

# P2010-A02

75W/100W GK107/GF108 128-BIT GDDR5 in x32/x16 MODE  
DVI-I-DL + DVI-D-DL/HDMI +mHDMI/DP

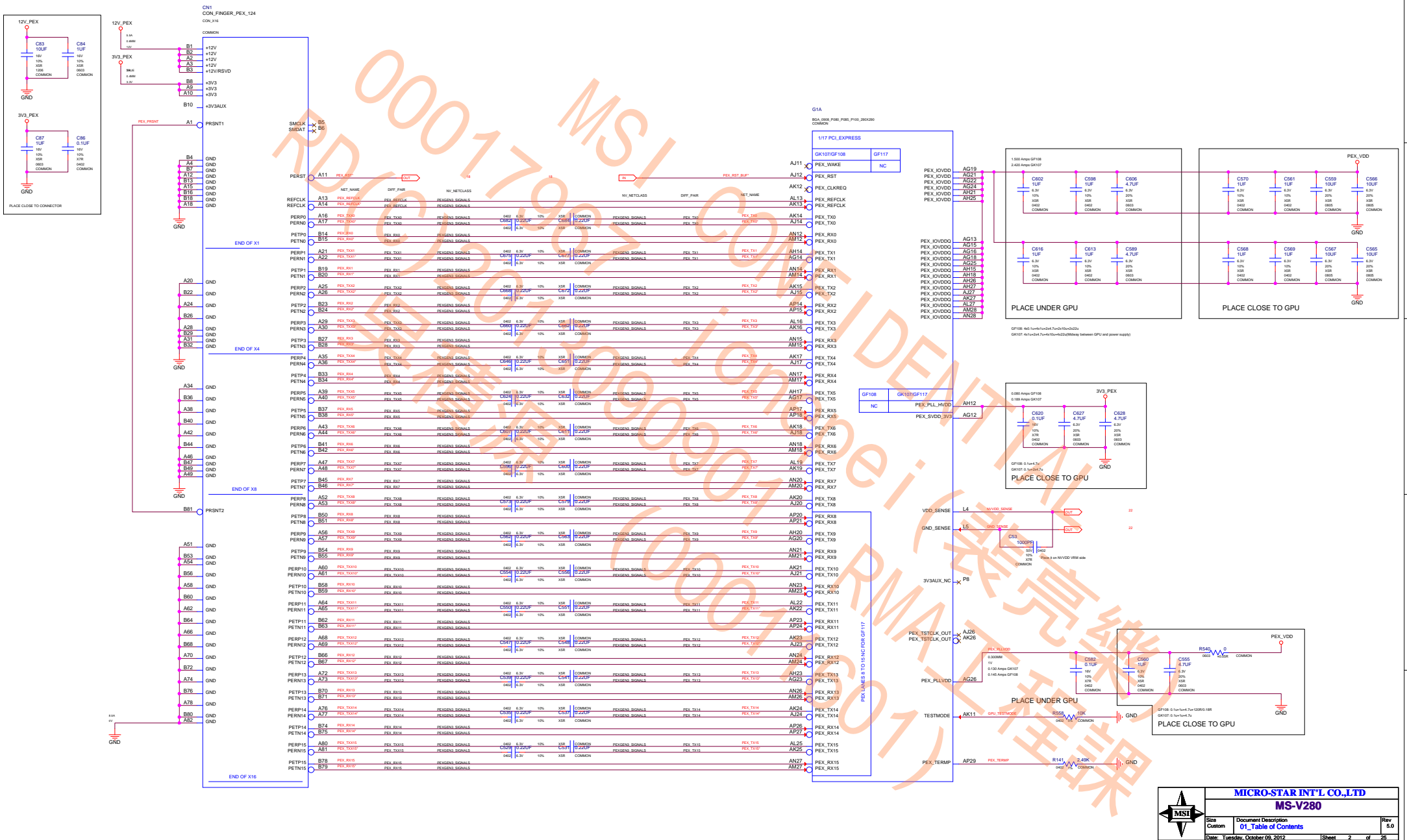
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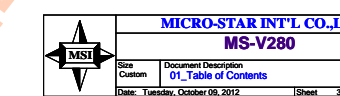
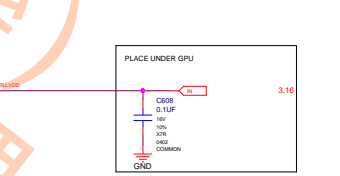
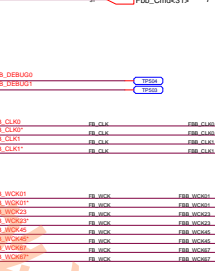
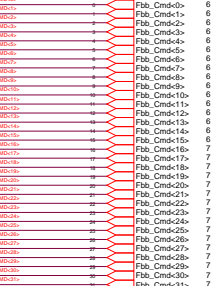
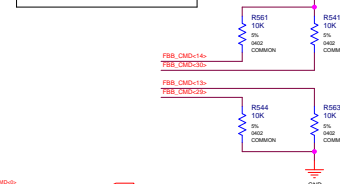
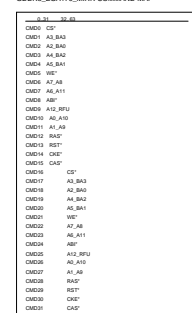
## 2012/07/05 Base on V280-1.3 changed to MS-V280-5.0

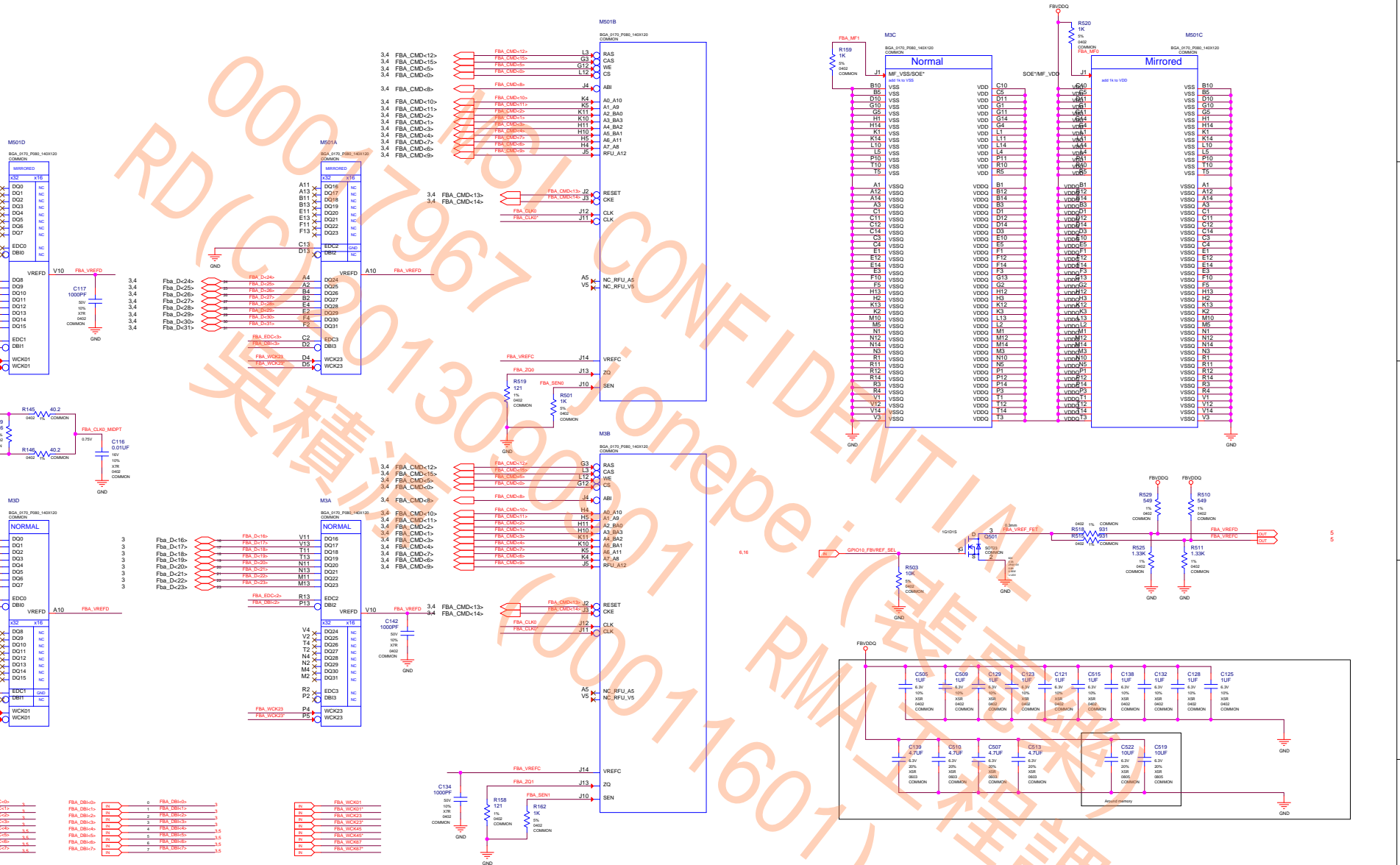
Page	Description
4	Remove Memory x32 co-layout circuit
5	Remove Memory x32 co-layout circuit
6	Remove Memory x32 co-layout circuit
7	Remove Memory x32 co-layout circuit
20	Add L8 choke
10,13	change J3,J4 拖錫點footprint

