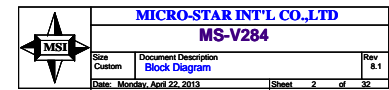


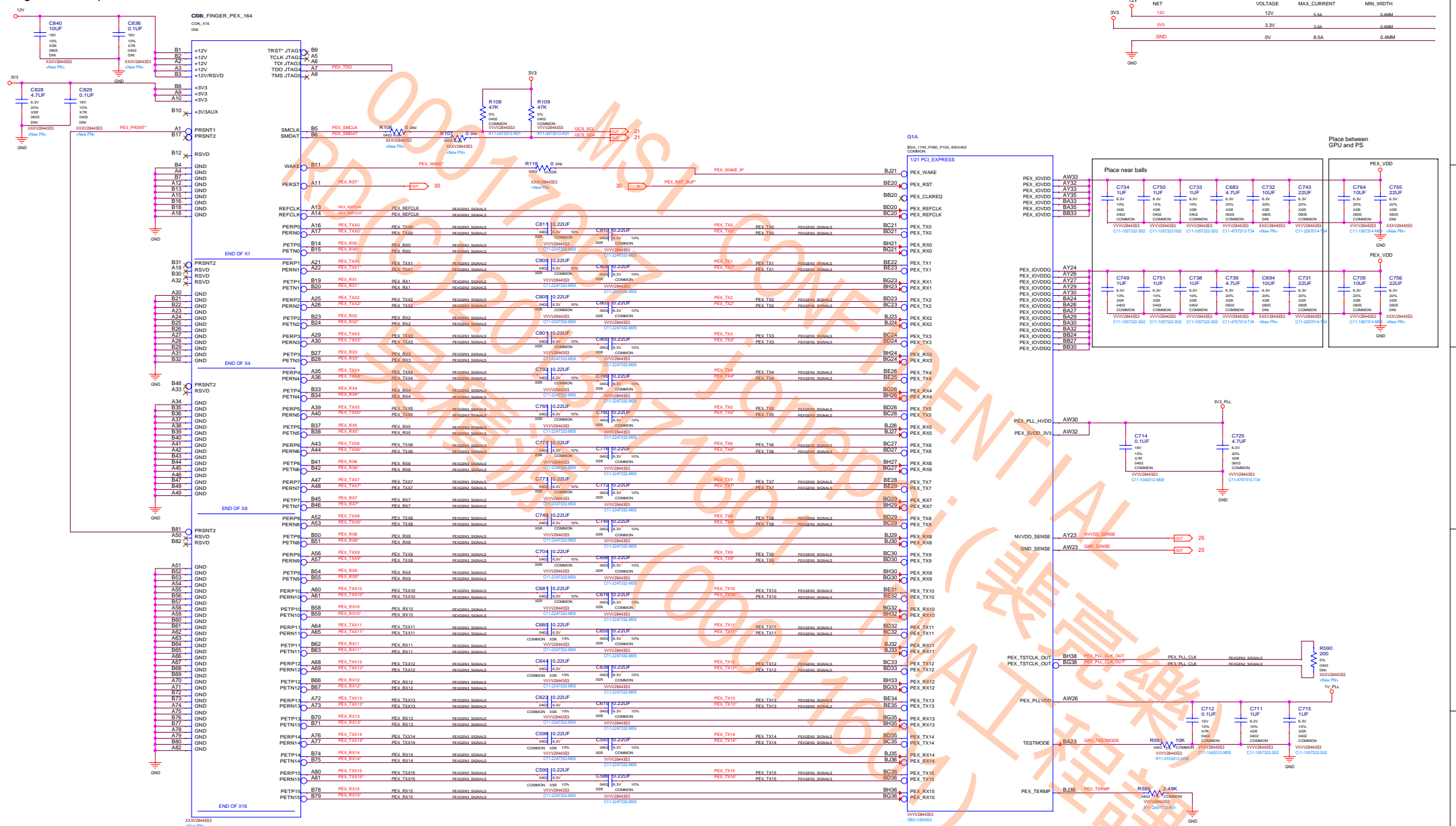
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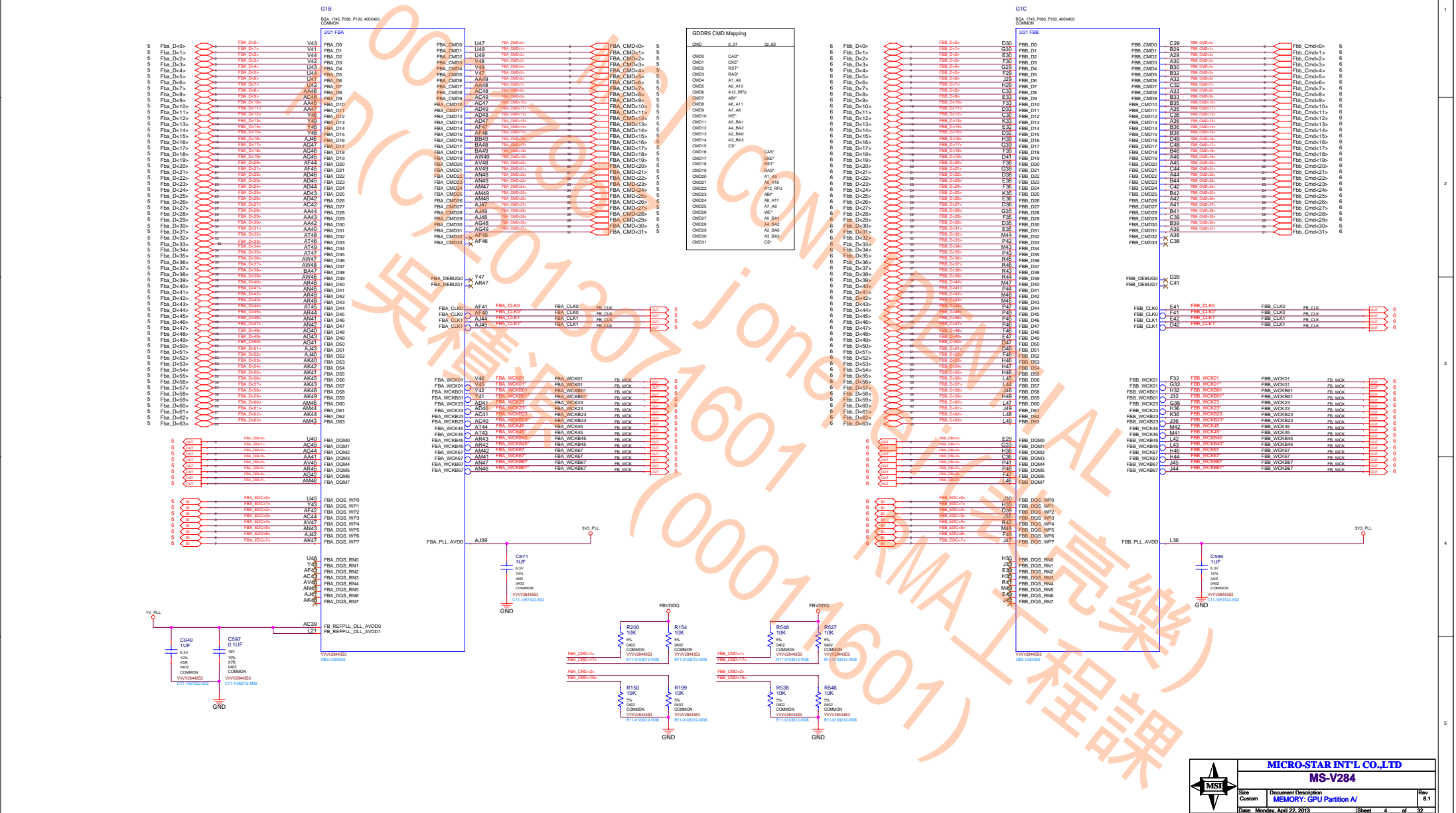
Page	Description
	Base on V284-20
P15	1. Change DVI Footprint
	2. Add ESD ROTECTION DIODES
P16	Change DVI Footprint
P17	1. Add ESD ROTECTION DIODES in I2CW
	2. Add POSCAP in DP_PWR
P22	Add Dual BIOS Circuit
P24	Change L802/L803 Footprint
P25	Del C211
P26	1. Change EL4/EL7 Footprint
	2. Change C837/C839/C844/C845/C950 Footprint
P27	Change EL3/EL8 Footprint
P28	Change EL9 Footprint
P29	Co-lay 8-pin Power Connector
P32	Change GPU Screw holes & MEC26 Footprint

