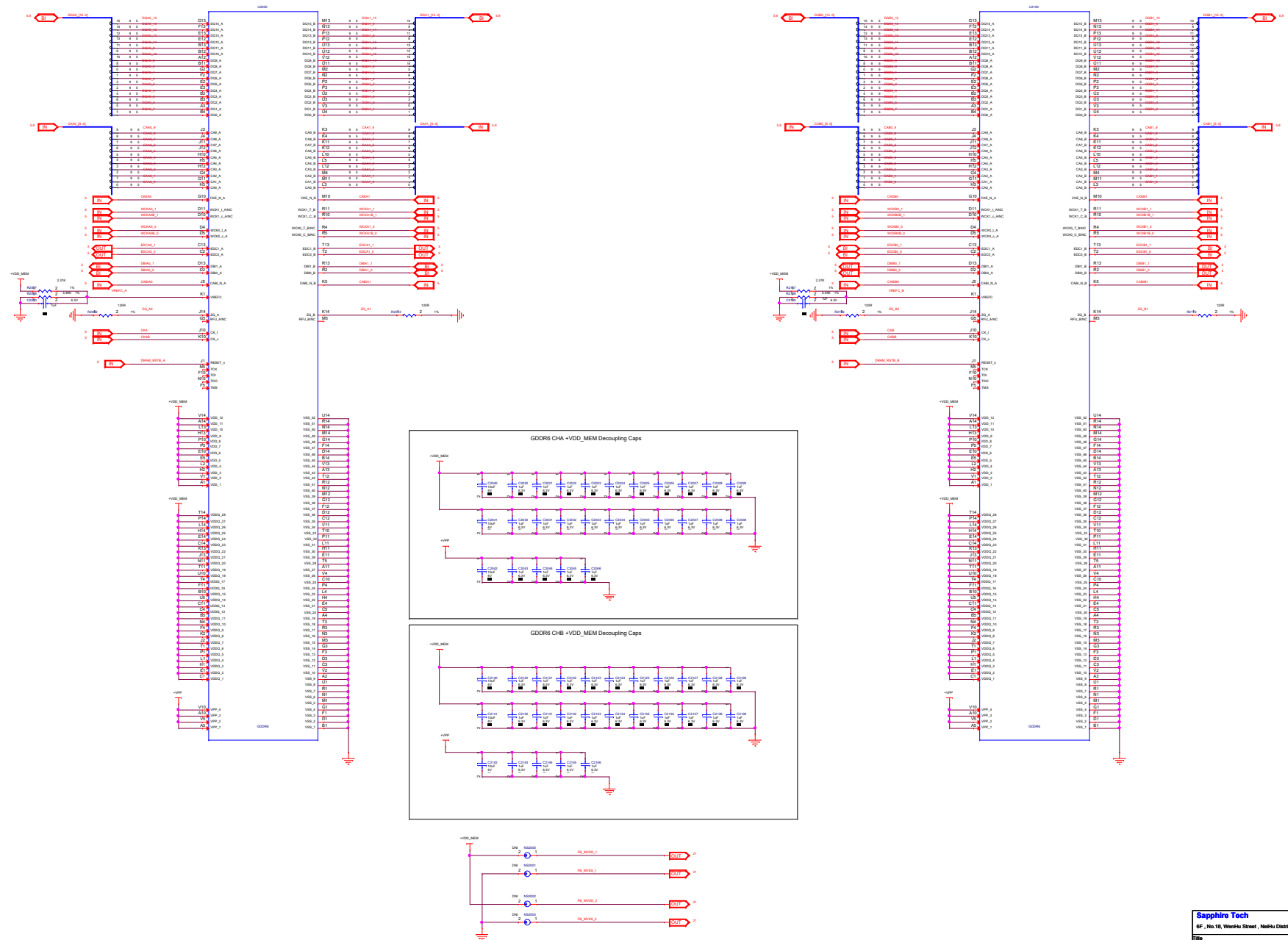


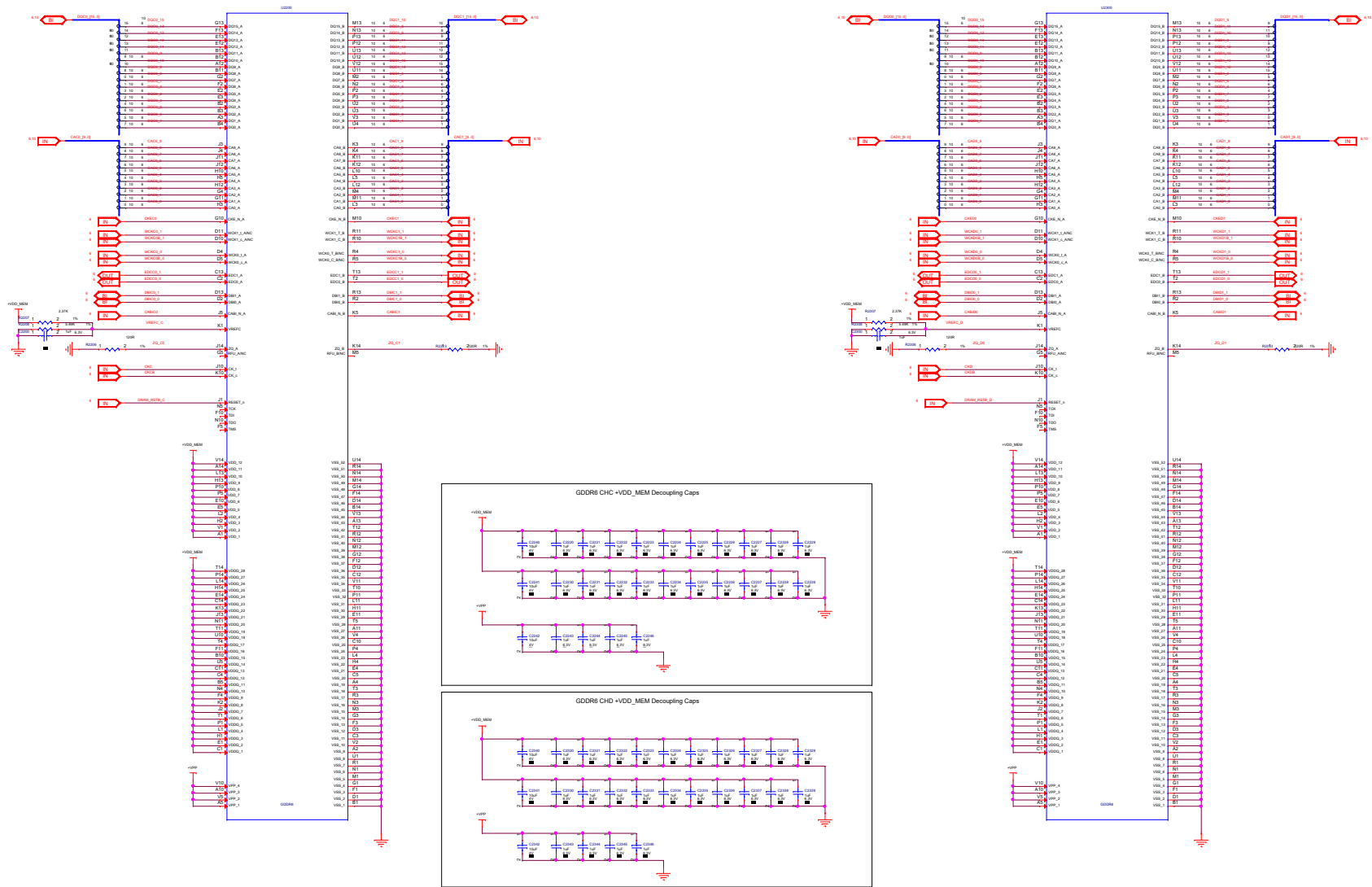
Note: Internal PUPD at GPIO pad is ~40k strength in 14nm design spec