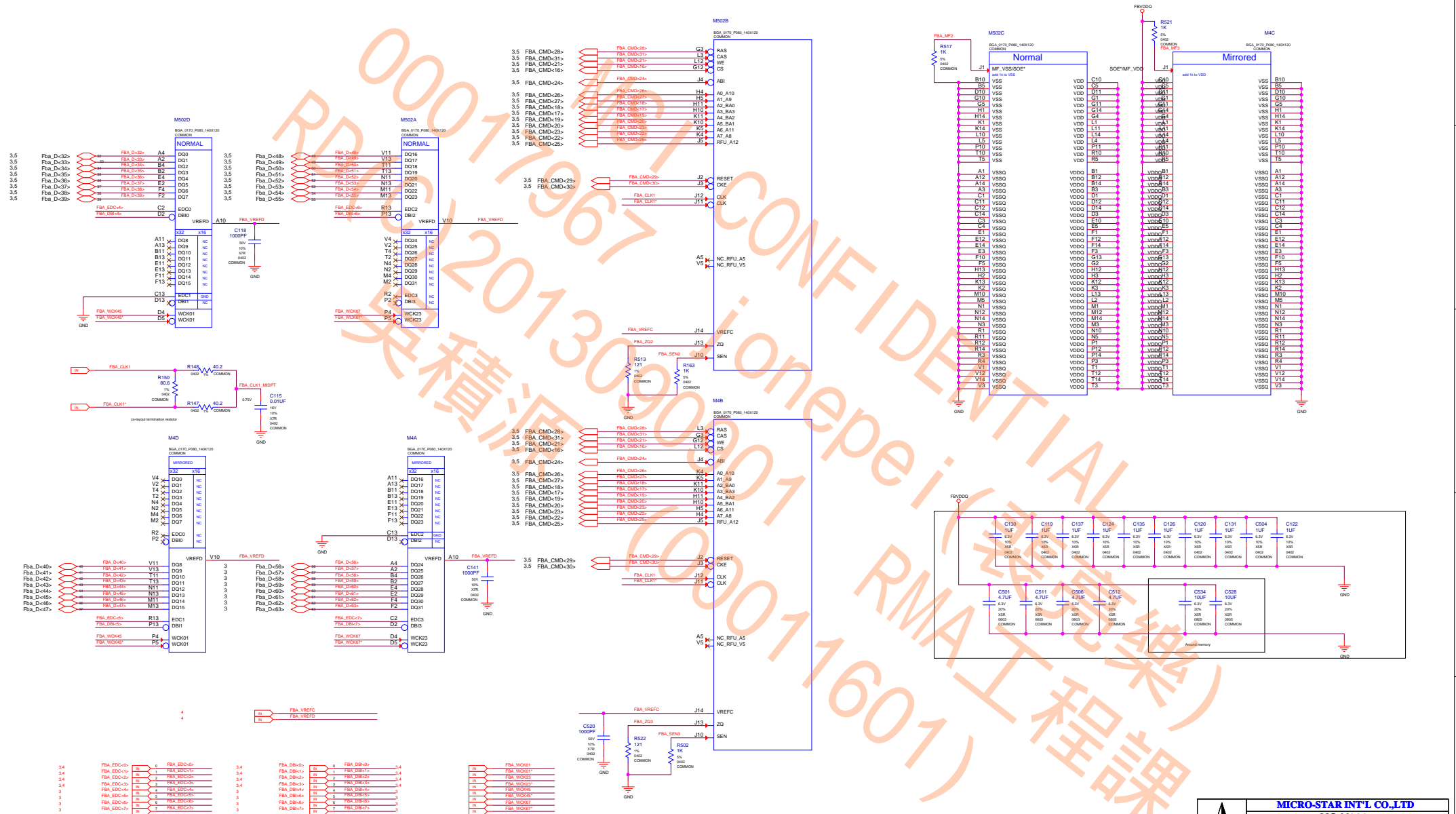
## PCI Express

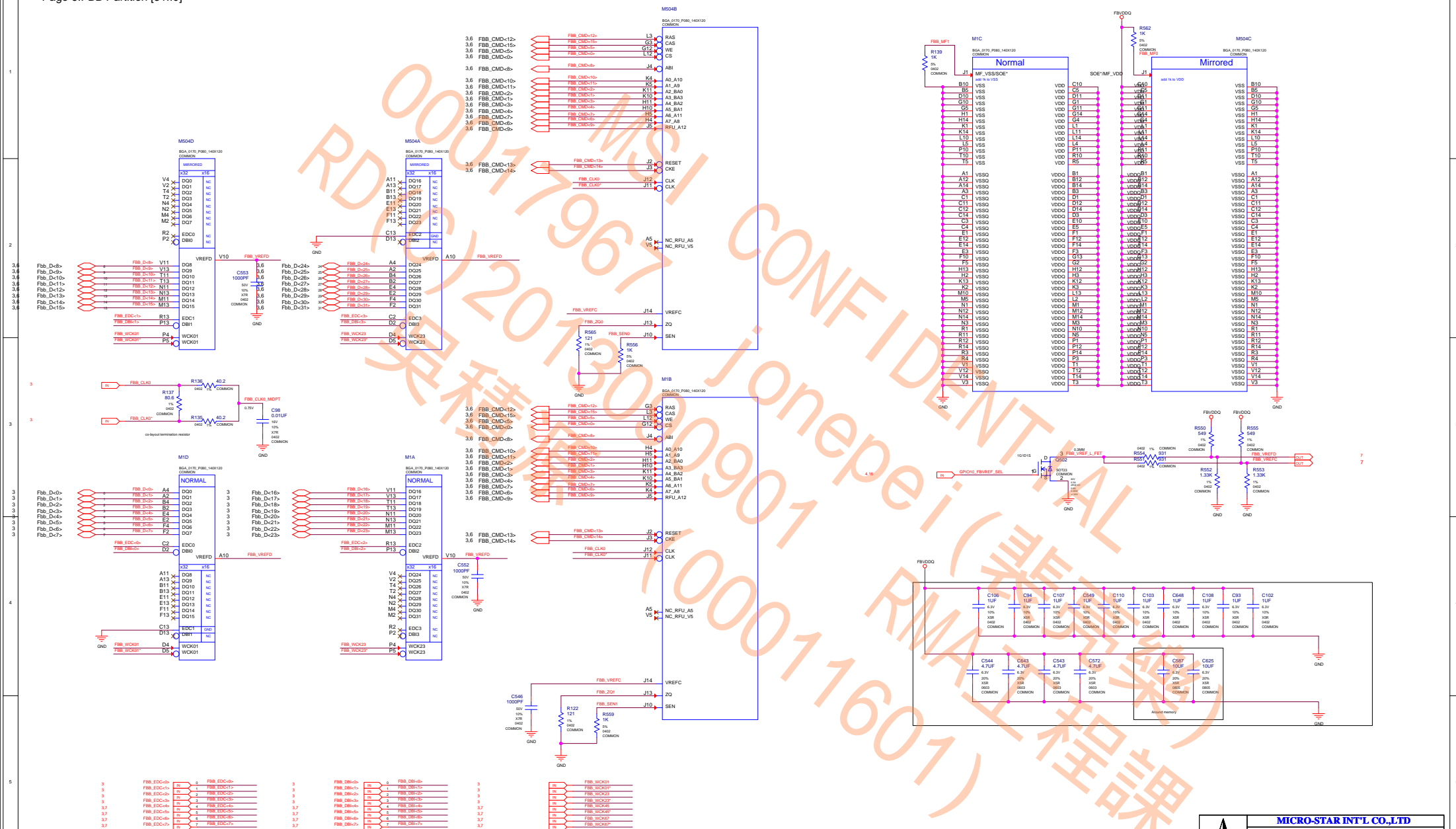


## GPU Frame Buffer Partition A/B

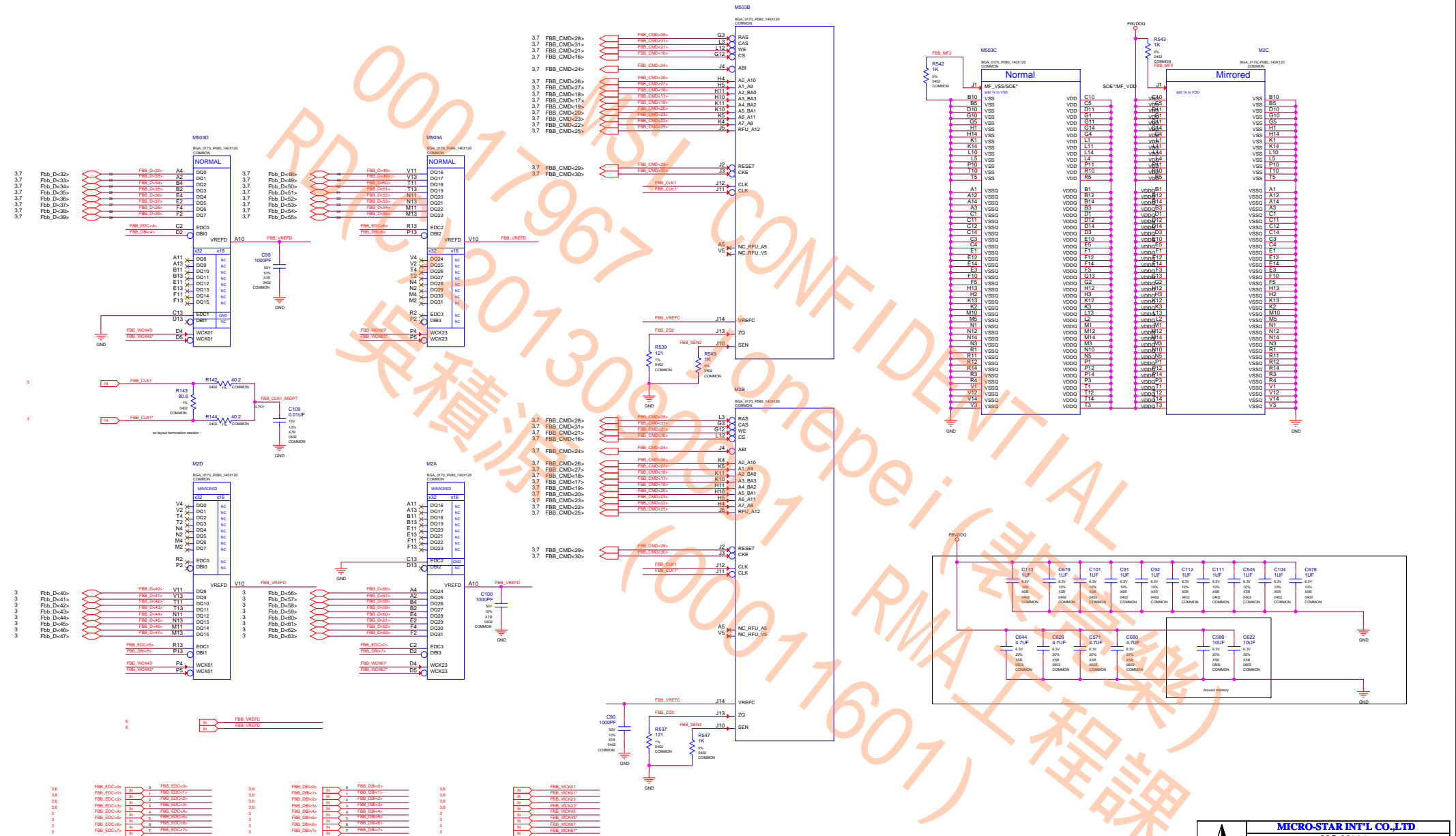