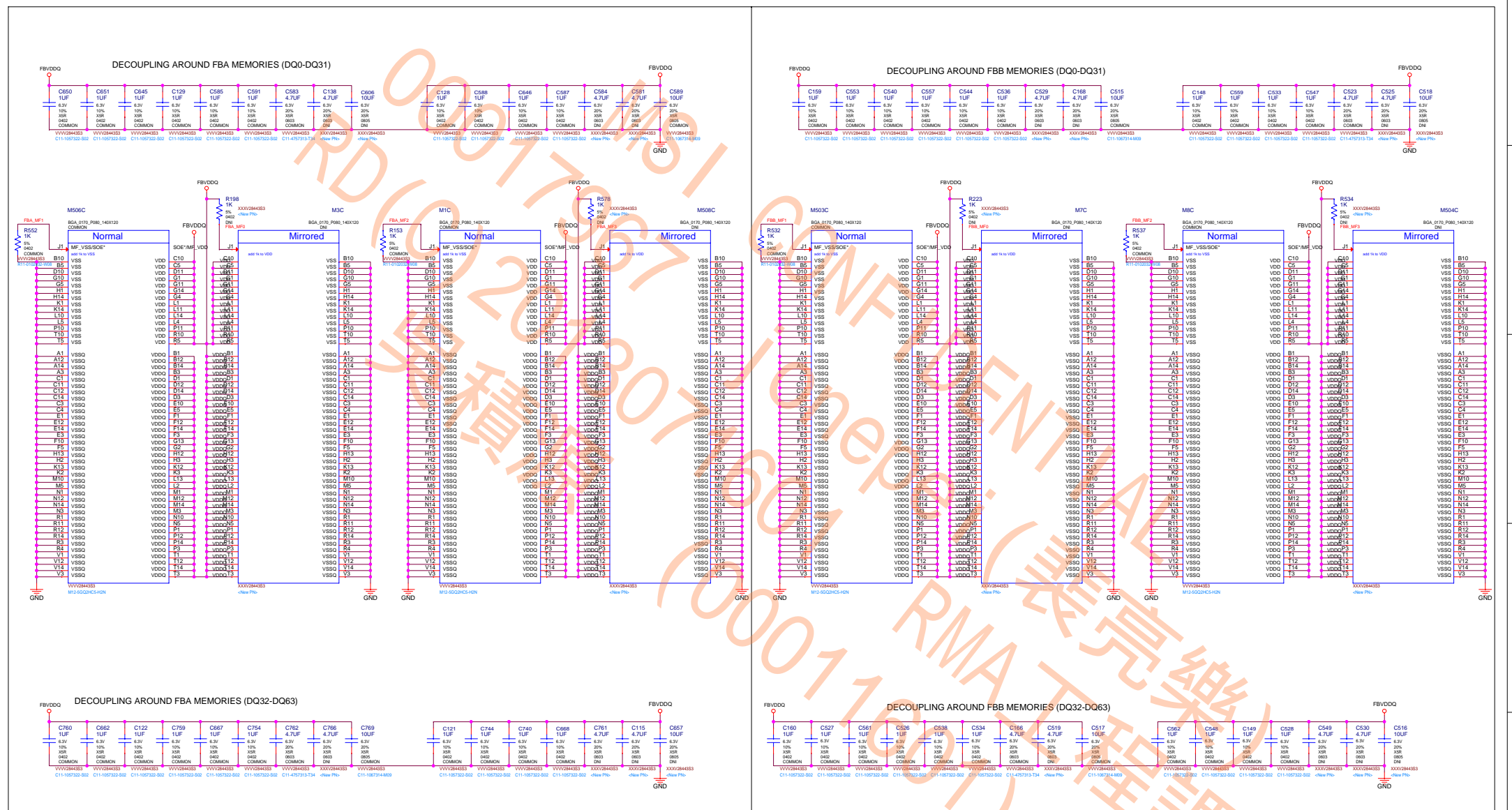
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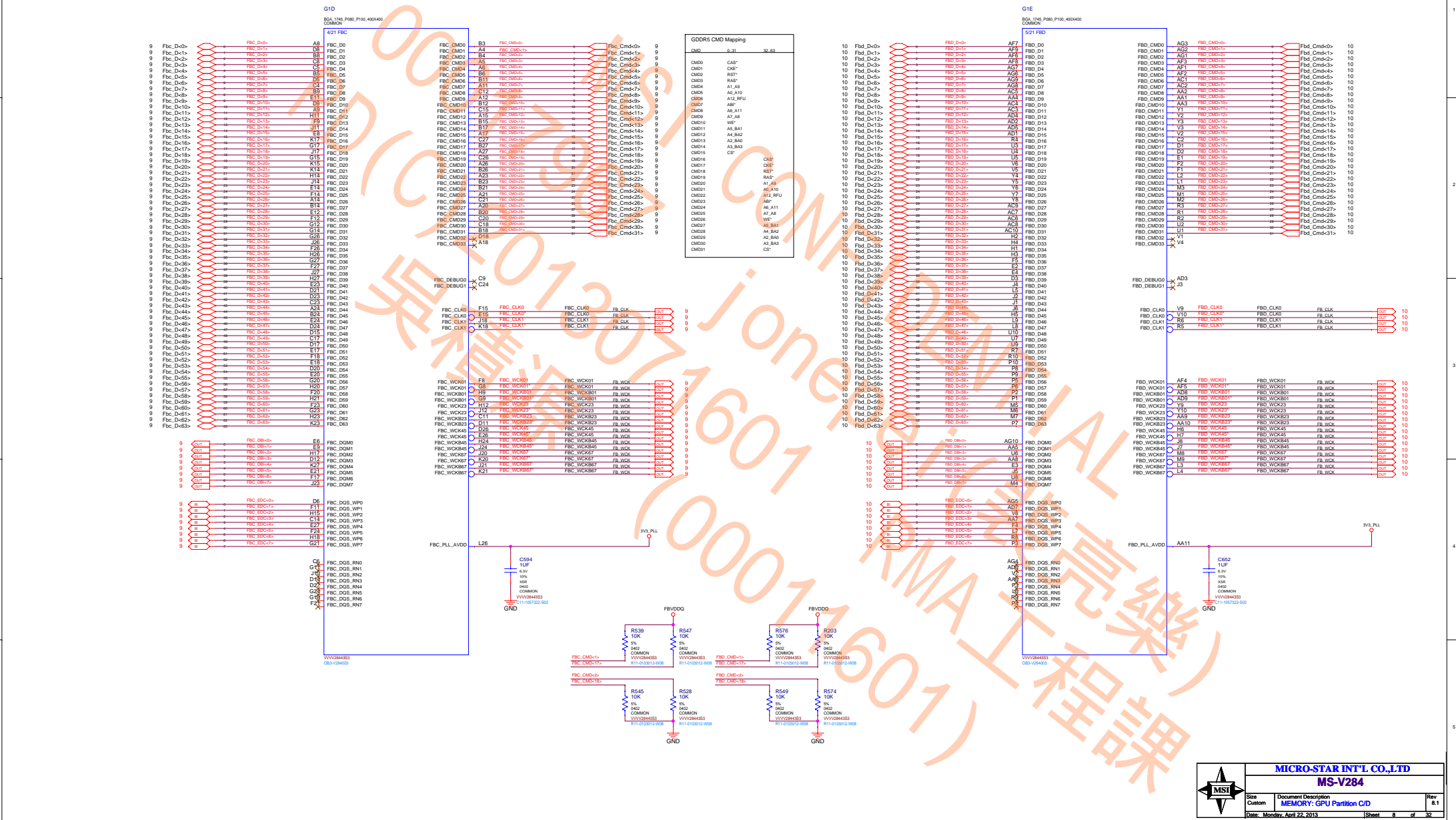
Page	Description
	Base on V284-80
P17	Remove POSCAP and Add 5pcs 22uF MLCC in DP_PWR
P19	Add SLI_LED circuit
P21	Add GPIO5_SLI_LED_DIM
P22	Remove Dual-BIOS circuit
P29	1. Add GPIO12_PWR_LVL in U502
	2. C508/C509/C506 change footprint to 0805
P30	Add SLI LED circuit

