

PG161-A00

TU106 6GB GDDR6, 192b, X16  
DVI-D/DP + DP + HDMI

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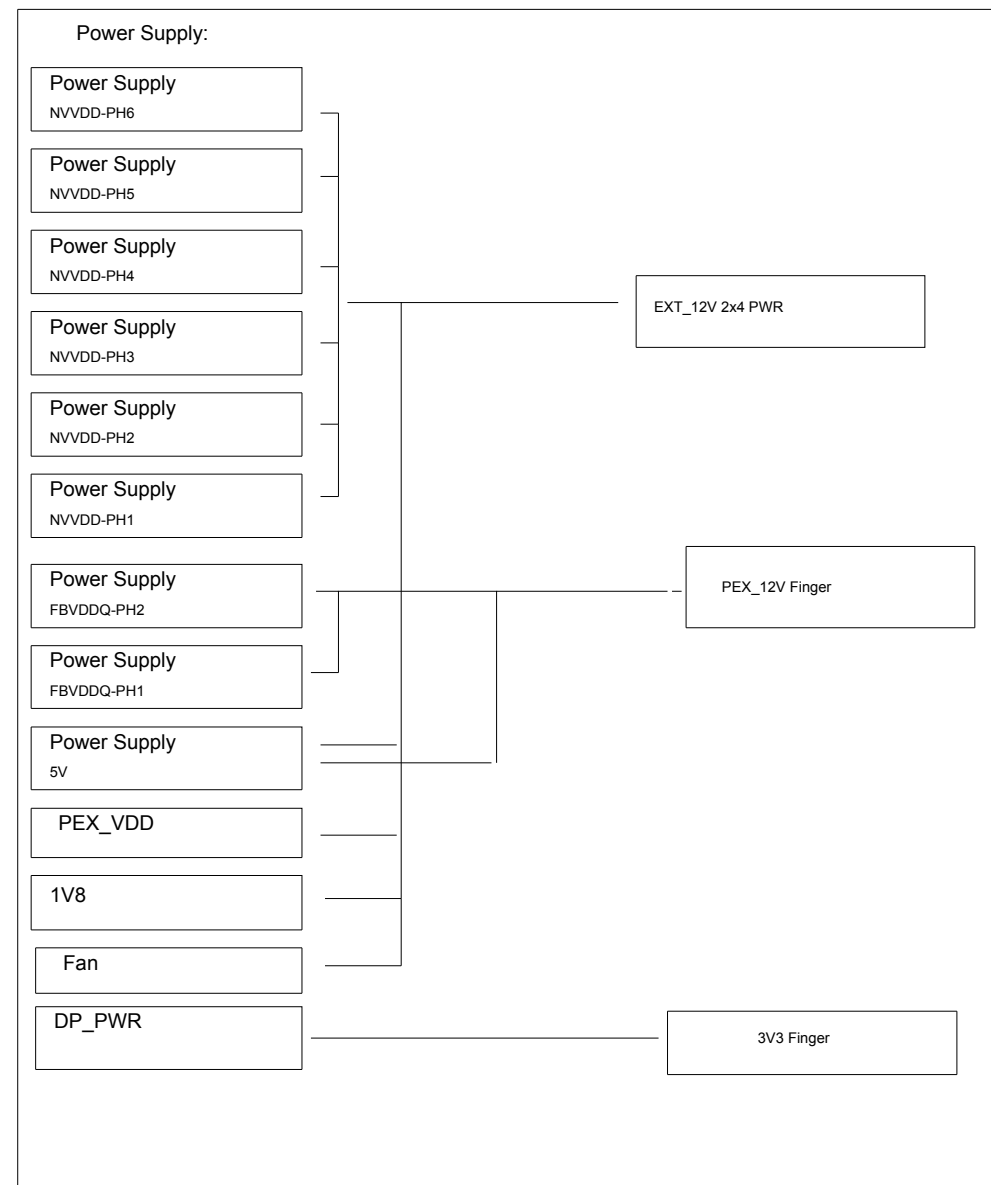
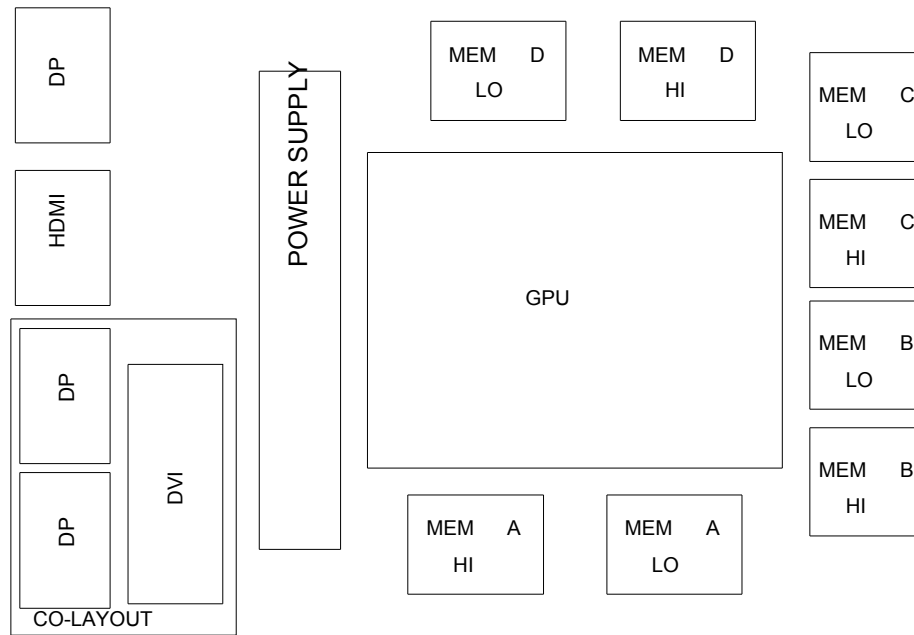