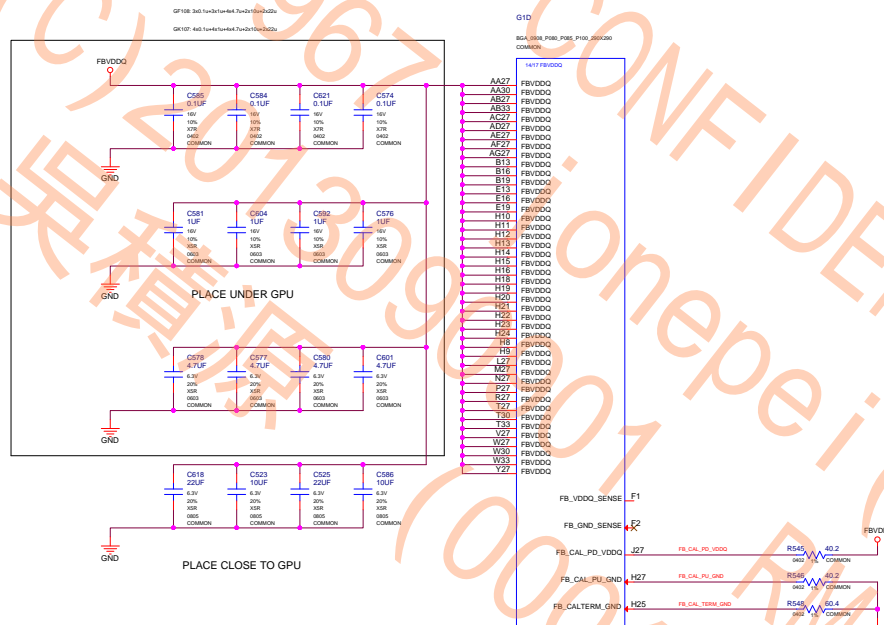






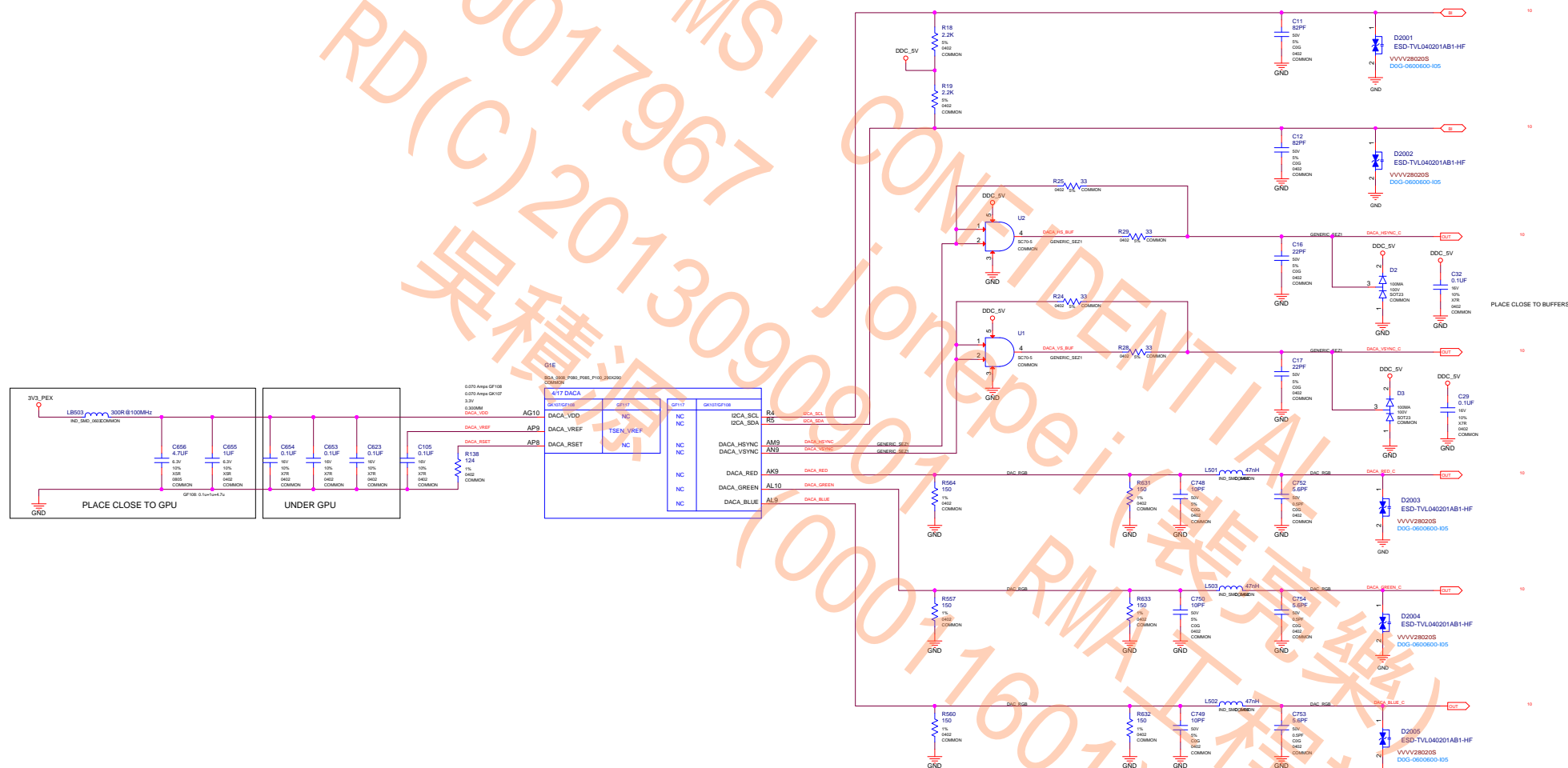


# FB Decoupling

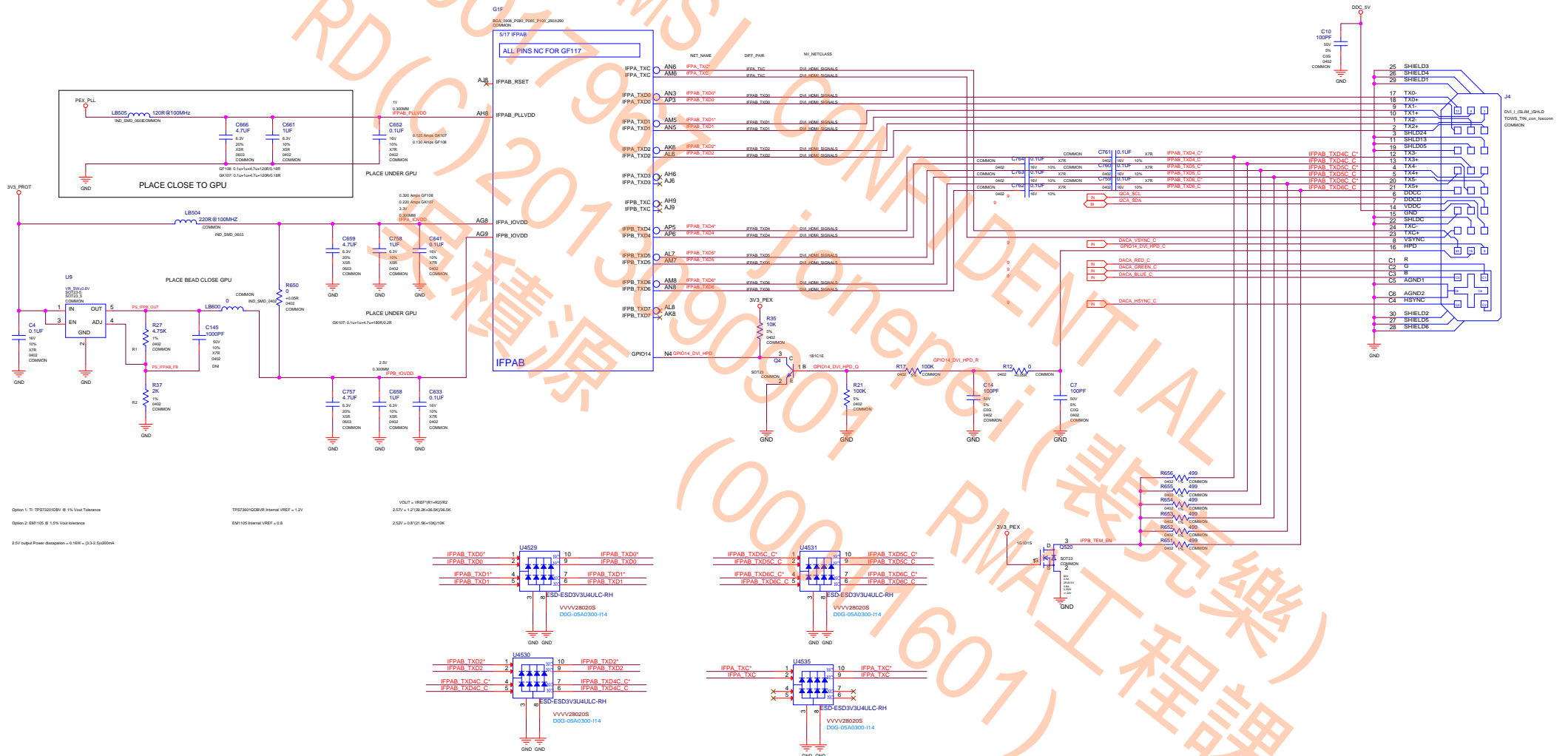




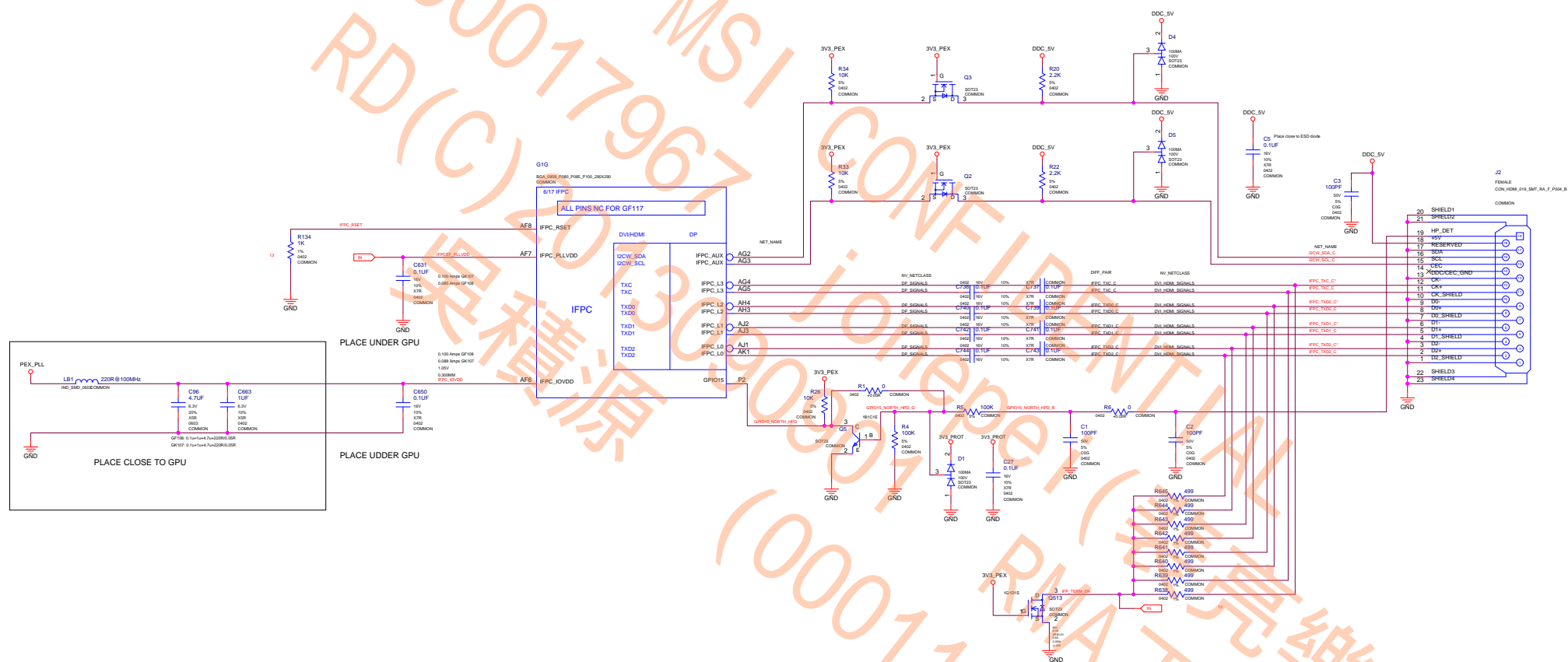