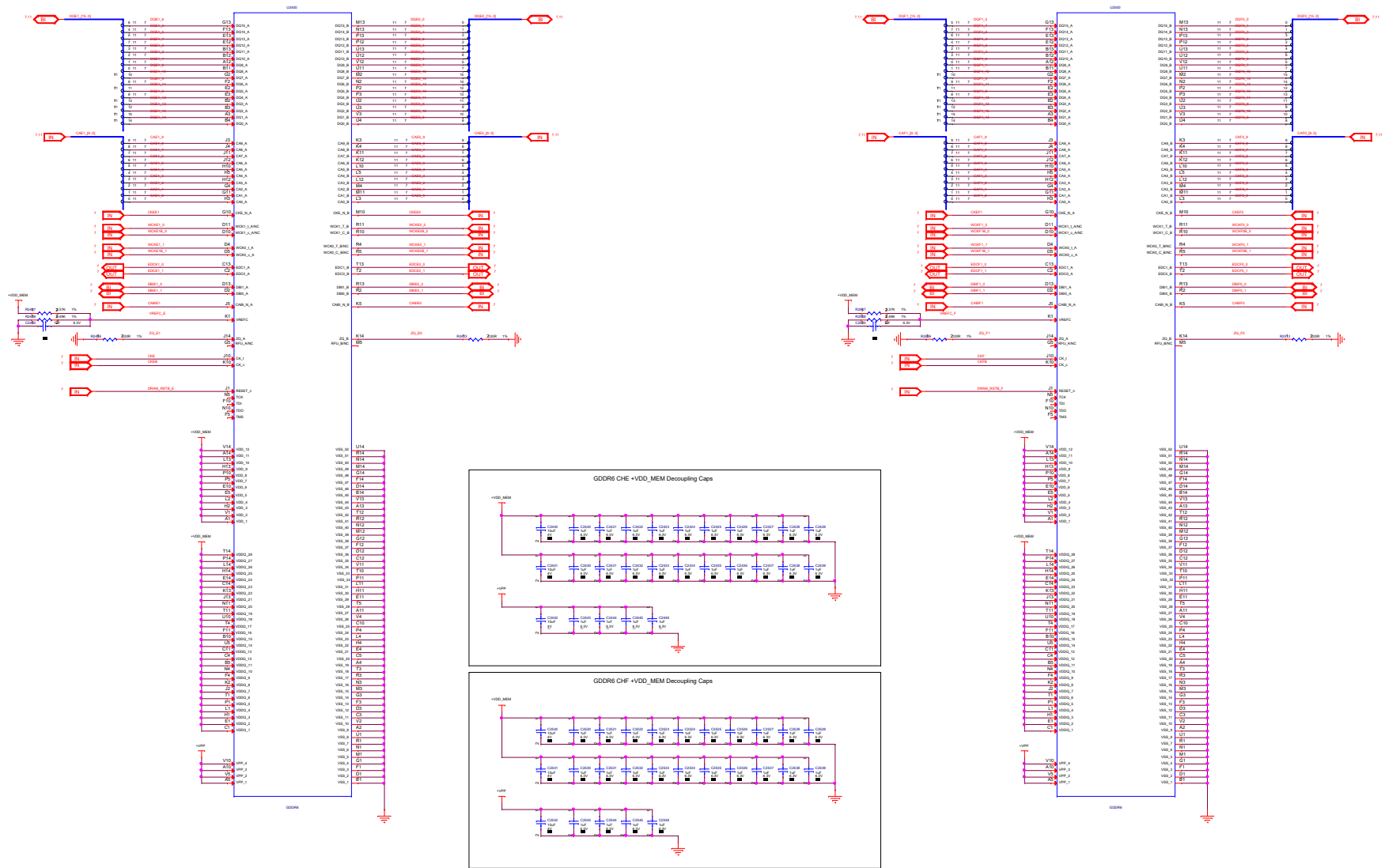
User	Internal Default Value	Definition
BIF	0	STRAP_BIF_GEN4_DIS_A 0: PCIe GEN4 supported 1: PCIe GEN4 not supported
	0	PINSTRAP_BIF_CLK_PM_EN 0: CLKREQ power management capability is disabled 1: CLKREQ power management capability is enabled
	0	PINSTRAP_BIF_LC_TX_SWING 0: VGA controller support enabled 1: The device won't be recognized as the system's VGA controller
DCE	0	PINSTRAP_BIF_VGA_DIS 0: VGA controller support enabled 1: The device won't be recognized as the system's VGA controller
	0	PINSTRAP_AUD_PORT_CONN[2:0] Number of audio-capable display outputs 0: All endpoints connected 1: 6 endpoints connected 2: 5 endpoints connected 3: 4 endpoints connected 4: 3 endpoints connected 5: 2 endpoints connected 6: 1 endpoint connected 7: 0 endpoints connected
	0	PINSTRAP_AUD[1:0] 1: Audios for DisplayPort only 2: Audios for DisplayPort and HDMI if dangle is detected 3: Audios for DisplayPort and native HDMI
Platform	0	GPIO_10
	0	GPIO_17
	0	GPIO_16
SMU	1	PINSTRAP_2
	0	PINSTRAP_1
	1	PINSTRAP_0
SMU	1	GPIO_10
	1	PINSTRAP_SMBUS_ADDR 0: 0x40 1: 0x40h
	1	PINSTRAP_BIOS_ROM_EN 0: Disable the external BIOS ROM device 1: Enable the external BIOS ROM device