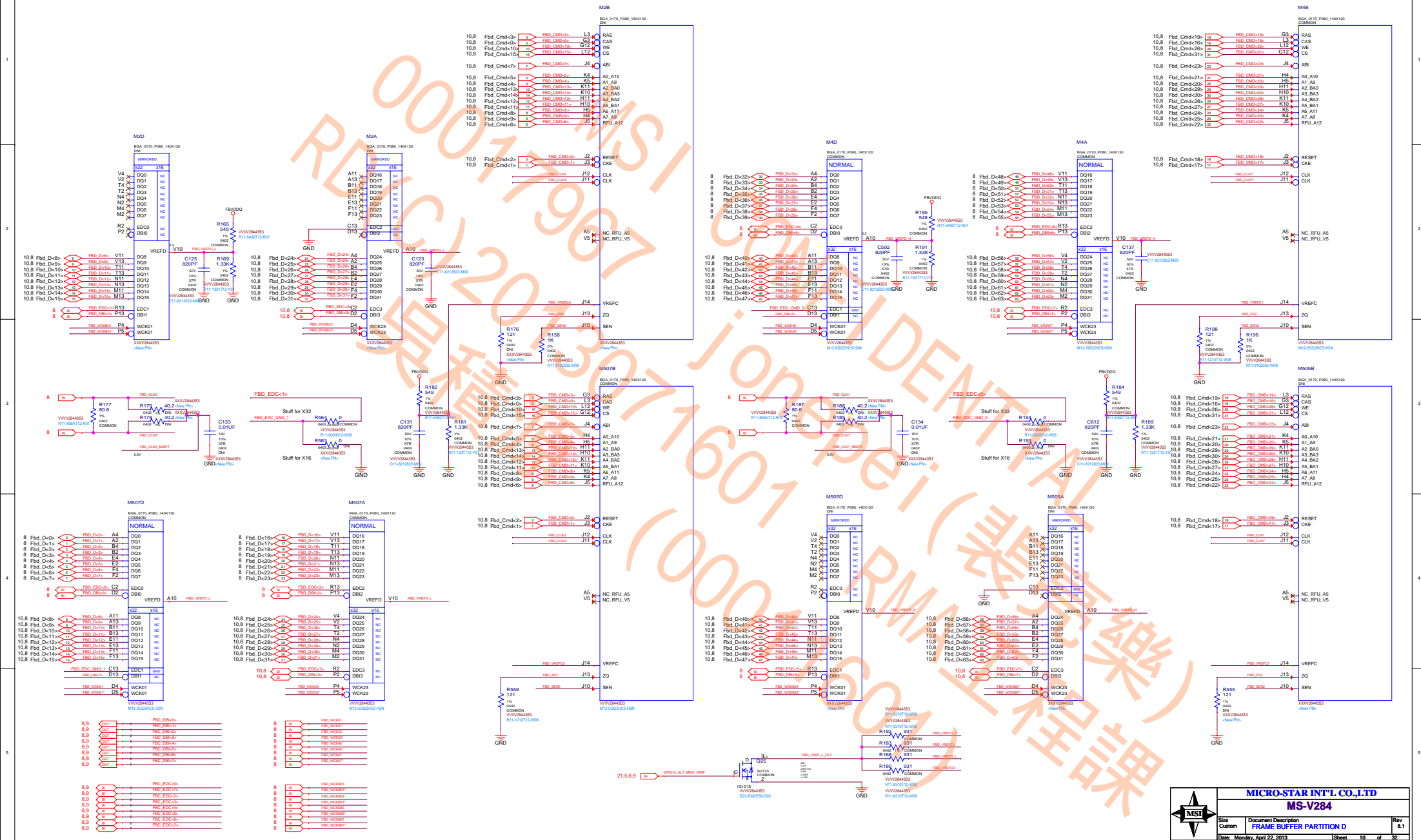


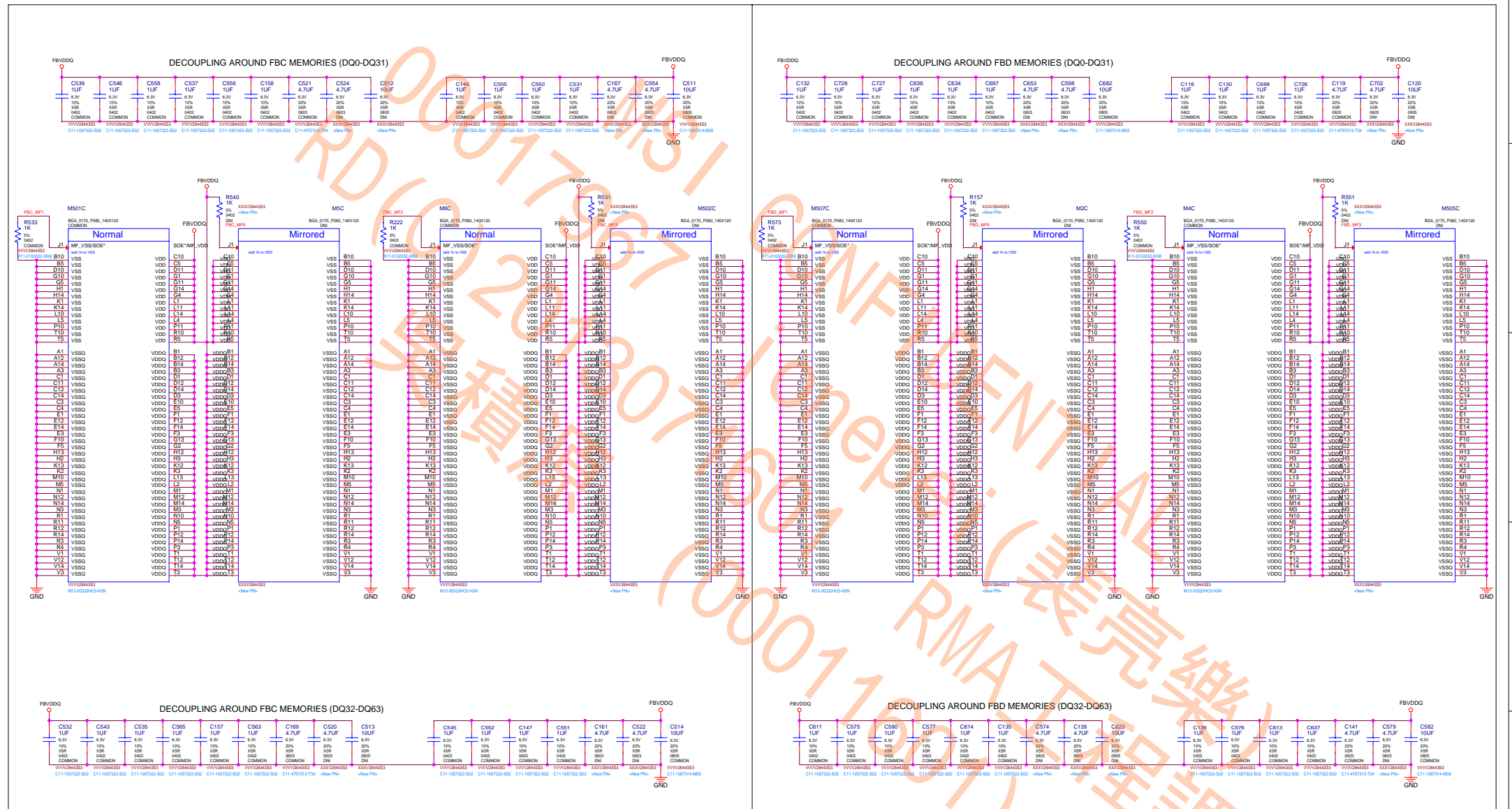






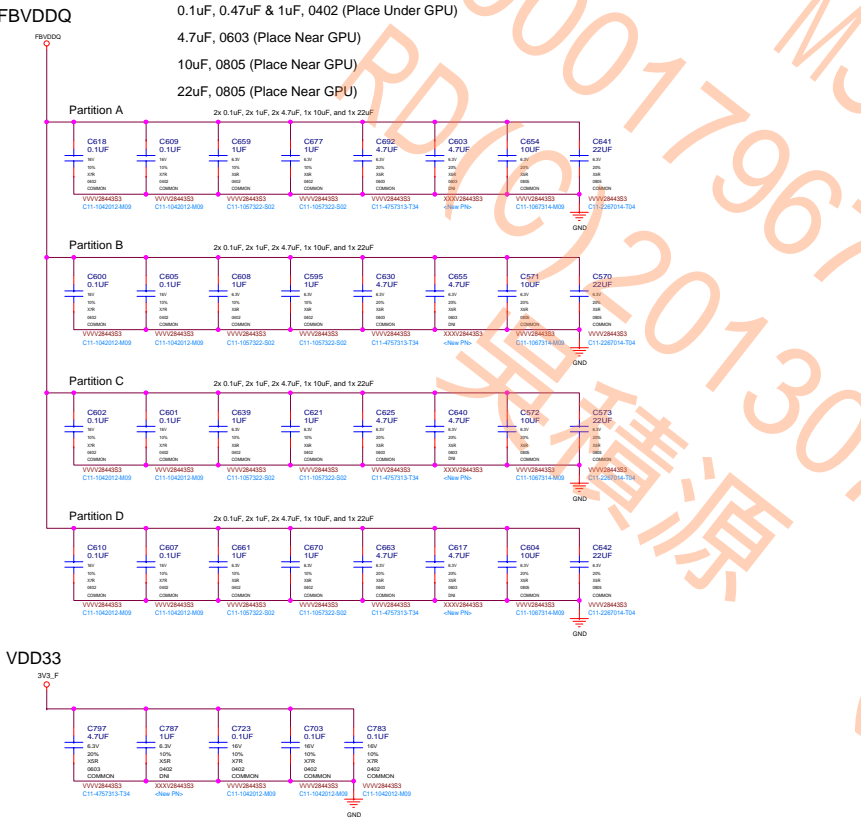




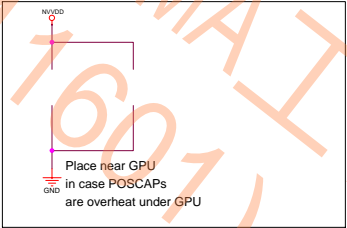


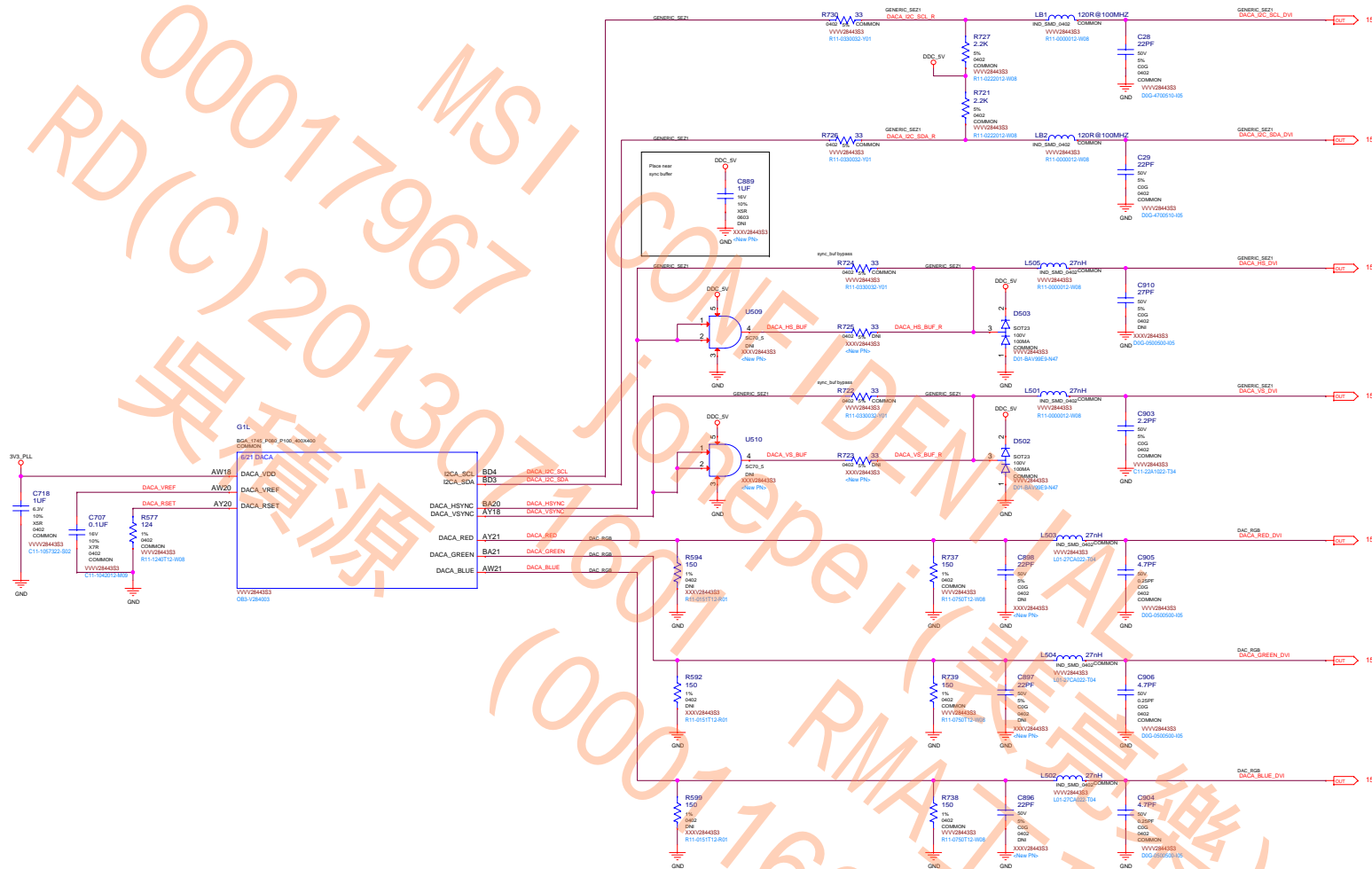


Based on GB2-X GDDR5 FBVDDQ Decap Guideline

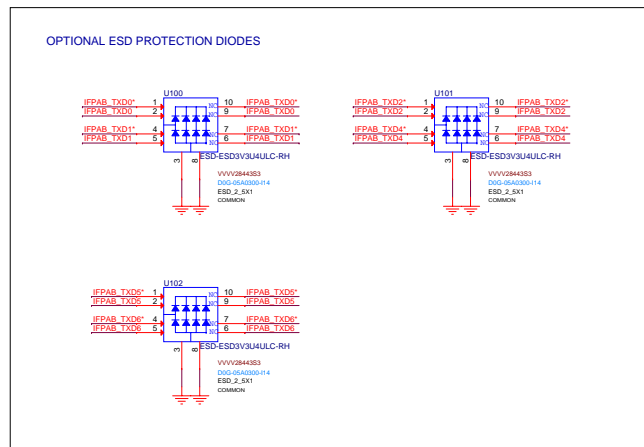