## DACA VGA



## IFPAB TMDS



## IFPC mHDMI



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**MS-V280**

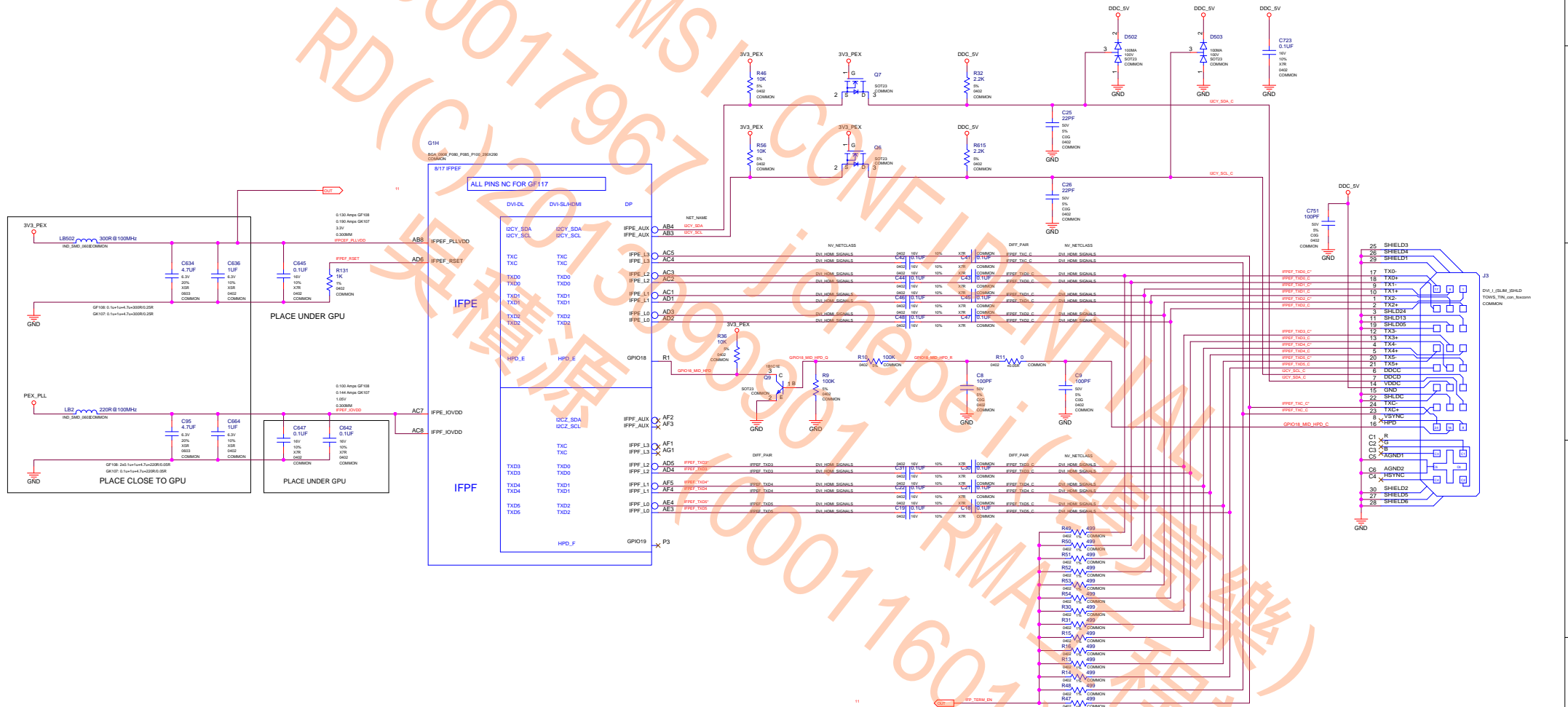
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IFPC DP

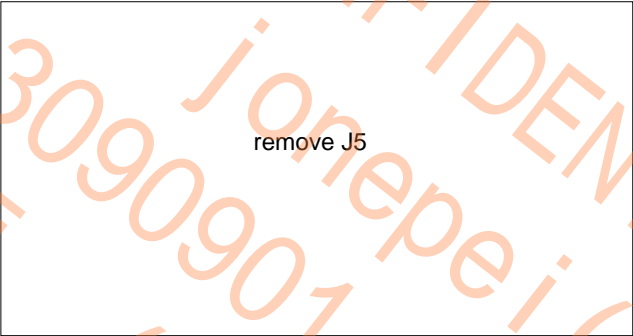
MSI CONFIDENTIAL  
00017967  
RD(C)2013090901  
吳積源  
Jonepei (裴亮樂)  
(00011601)  
RMA工程課