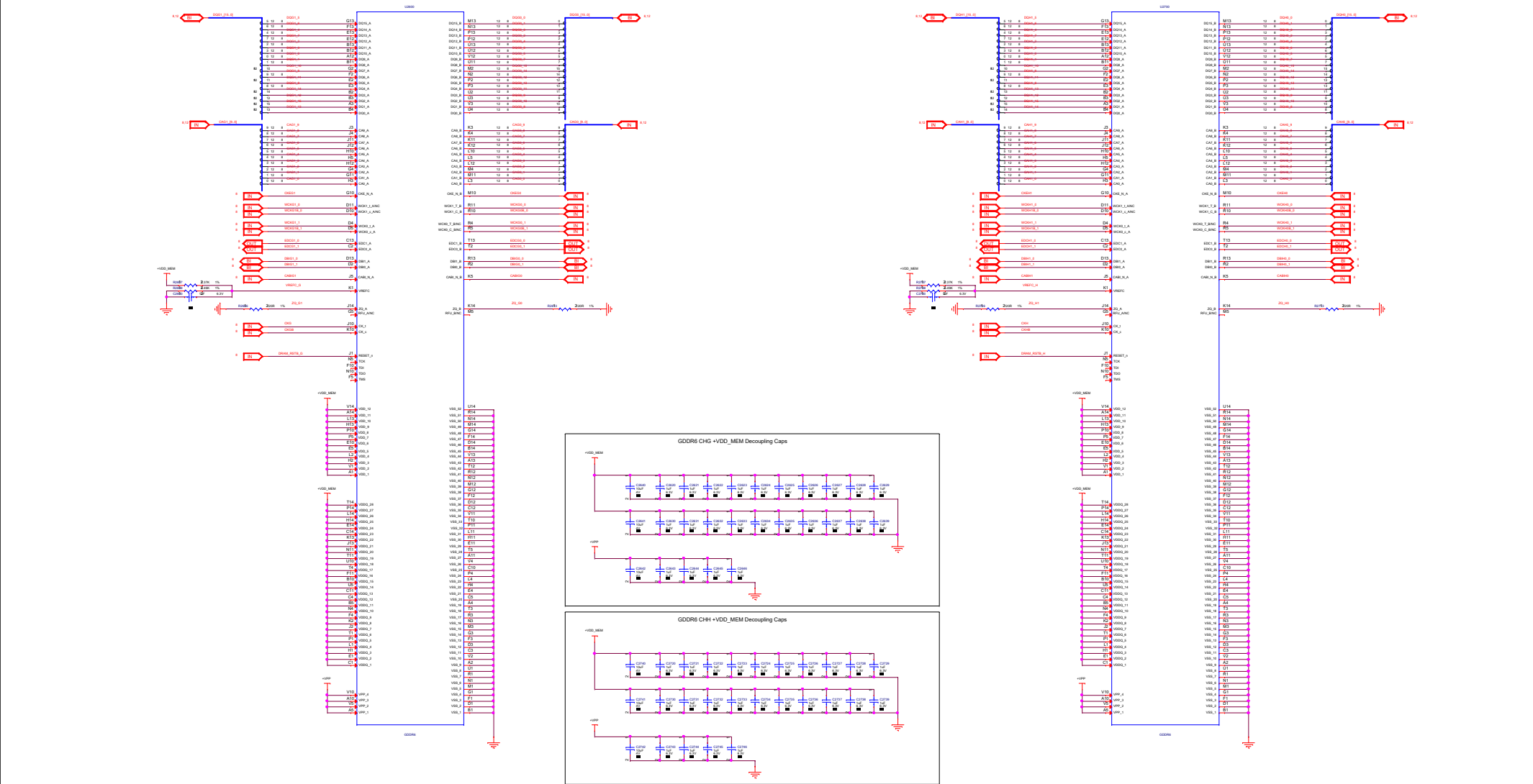




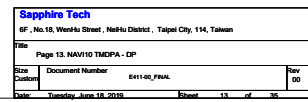




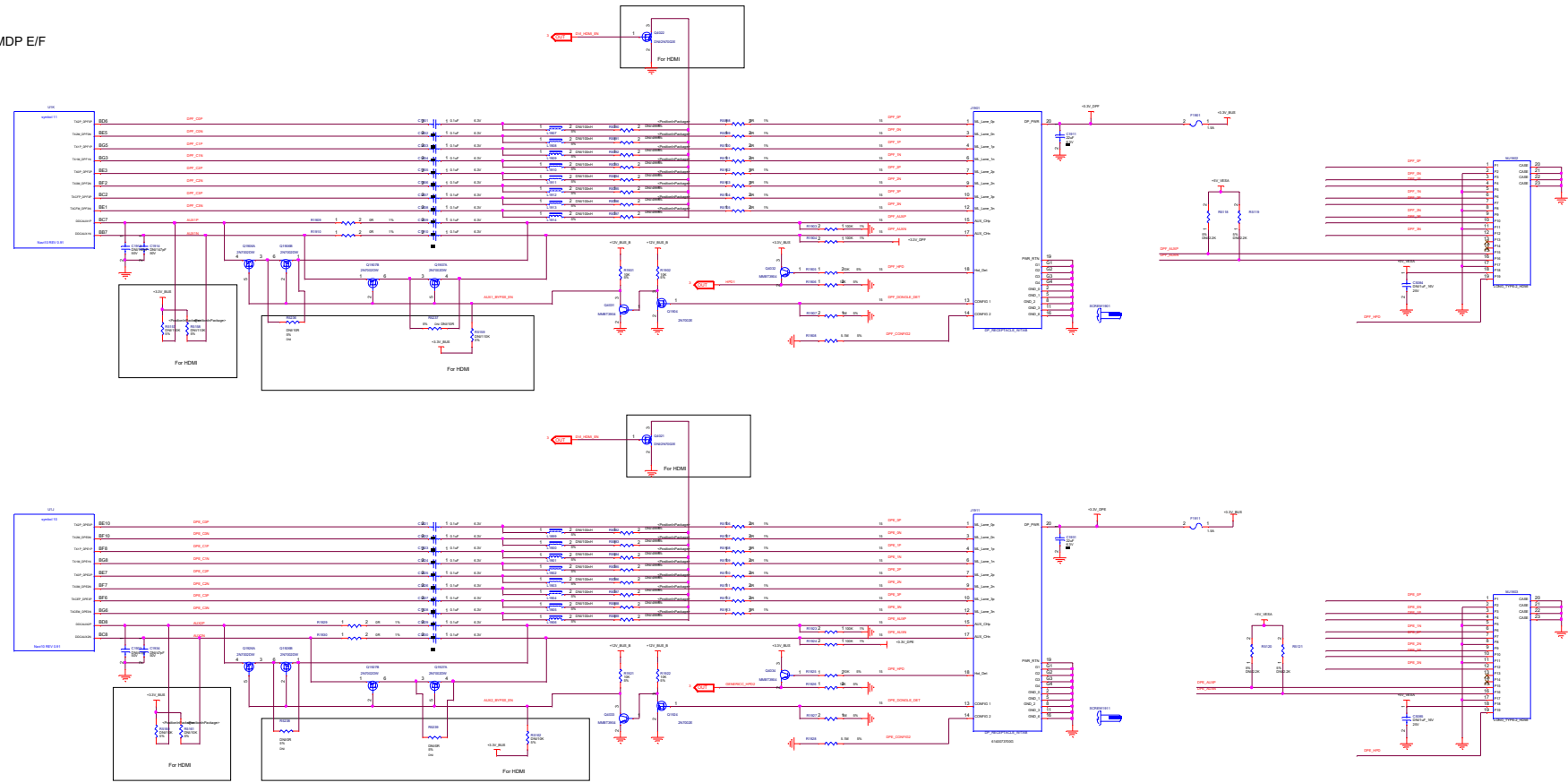


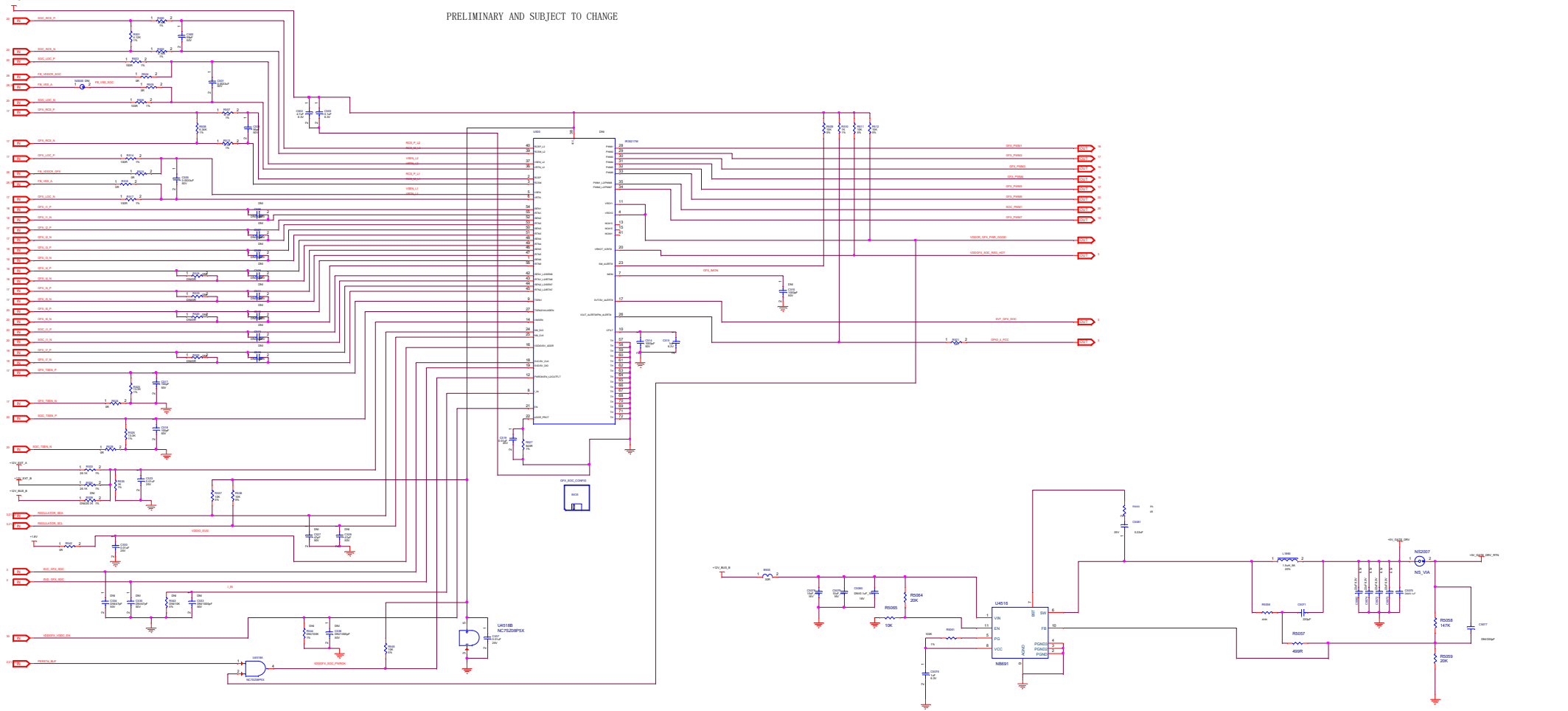


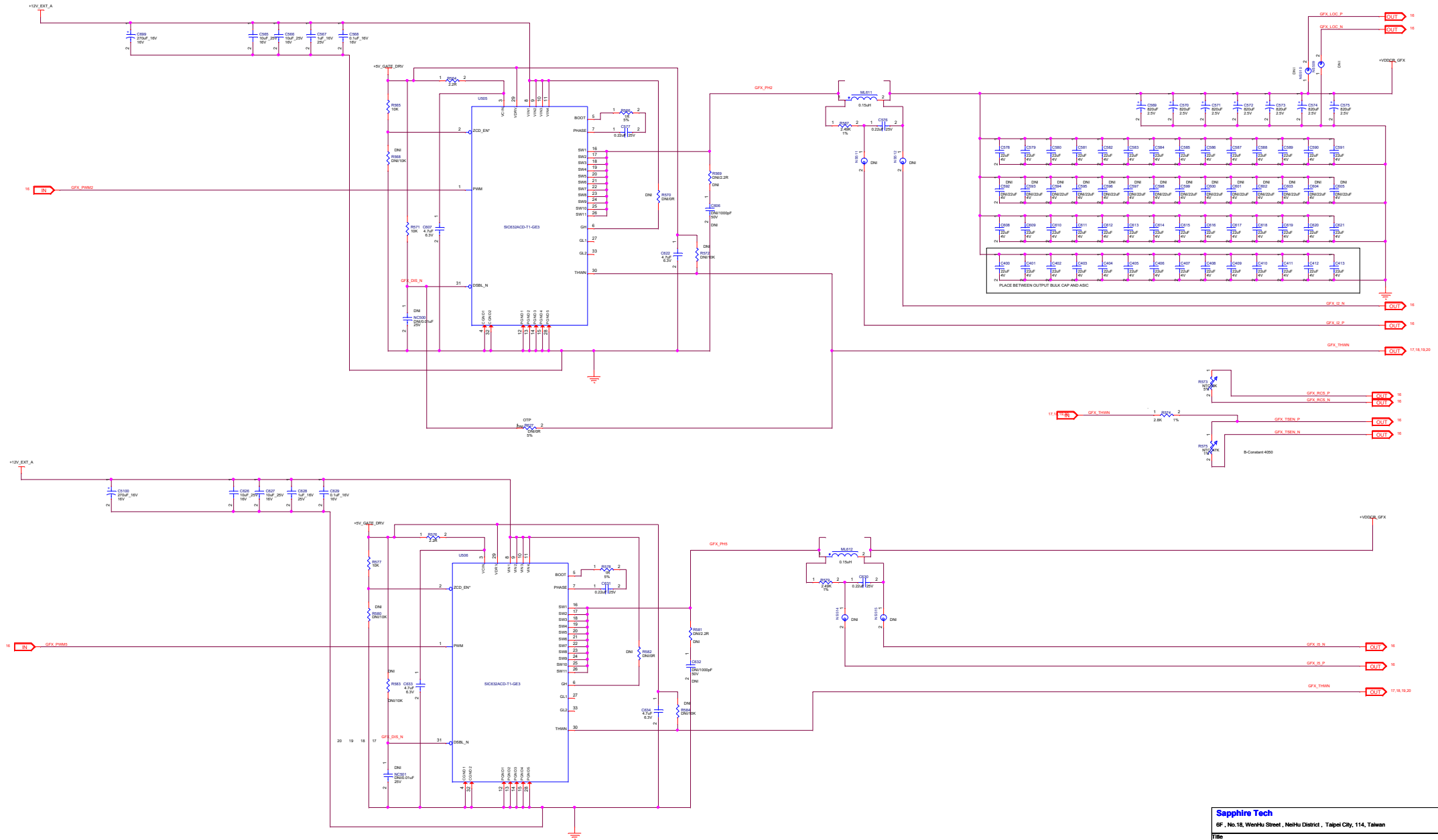
PRELIMINARY AND SUBJECT TO CHANGE



(9) NAVI10 TMDP E/F

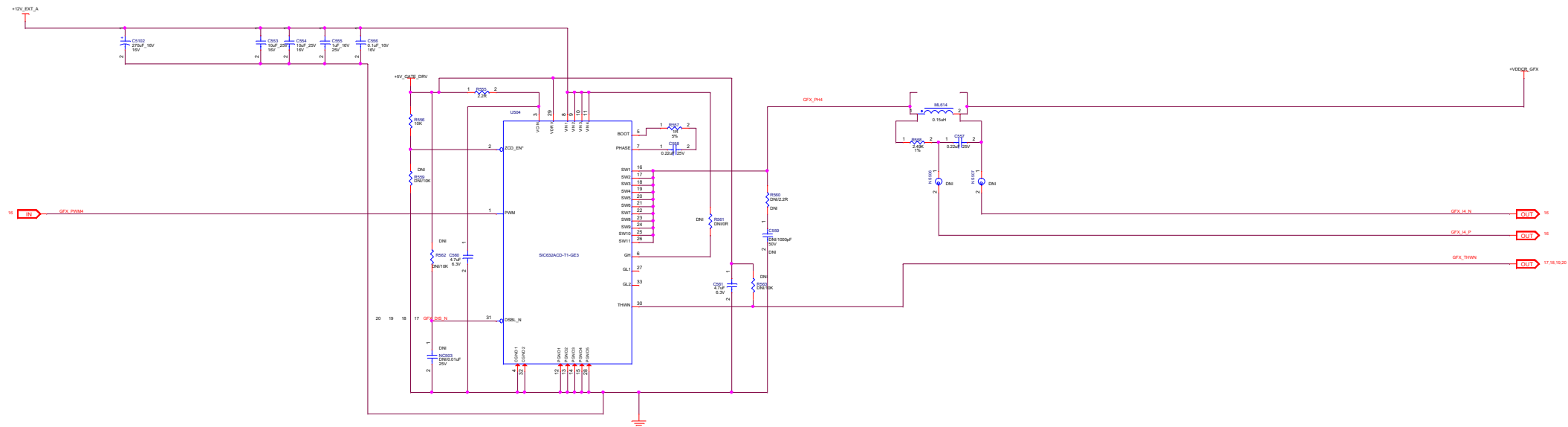