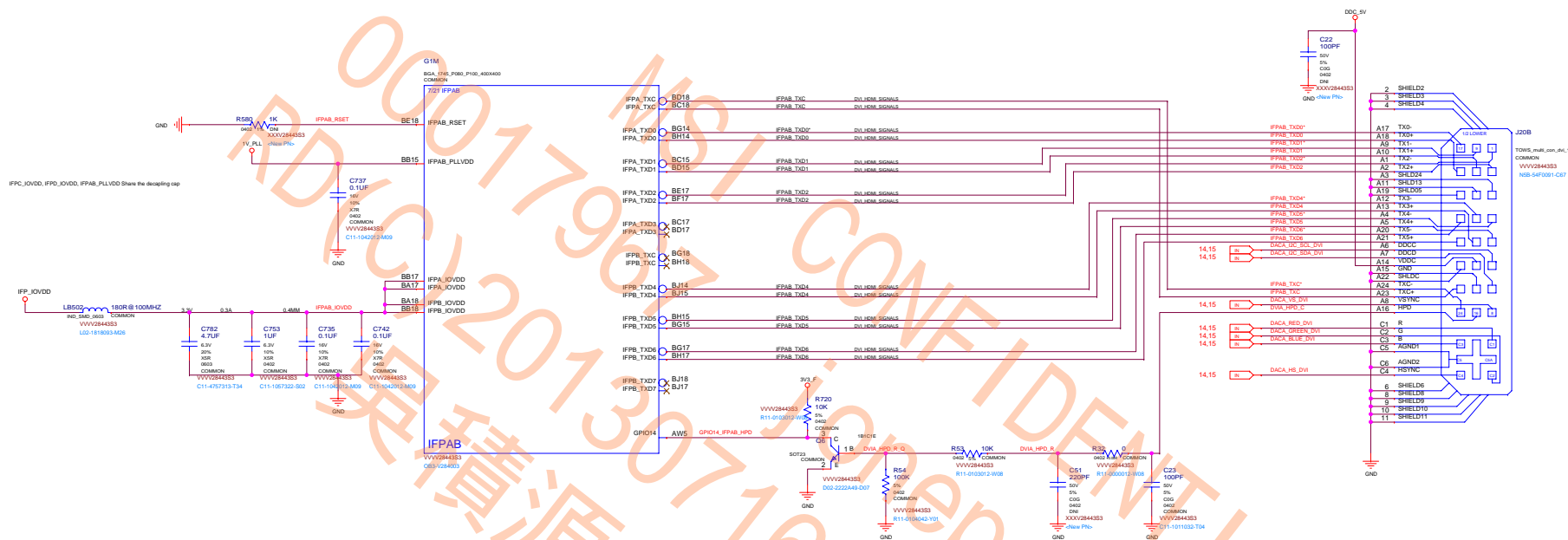


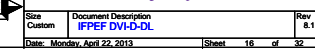
NVVDD Decoupling caps. Place under GPU.





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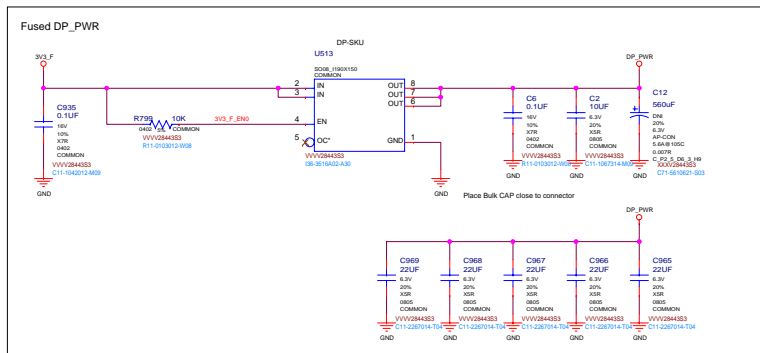
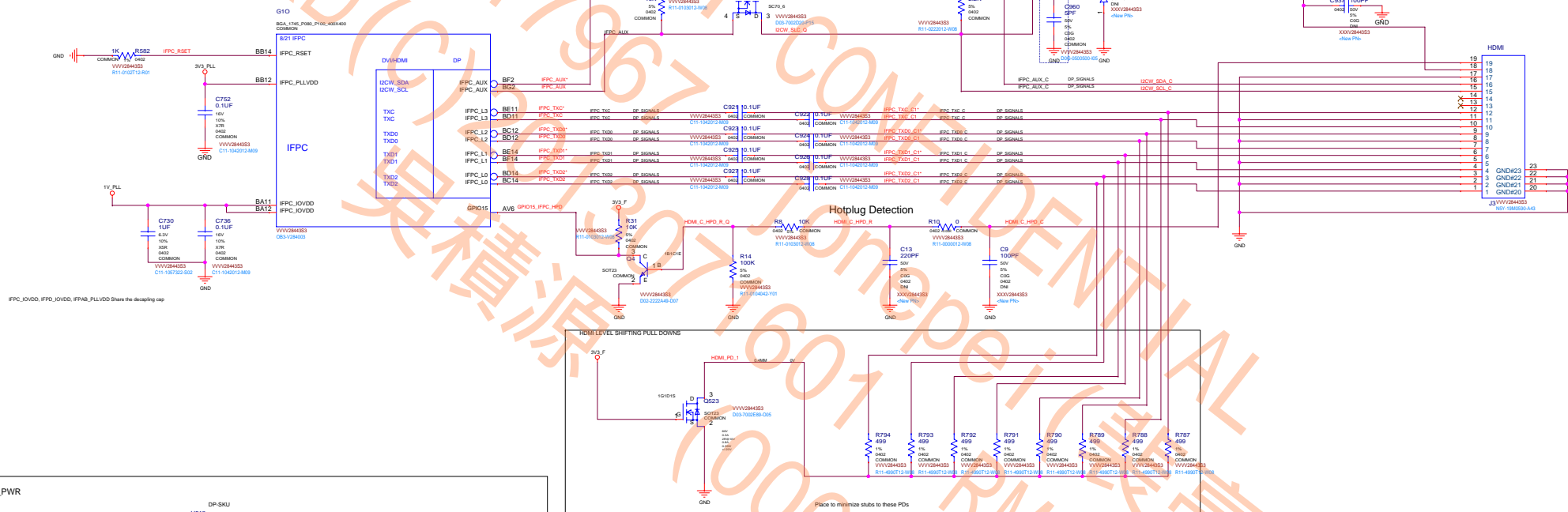




Two cases to be considered:

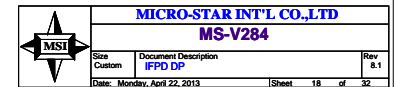
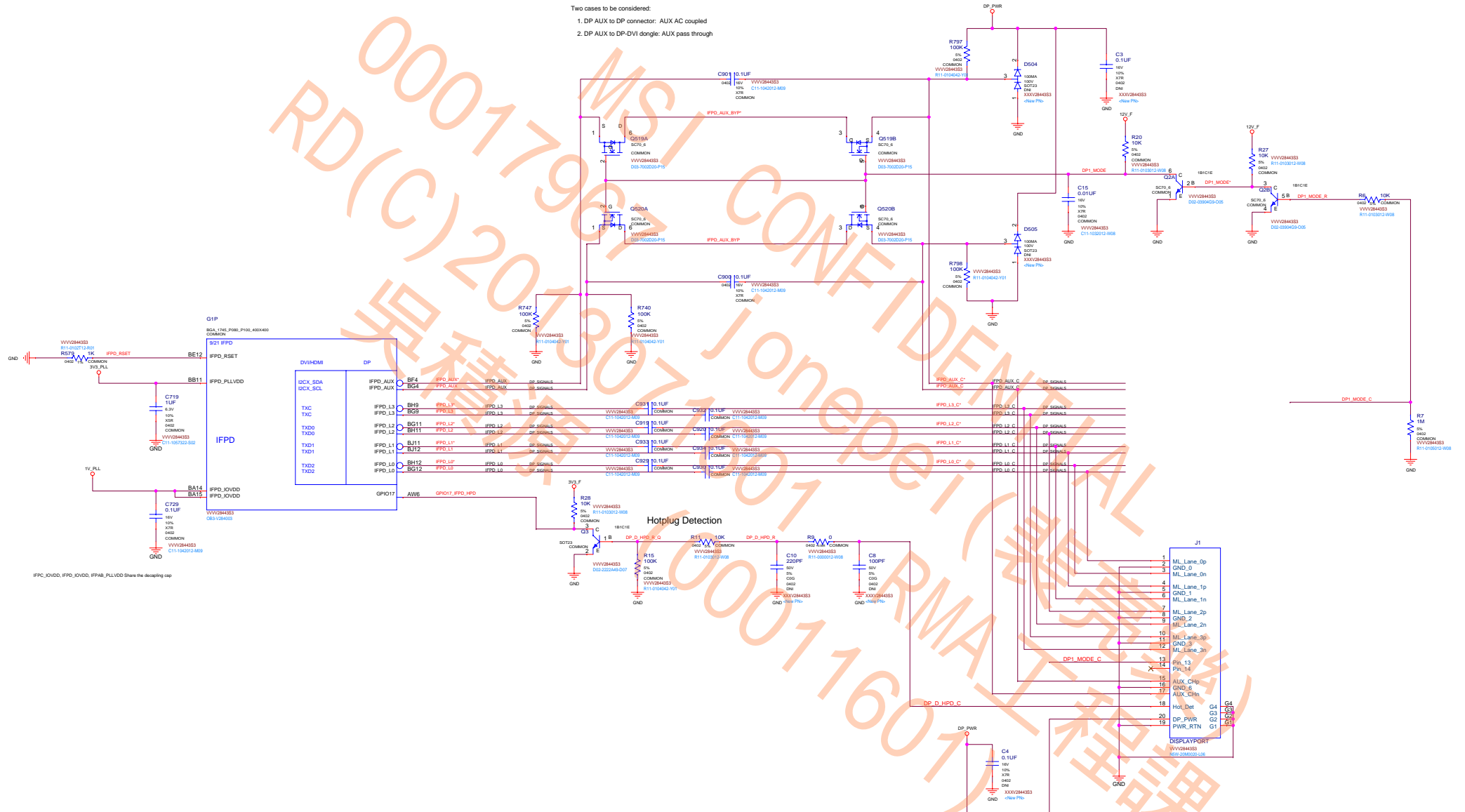
1. DP AUX to DP connector: AUX AC coupled
2. DP AUX to DP-DVI dongle: AUX pass through

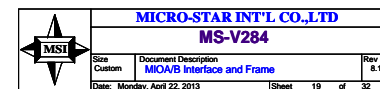
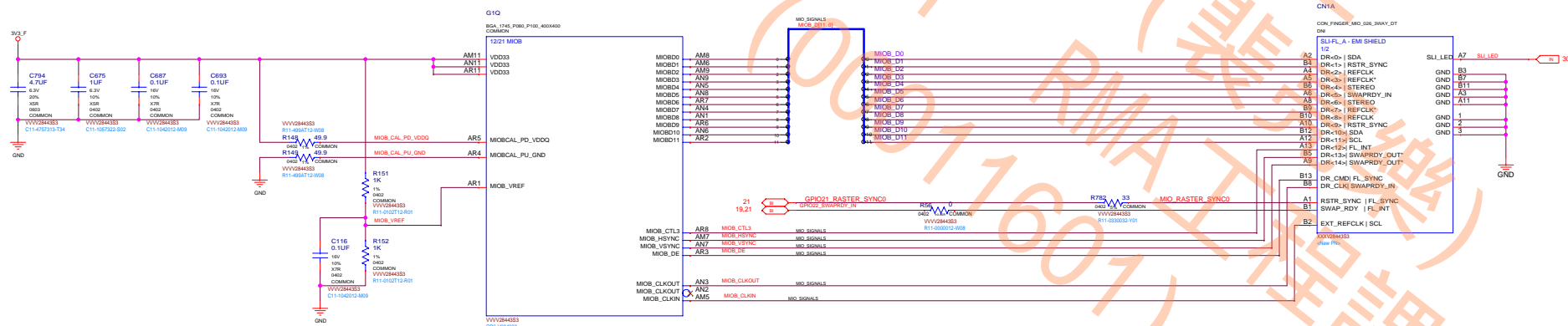
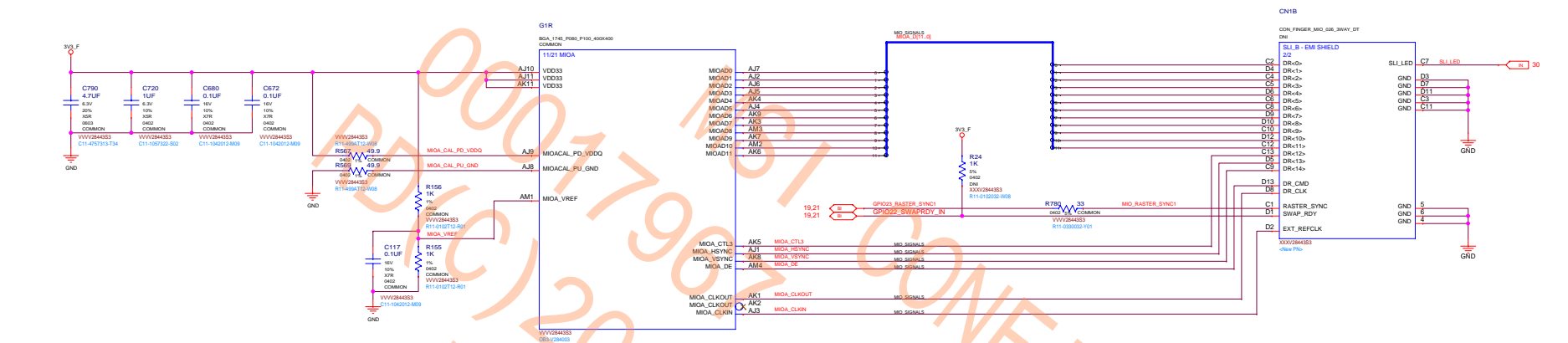
* I2C to DDC level switching



Two cases to be considered:

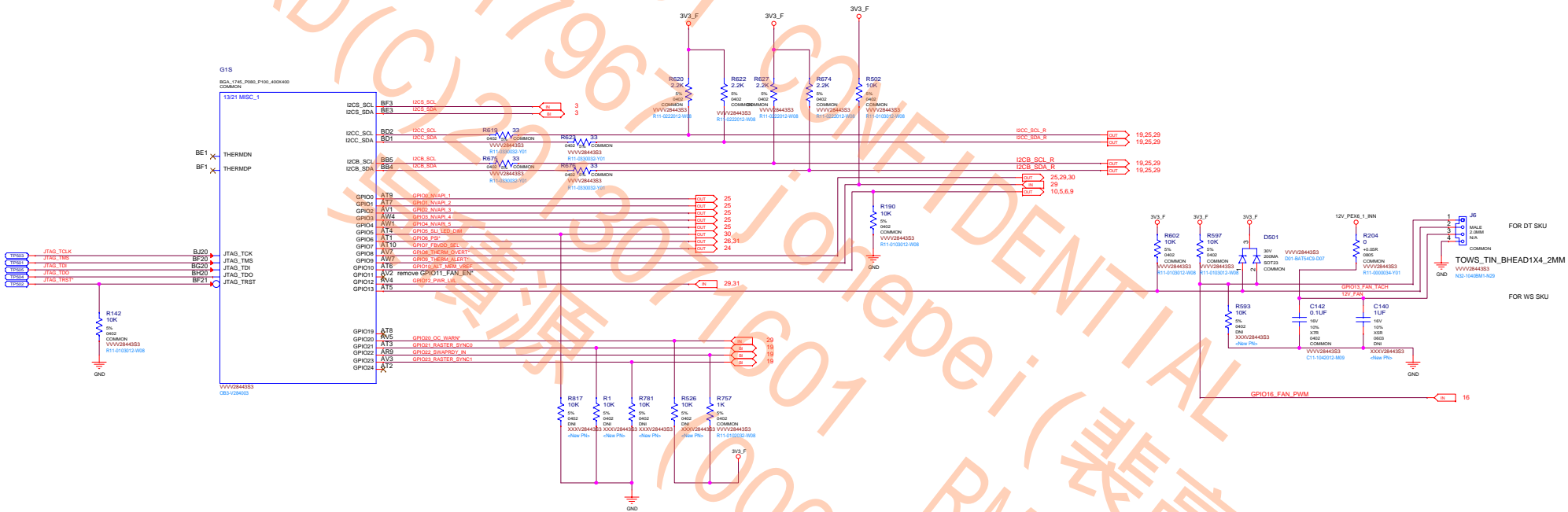
1. DP AUX to DP connector: AUX AC coupled
2. DP AUX to DP-DVI dongle: AUX pass through