remove J1

# IFPEF TMD5

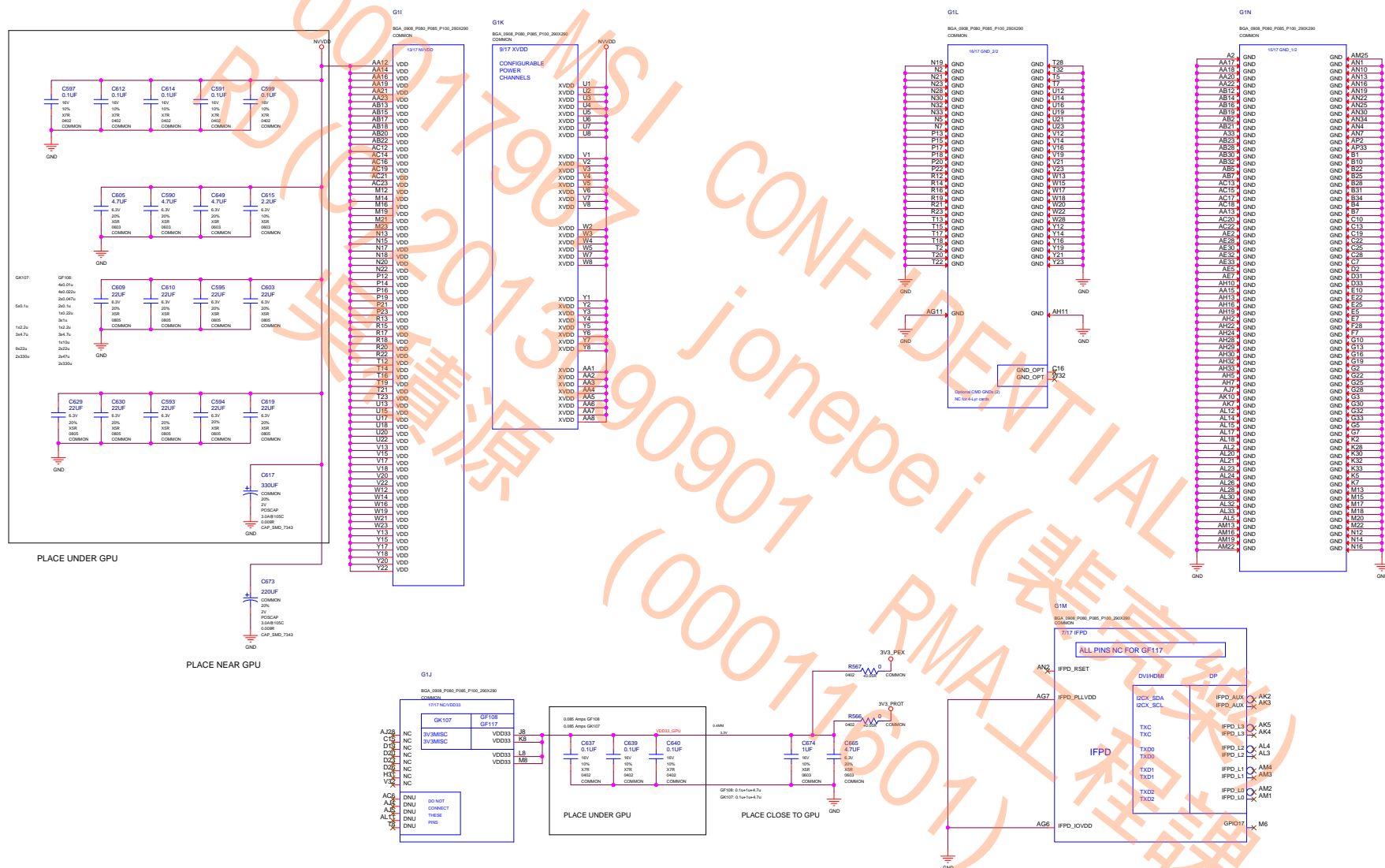


IFPE Long HDMI

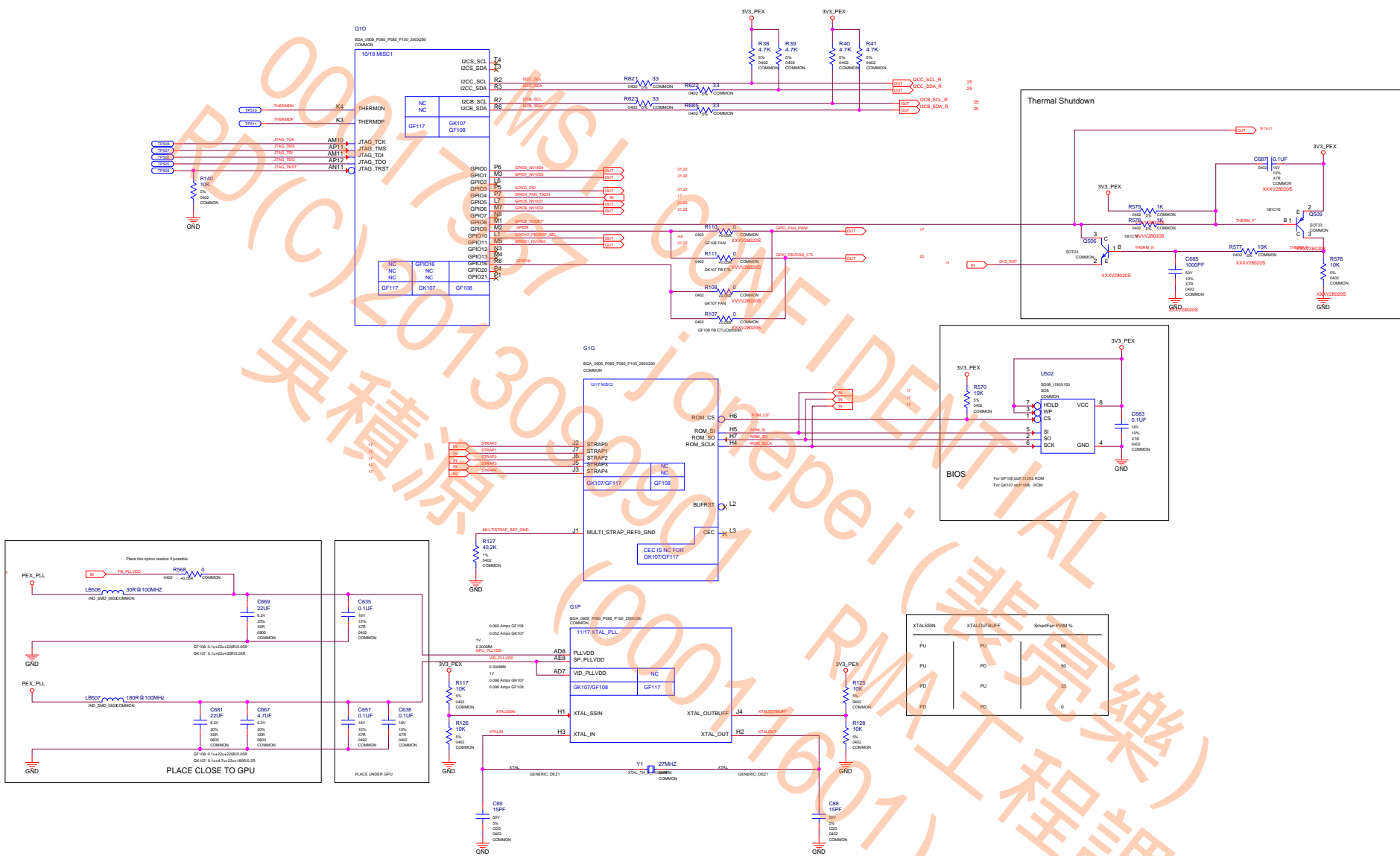




## Core Decoupling, GPU\_VDD\_3V3



## Misc Interfaces

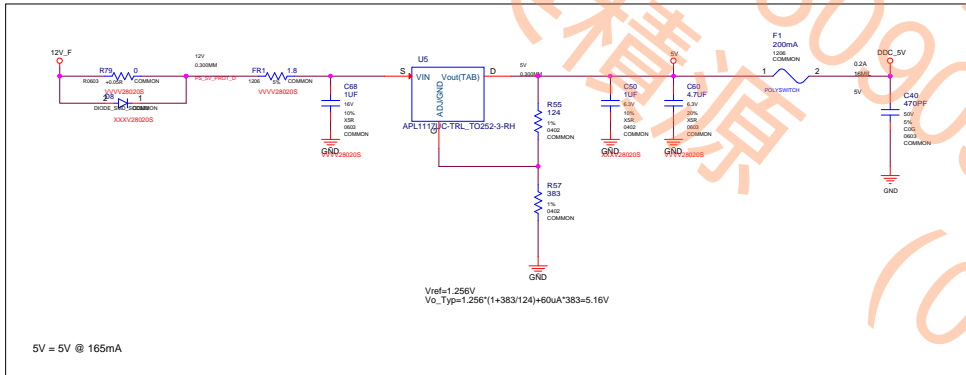


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**MS-V280**

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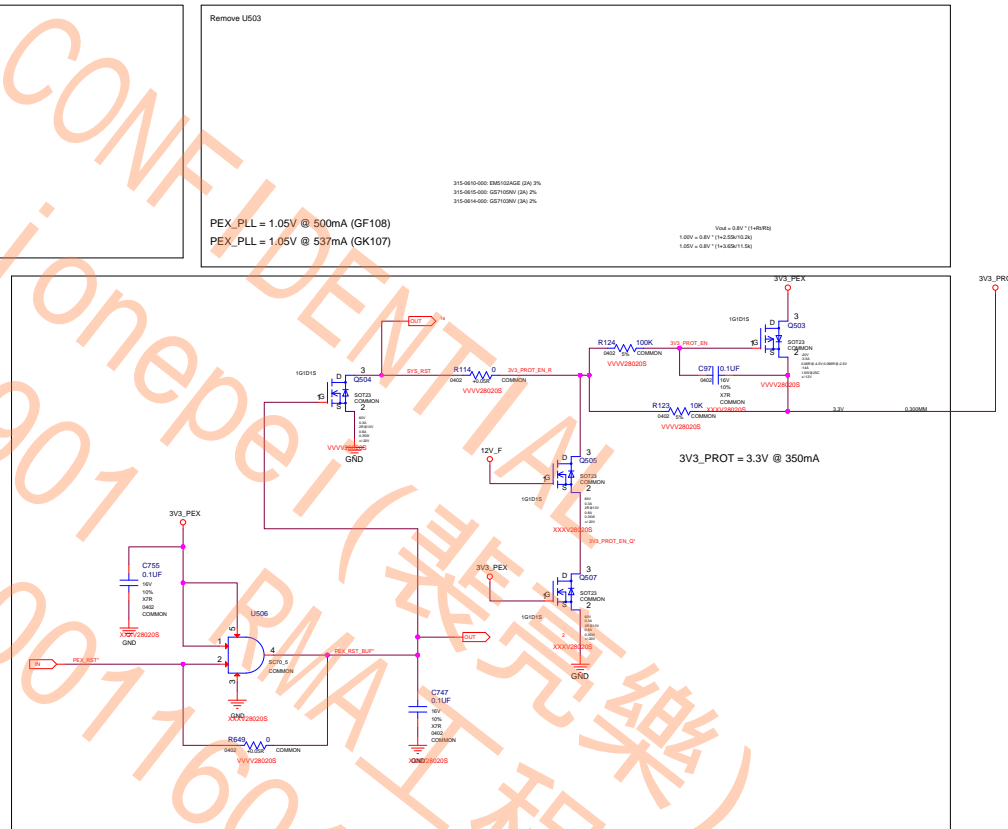