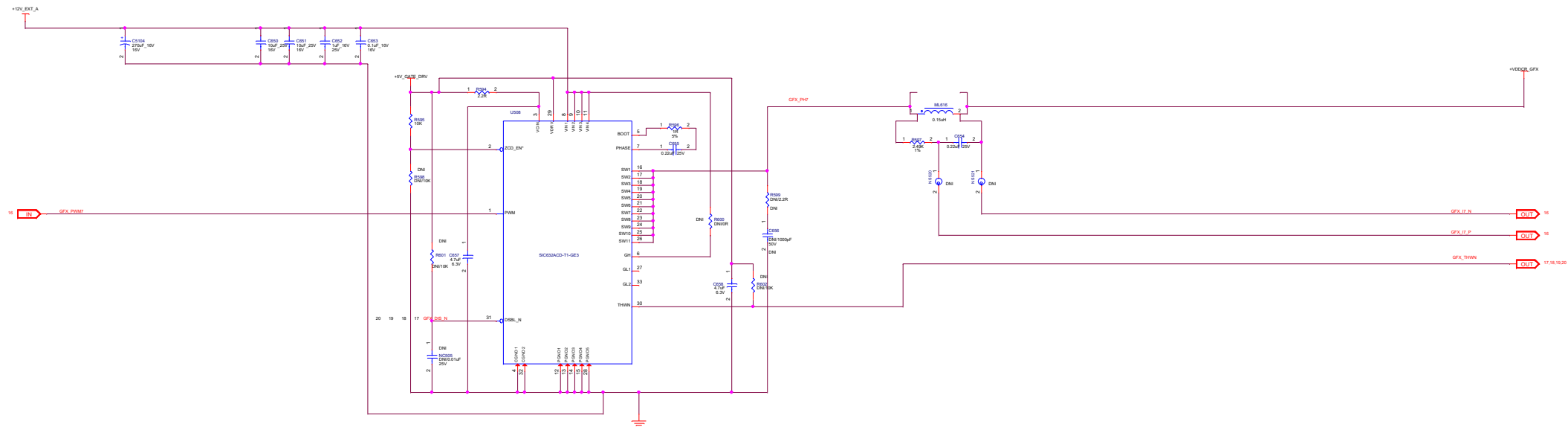


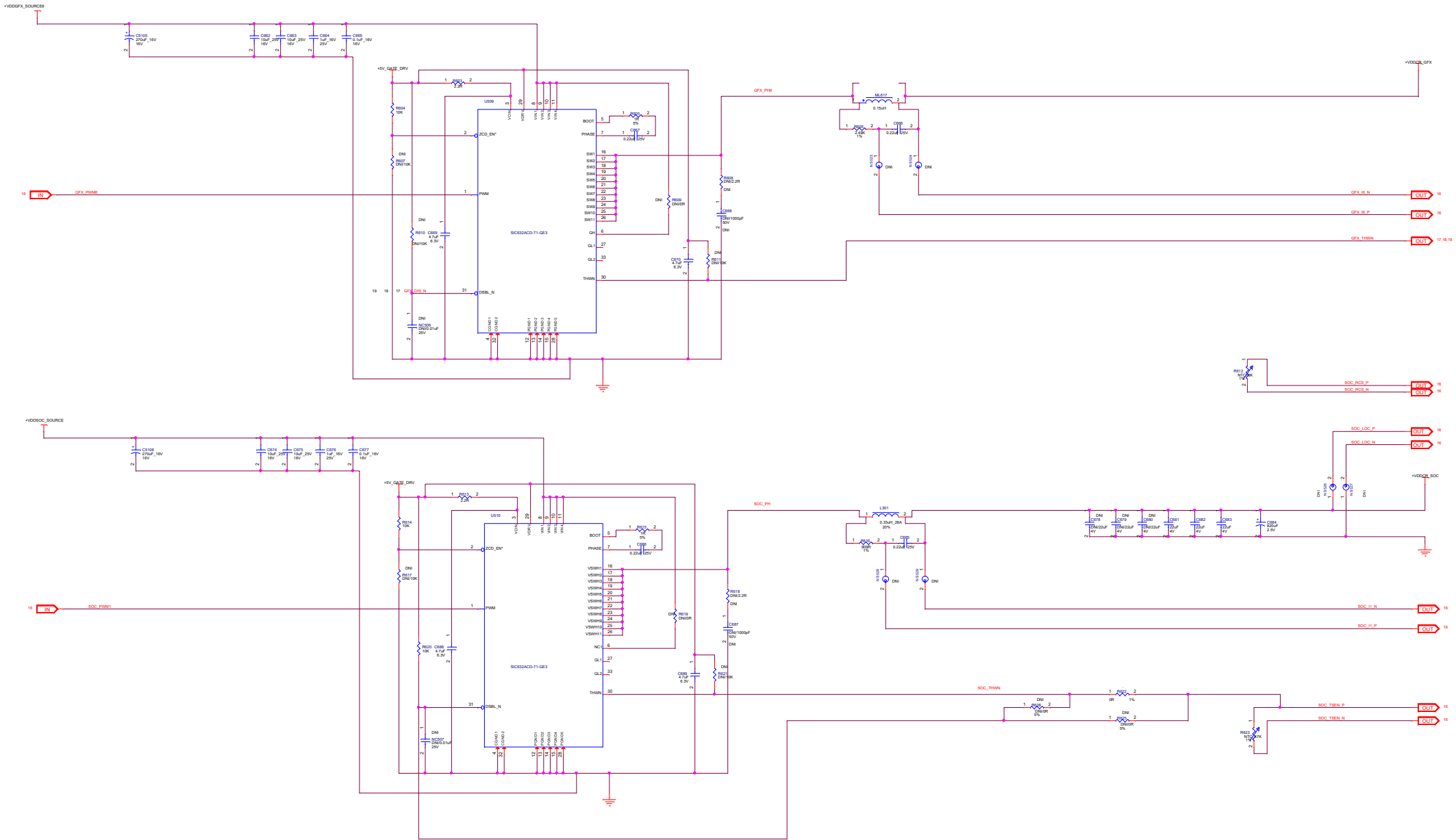


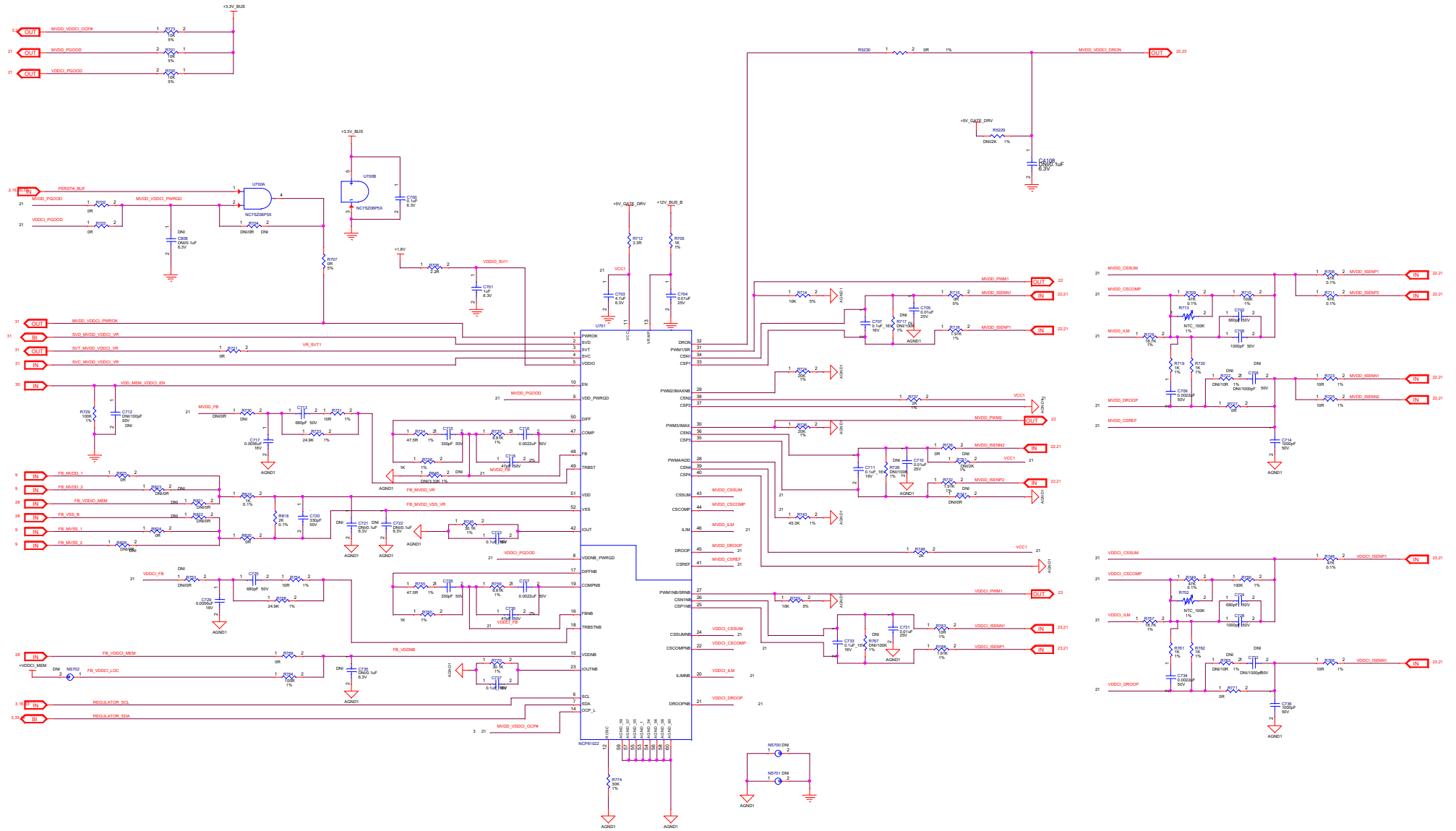
The schematic illustrates the internal circuitry of the BQ20ZACD-T1-QE3, a precision battery charger controller. Key components include:

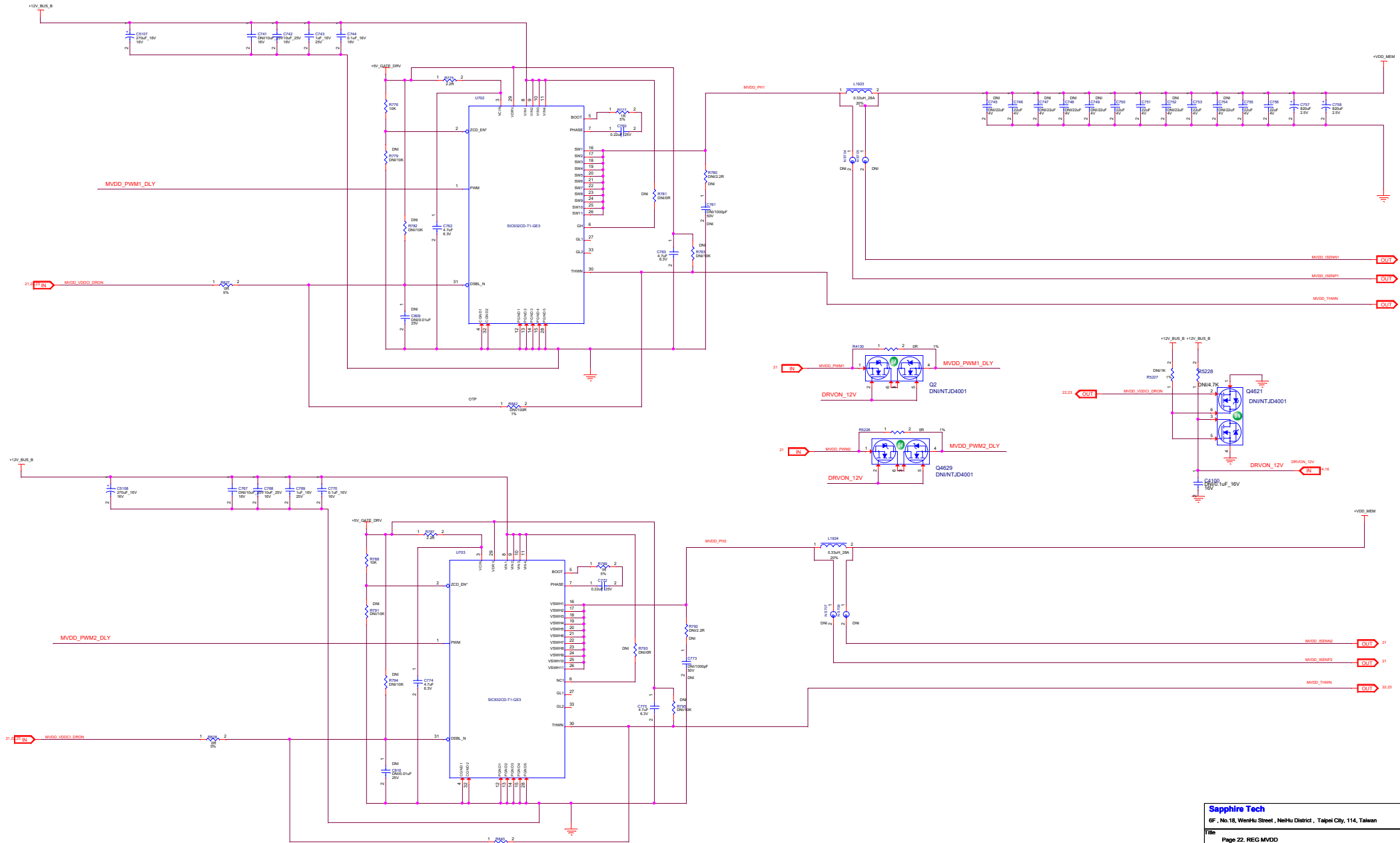
- Power Input Section:** Features a network of capacitors (C101-C104) and resistors (R847, R859) connected to +VDDP_SOURCE.
- Control Logic:** Includes a microcontroller core (U100), various support capacitors (C106-C110), and resistors (R853, R854).
- Charge Regulation:** Utilizes a current sense resistor (R857), a feedback capacitor (C105), and a reference voltage divider (R855, R856).
- Output Stages:** Consists of two MOSFET drivers (M1001, M1002) and their respective gate drive networks (C107, C108; C109, C110).
- External Connections:** Shows pins for IN (GFX_PWM1), OUT (GFX_I1_N, GFX_I1_P, GFX_THW1), and VDDOCP_GFX.