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00017967 jonepei (裴亮樂)
RD(C)2013071601 RMA工程課
吳積源 (00011601)

MICRO-STAR INT'L CO.,LTD		
MS-V284		
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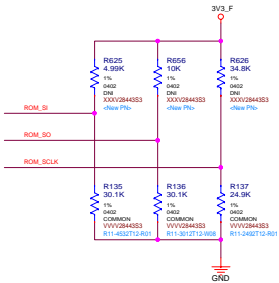
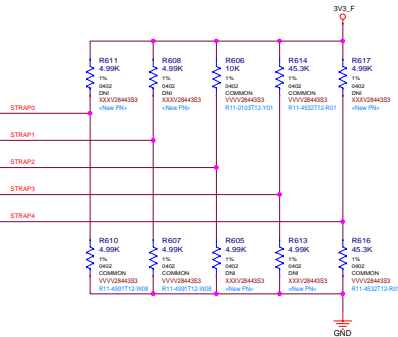


STRAP0	USER_BIT [3:0]*	0000*	5K PD*
STRAP1	3GIO_PADCFG_LUT_ADR*	0000*	5K PD Desktop*
STRAP2	PCI_DEVID [3:0]*	1001 - (0x1189)*	10K PU -325 GPU*
STRAP3	SOR_EXPOSED [3:0]*	1111*	45K PU*
STRAP4	DP_PLL_VDD_33V*	1* FOR 3_3V*	
	PEX_MAX_SPEED*	1* FOR GEN2/3*	45K PD*
	PEX_SPD_CHANGE_GEN3*	1* ENABLED*	
	*		
ROM_SI	RAMCFG[0]*	0*	
	RAMCFG[1]*	1*	64Mx32 256-bit Hynix for SMD5 primary memory
	RAMCFG[2]*	1*	35K PD*
	RAMCFG[3]*	0*	
ROM_SO	VGA_DEVICE*	1*	
	SMB_ALT_ADDR*	0*	30k PD*
	FB[0]_APERTURE_SIZE*	1* For 128MB*	
	FB[1]_APERTURE_SIZE*	0* For 128MB*	
ROM_SCLK	PEX_PLL_EN_TERM100*	0* DISABLE*	
	PCI_DEVID_EXT[5]*	0* For 0x1189*	25K PD*
	SUB_VENDOR*	1* Dedicated BIOS*	
	PCI_DEVID_EXT[4]*	0* For 0x1189*	

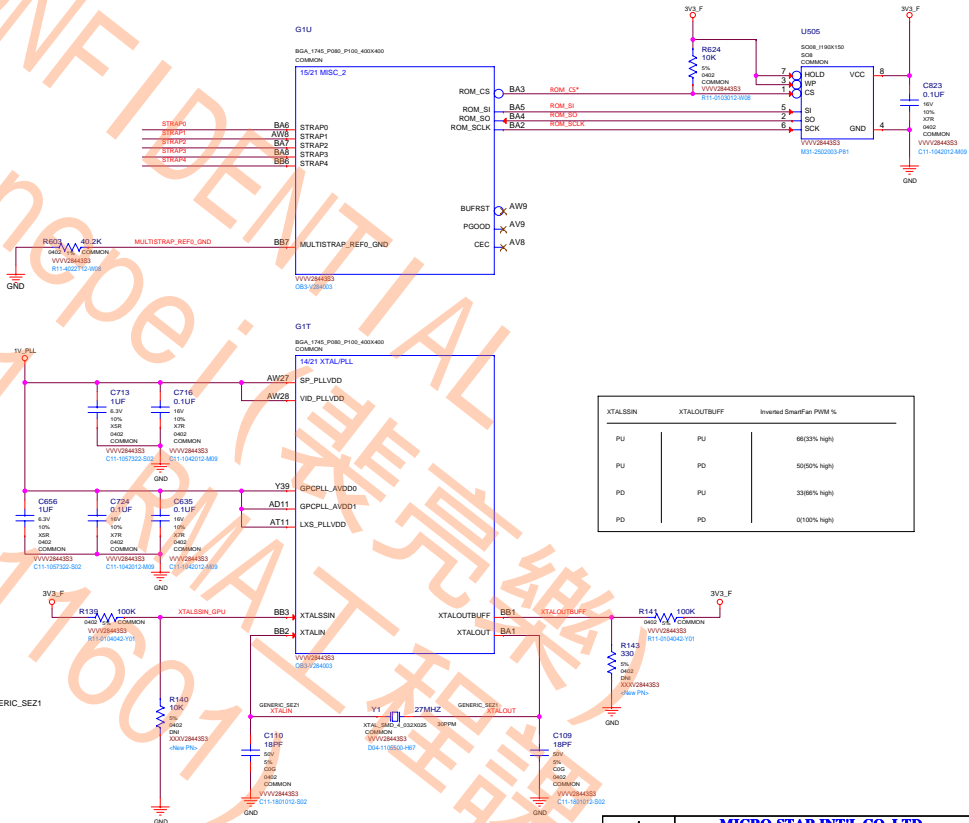
	GND	3V3
5k	0000	1000
10k	0001	1001
15k	0010	1010
20k	0011	1011
25k	0100	1100
30k	0101	1101
35k	0110	1110
45k	0111	1111

CFG[3:0] Config Width	Vendor
0000	Reserved
0001	32Mx32 256-bit Elpida
0010	32Mx32 256-bit Hynix
0011	32Mx32 256-bit Samsung
0100	Reserved
0101	64Mx32 256-bit Elpida
0110	64Mx32 256-bit Hynix
0111	64Mx32 256-bit Samsung

	MULTI_STRAP_REF0_GND
BINARY PRODUCTION	NC
BINARY BRINGUP	NC
MULTI-LEVEL	40.3k 1% TO GND



remove XTALSSIN_GPU/GENERIC_SEZ1



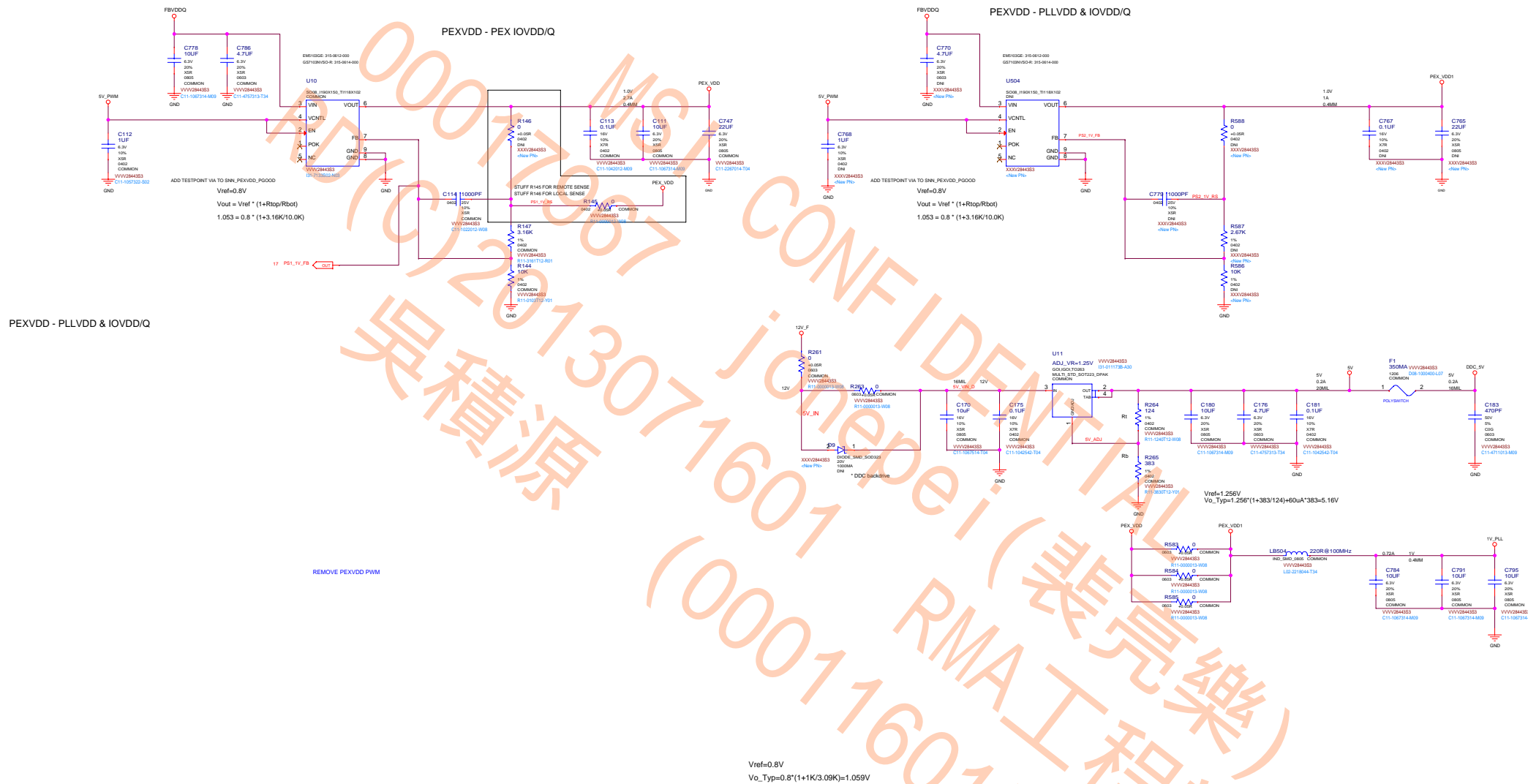
XTALSSIN	XTALOUTBUFF	Inverted SmartFan PWM %
PU	PU	86(32%) High
PU	PD	50(50%) High
PD	PU	33(66%) High
PD	PD	0(00%) High