### Power Supply I: Misc Power



Remove U3

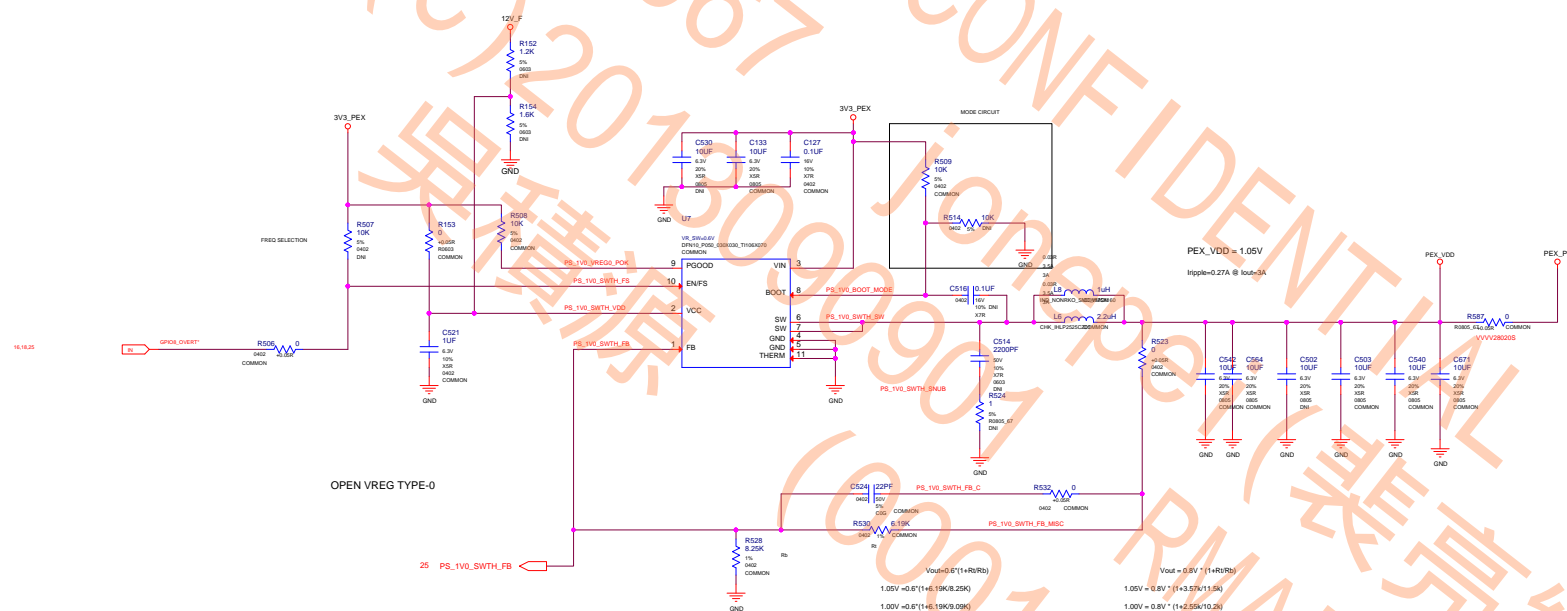
3V3\_FUSE = 3.3V @ 500mA

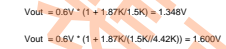


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**MS-V280**

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## GK107 PEX\_VDD OPTION





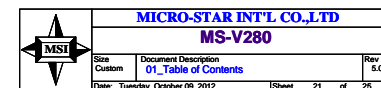
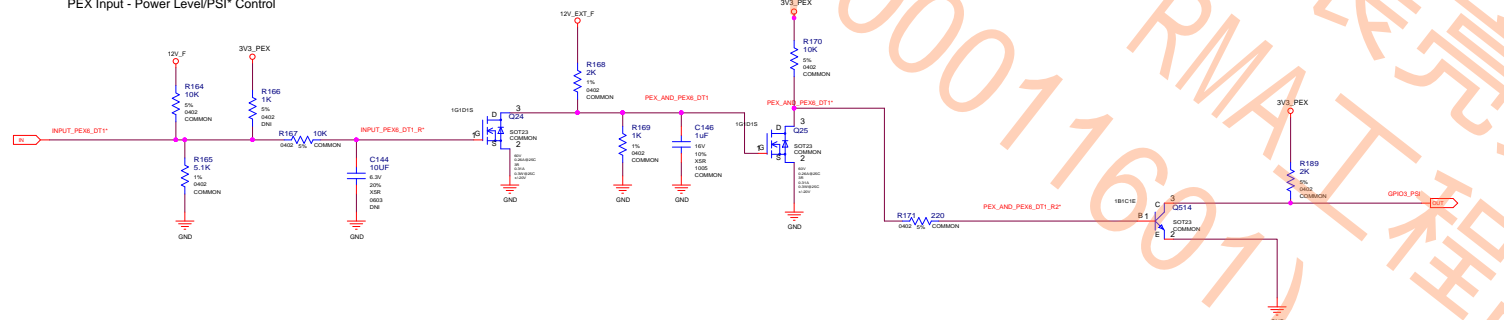
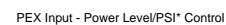
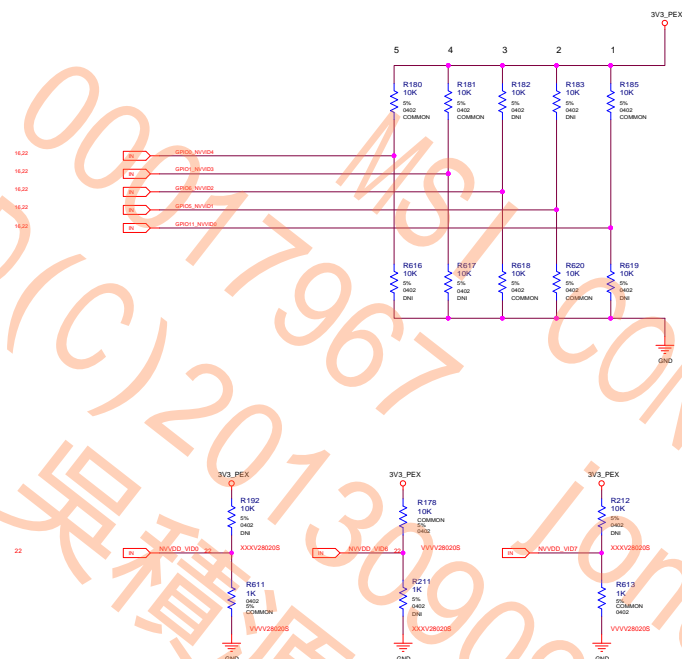
FBVDDQ_CTL	FBVDDQ
0	1.35V
1	1.5V

<= DEFAULT



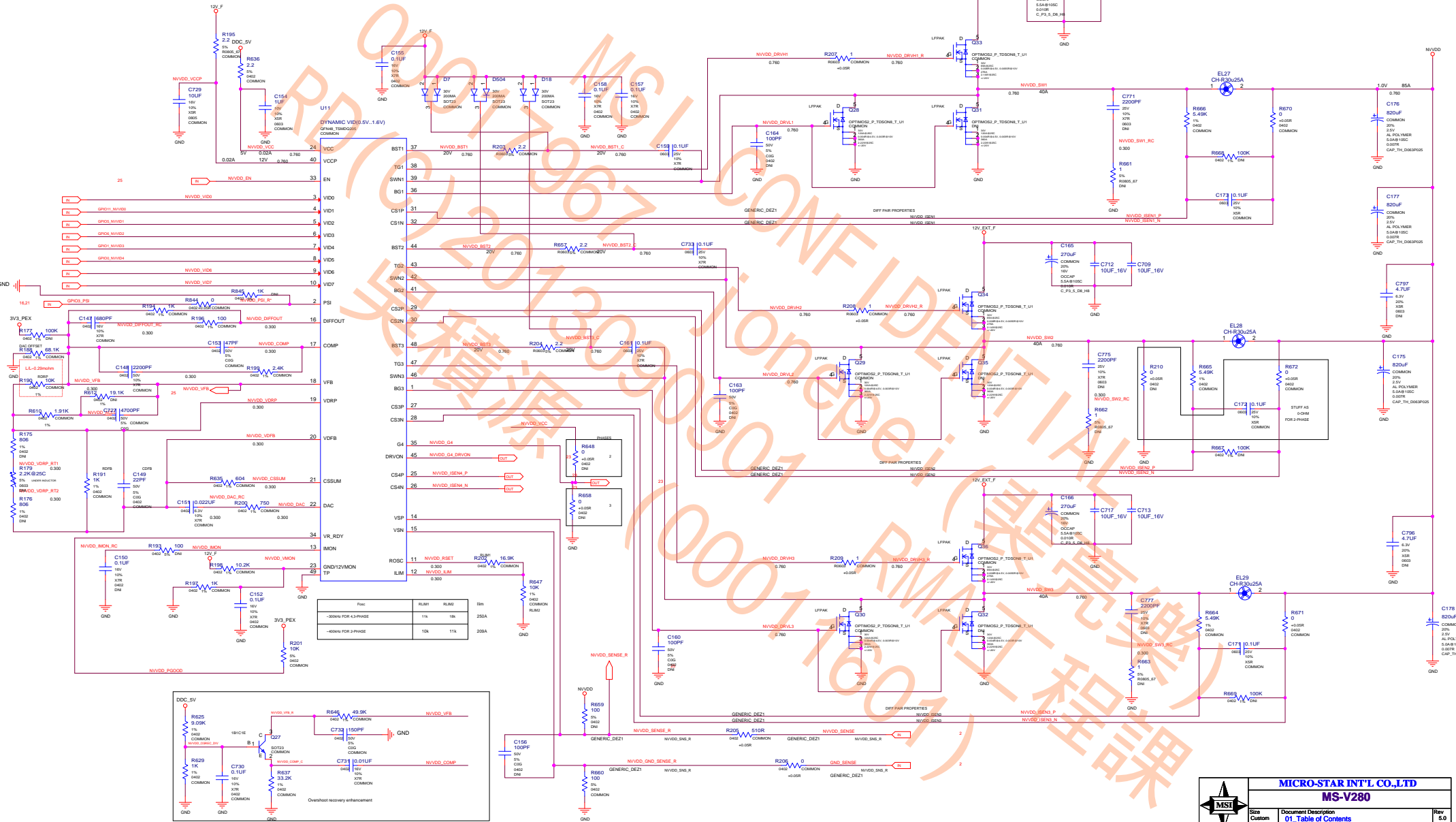
## VID Table

GPIO4	GPIO3	GPIO2	GPIO1	GPIO0	VOUT
VID_5	VID_4	VID_3	VID_2	VID_1	
0	0	0	0	0	1.2125V
0	0	0	0	1	1.2000V
0	0	0	1	0	1.1875V