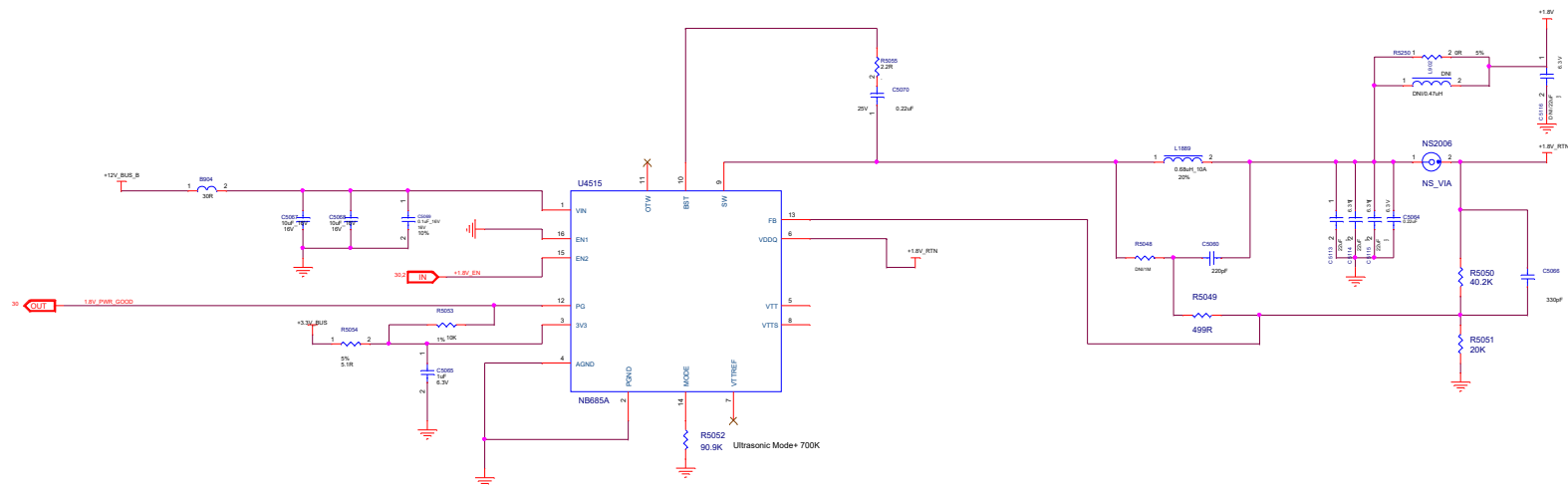






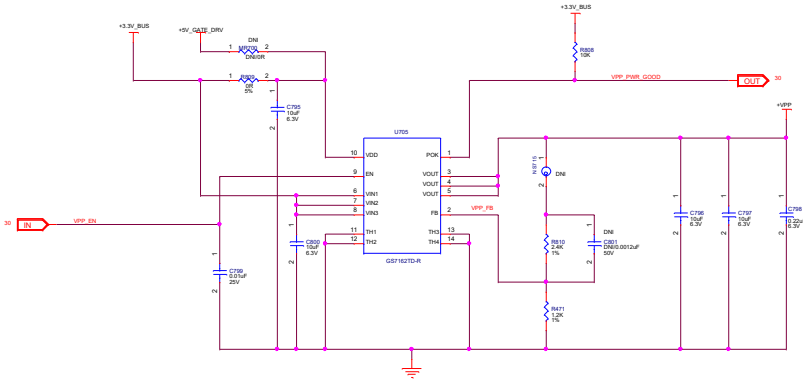
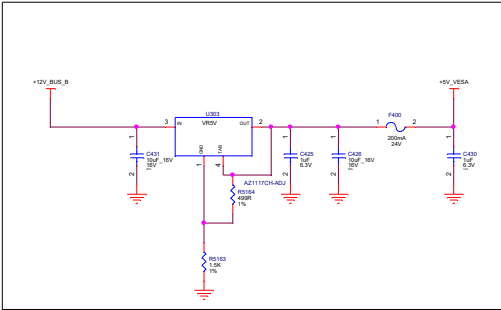


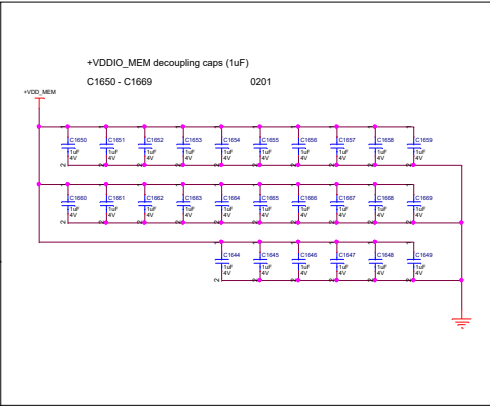
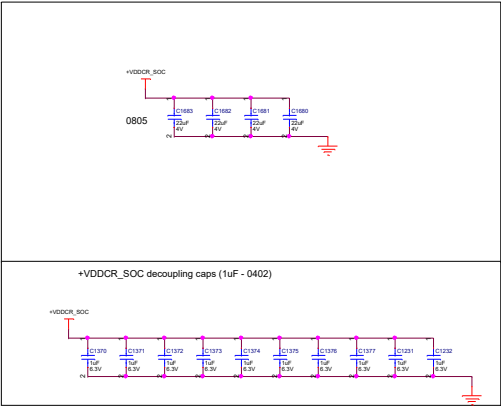
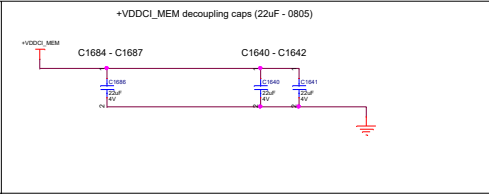
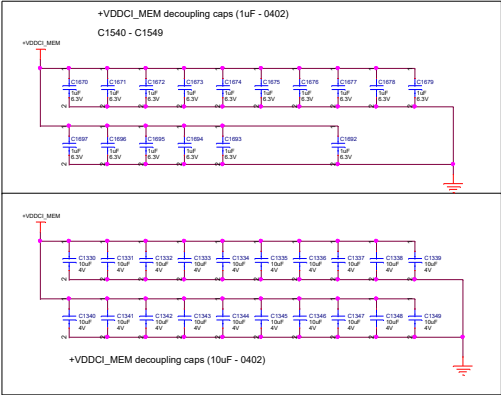
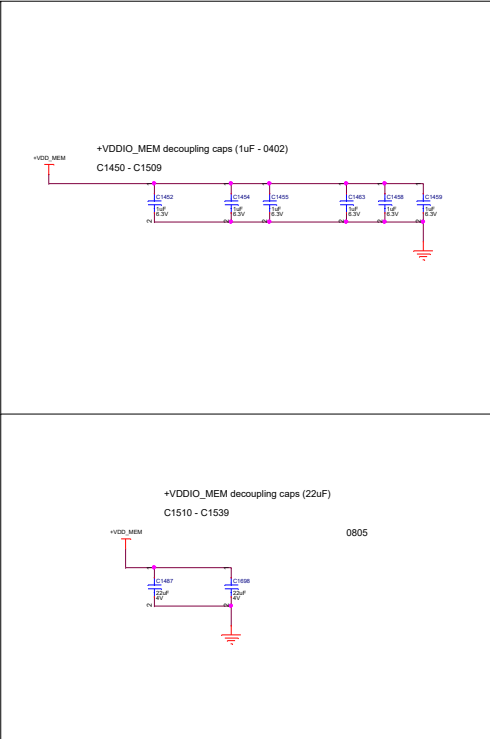
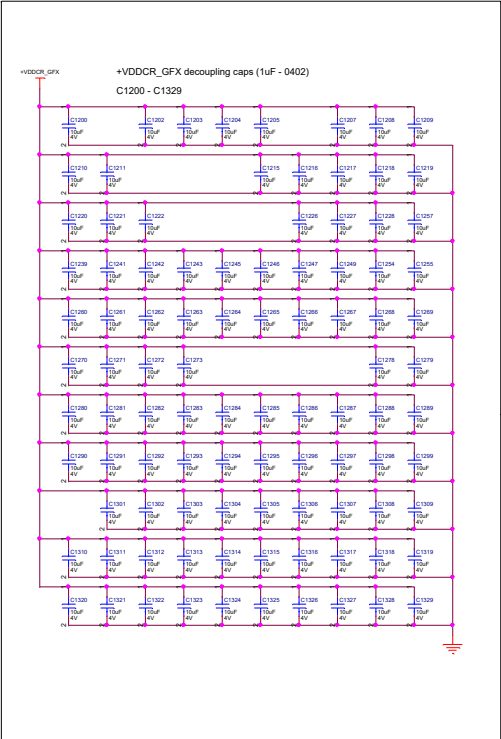