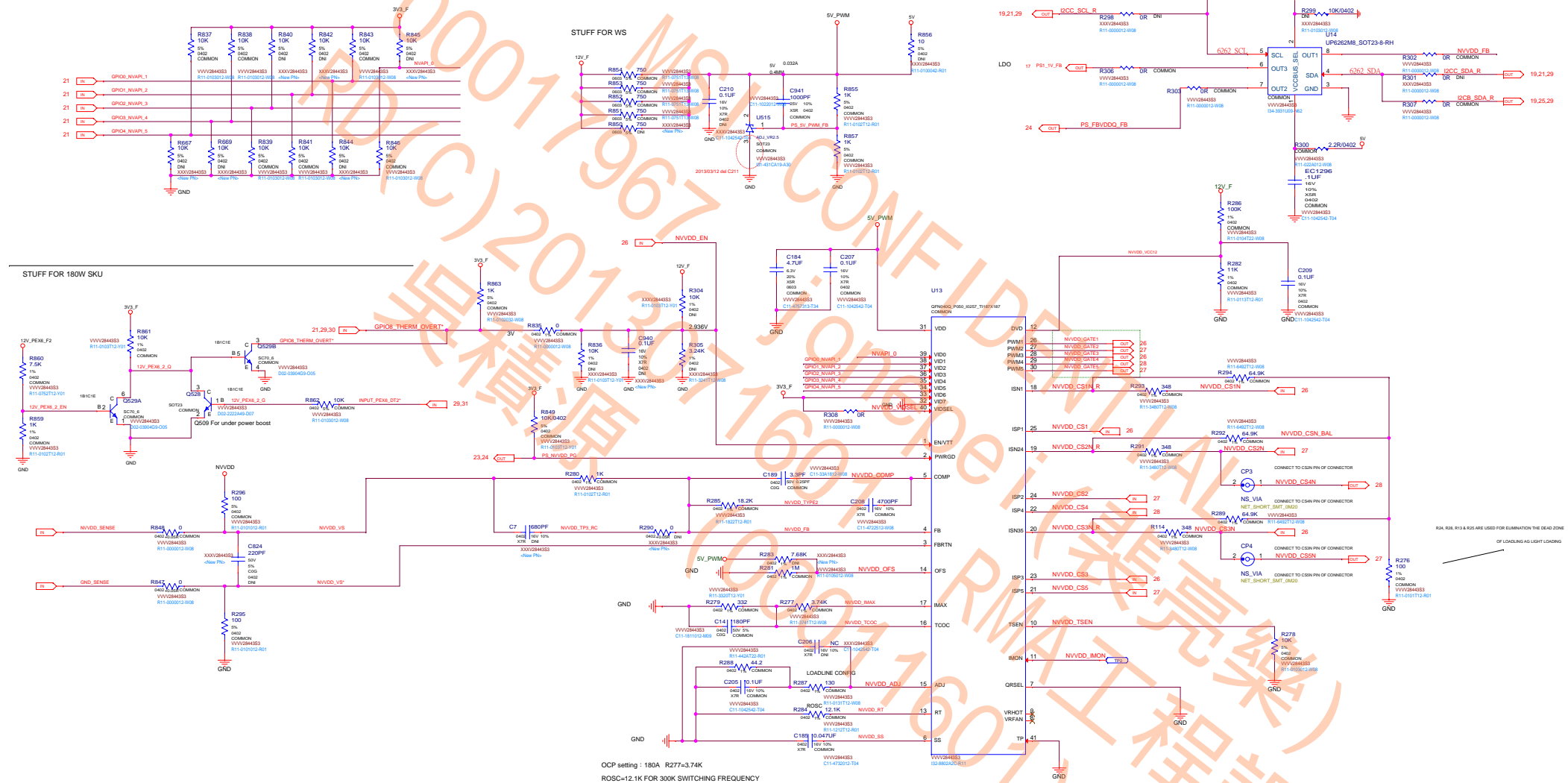


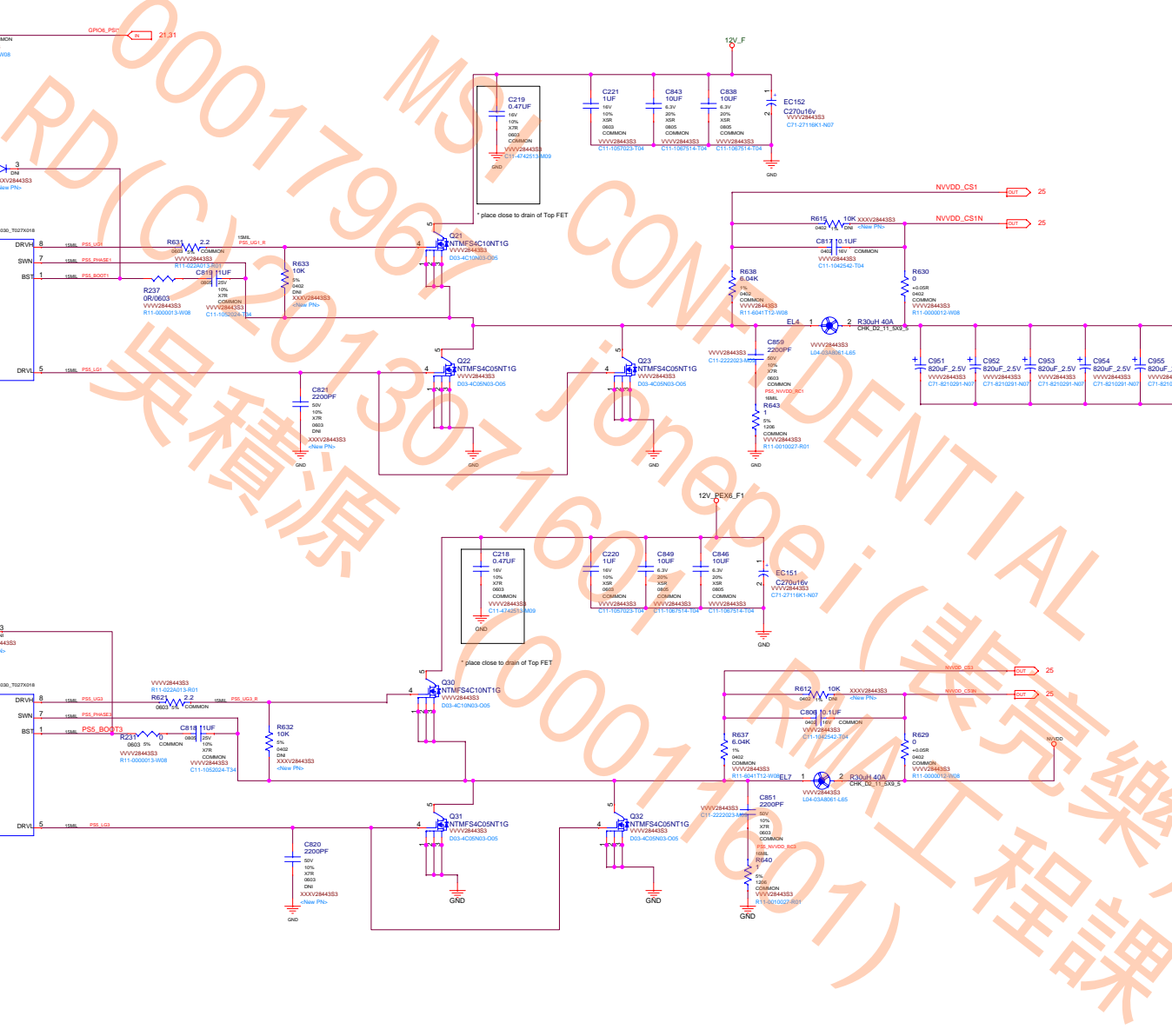
MICRO-STAR INT'L CO.,LTD

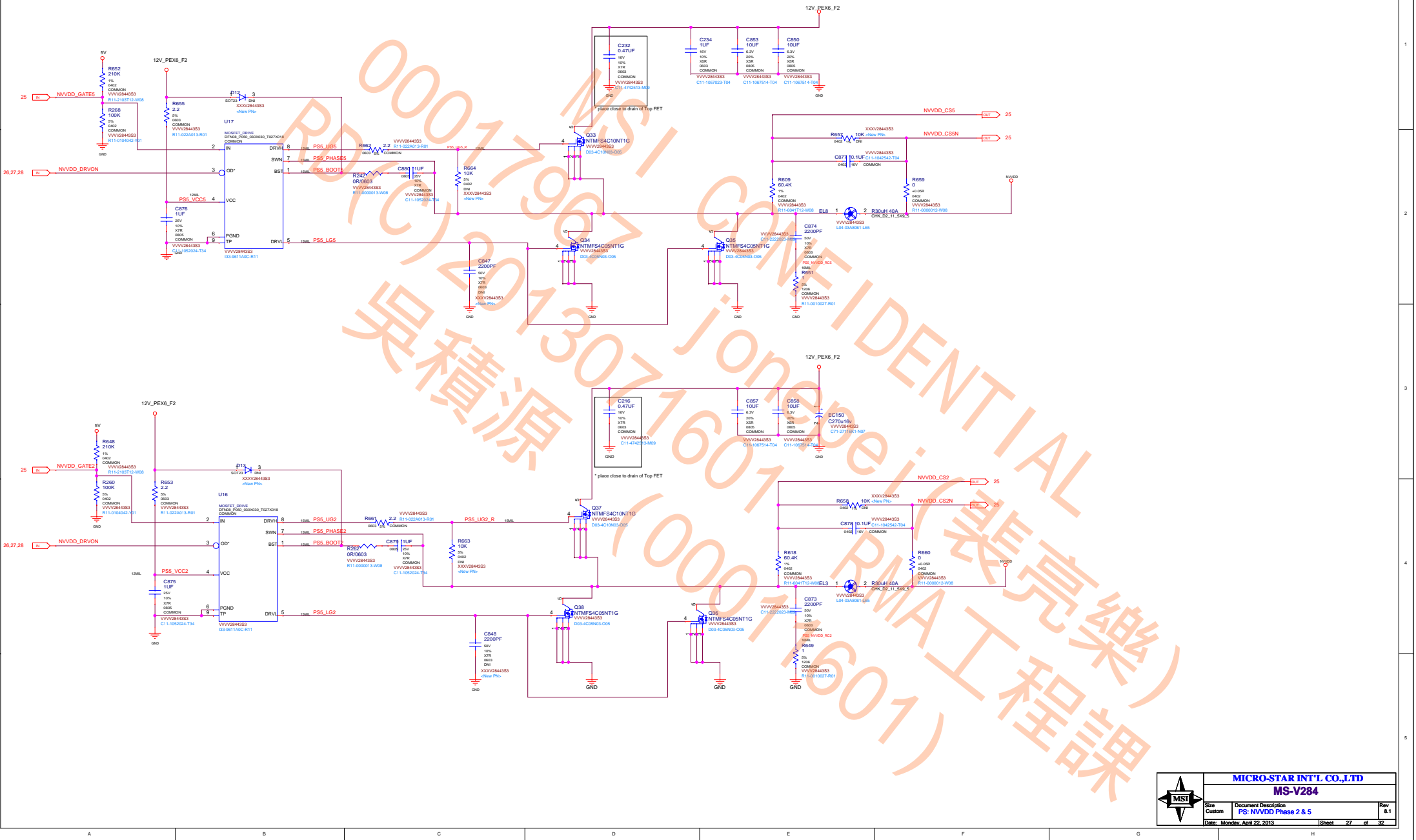
MS-V284

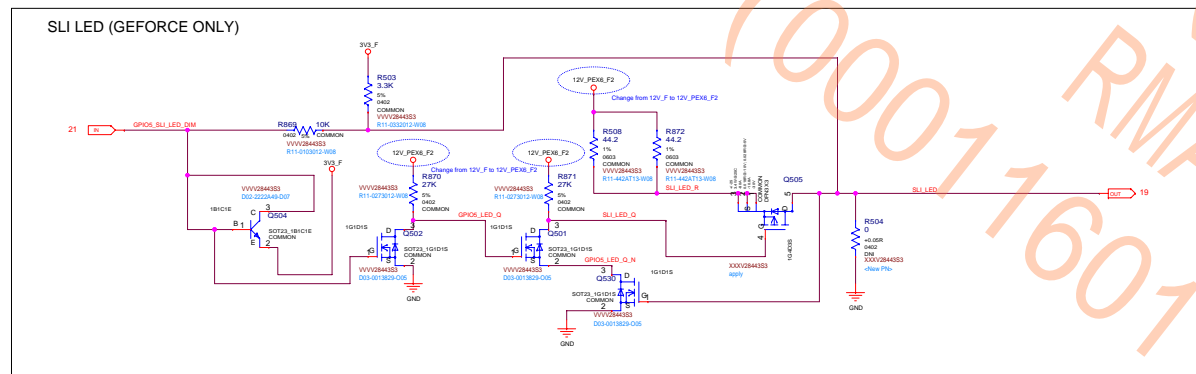
Size	Custom	Document Description	MISC2: ROM, XTAL, Straps	Rev	8.1
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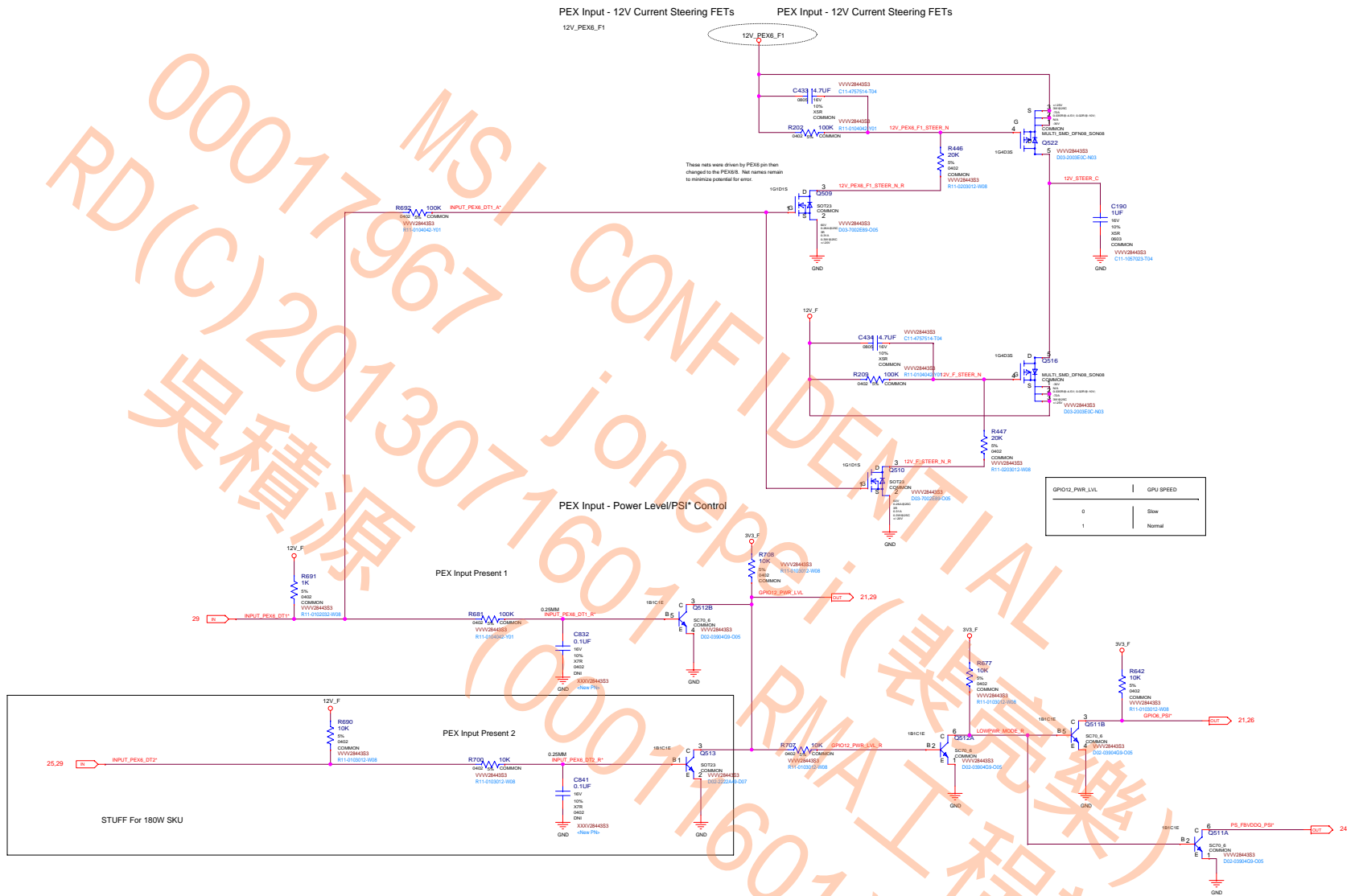


Diagram illustrating a 4-wire CAN bus system. The system includes a 24V power source connected to a common ground (GND). Four CAN nodes (MEC1, MEC2, MEC3, MEC4) are connected to the positive terminal of the 24V source. Each node has a 120 ohm termination resistor connected to ground. The CAN bus lines are labeled H_R220D125.

Schematic diagram of the input section of the H_R220D125 power supply. The diagram shows a common ground (GND) connected to the negative