0	0	0	1	1	1.1750V
0	0	1	0	0	1.1625V
0	0	1	0	1	1.1500V
0	0	1	1	0	1.1375V
0	0	1	1	1	1.1250V
0	1	0	0	0	1.1125V
0	1	0	0	1	1.1000V
0	1	0	1	0	1.0875V
0	1	0	1	1	1.0750V
0	1	1	0	0	1.0625V
0	1	1	0	1	1.0500V
0	1	1	1	0	1.0375V
0	1	1	1	1	1.0250V
1	0	0	0	0	1.0125V
1	0	0	0	1	1.0000V
1	0	0	1	0	0.9875V
1	0	0	1	1	0.9750V
1	0	1	0	0	0.9625V
1	0	1	0	1	0.9500V
1	0	1	1	0	0.9375V
1	0	1	1	1	0.9250V
1	1	0	0	0	0.9125V
1	1	0	0	1	0.9000V
1	1	0	1	0	0.8875V
1	1	0	1	1	0.8750V
1	1	1	0	0	0.8625V
1	1	1	0	1	0.8500V
1	1	1	1	0	0.8375V
1	1	1	1	1	0.8250V



NVDD CTRL

Output ripple = 15A p-p at 300kHz with 23uH  
Input ripple = 5.8A rms at 300kHz



## 1



A	B	C	D	E	F	G	H
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