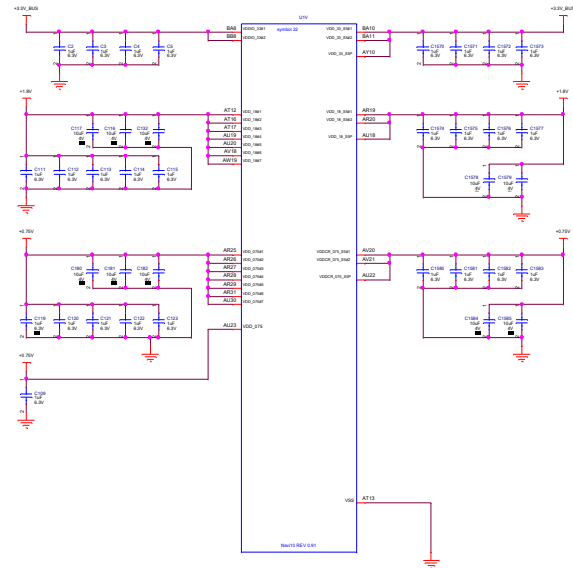


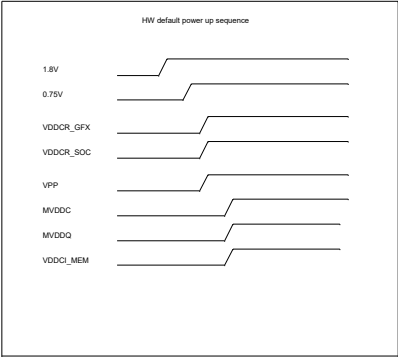
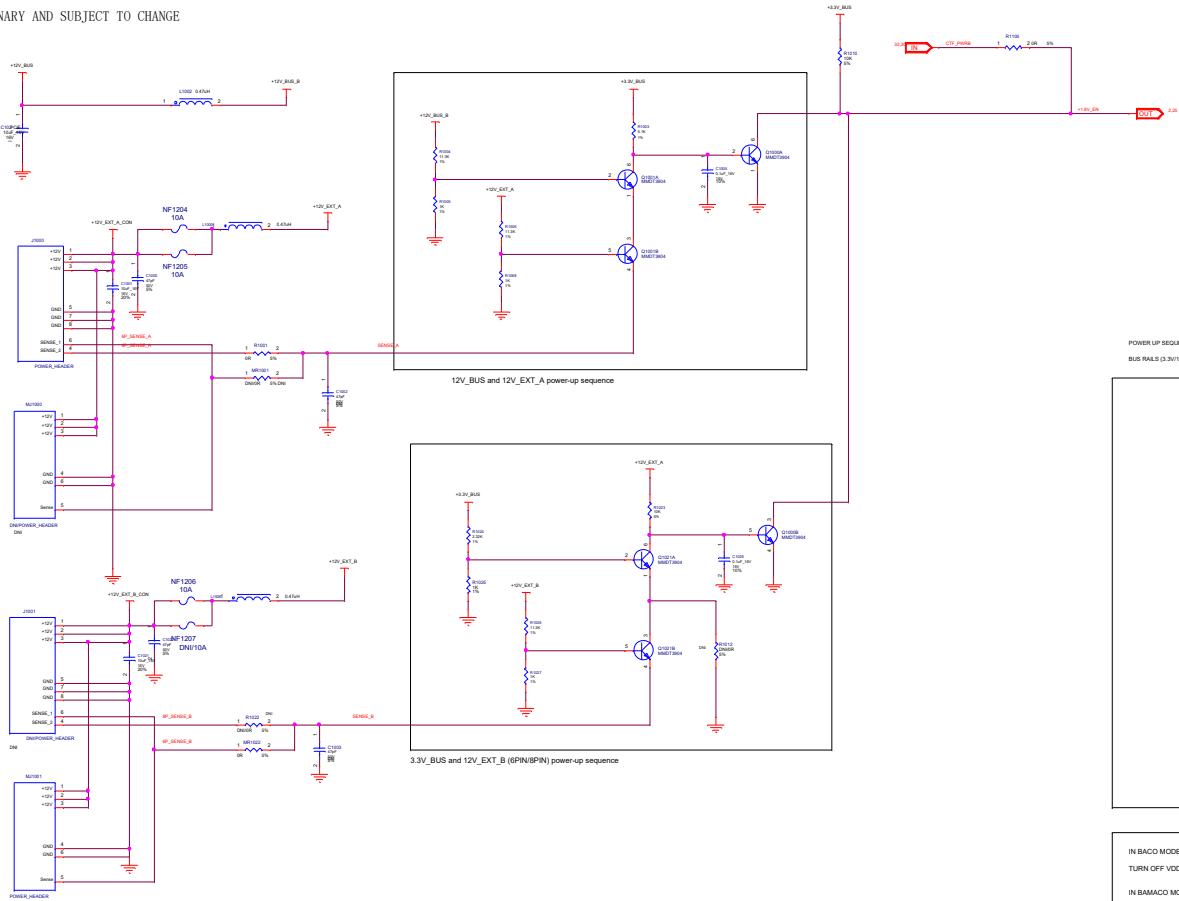
REGULATOR FOR +5V RAILS

IOUT = 50mA









POWER UP SEQUENCE
BUS RAILS (3.3V/12V UP) → +1.8V → 0.75V → VDDGF/VDDSOC
→ VPP → VDDCI/MEM