terminals of eight DC-DC converters. The positive terminals are connected to various input pins: MEC18, MEC19, MEC20, MEC21, MEC22, MEC23, MEC24, and MEC25. MEC26 is also shown but is crossed out with an 'X'. Each converter is labeled with its part number: H_R220D125 for MEC18 through MEC25, and H_NR162D125 for MEC26.

STIFFNESS
NO PINS
VWV284K3S3
OE3-V070010

FAN
H5B_GPU_GF100_B_AL
COMMON

PCB

PCB

PCB

YYY2844353

Px0-0y28481-E55

HDMI_FEE
HDMI
\$\$\$\$\$
HDMI_FEE
VVVY2844353
Y01-RH0MIG3-000

MEC6
MEC_SCREW_HEX_JACK
COMMON

VVV28443S3
E42-5047006-C87

MEC5
MEC_SCREW_P
DNI

XXXV2844SS
«New Pto»

MEC7
MEC_SCREW_HEX_JACK
COMMON

VVV2843S3
E43-5047006-C67

new LF screw -- 155-0001-03
BCME screw -- 154-0003-70

MEC8
MEC_SCREW_HEX_JACK
COMMON

WWW28443S3
E43-5047006-C87

MEC9
MEC_SCREW_HEX_JACK
COMMON

VVV284353
E42-5047006-087