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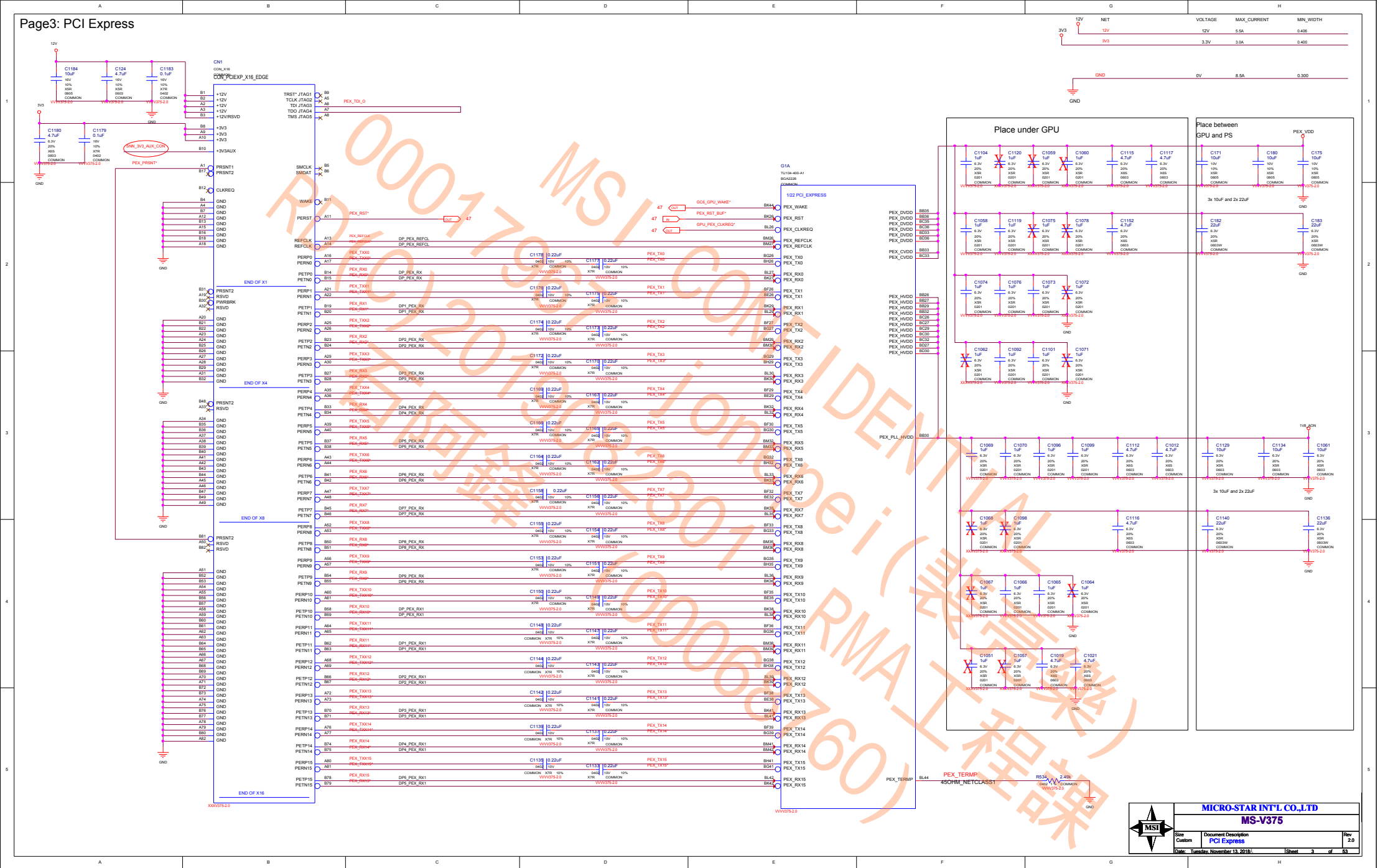
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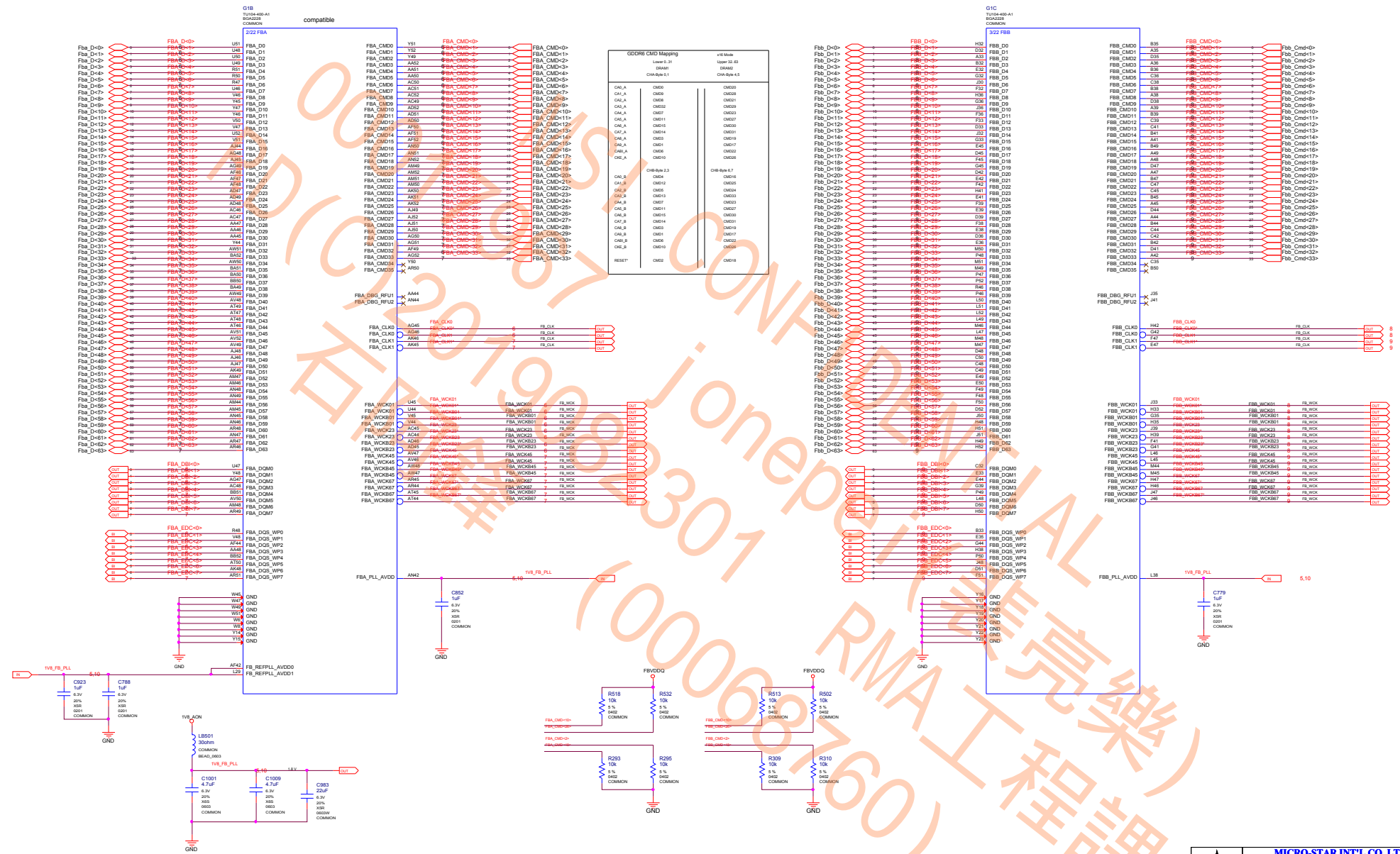
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| 51 | PS: Pre-filter |
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NO PEX GEN4 SUPPORT  
DELETE RC TERMINATIONS



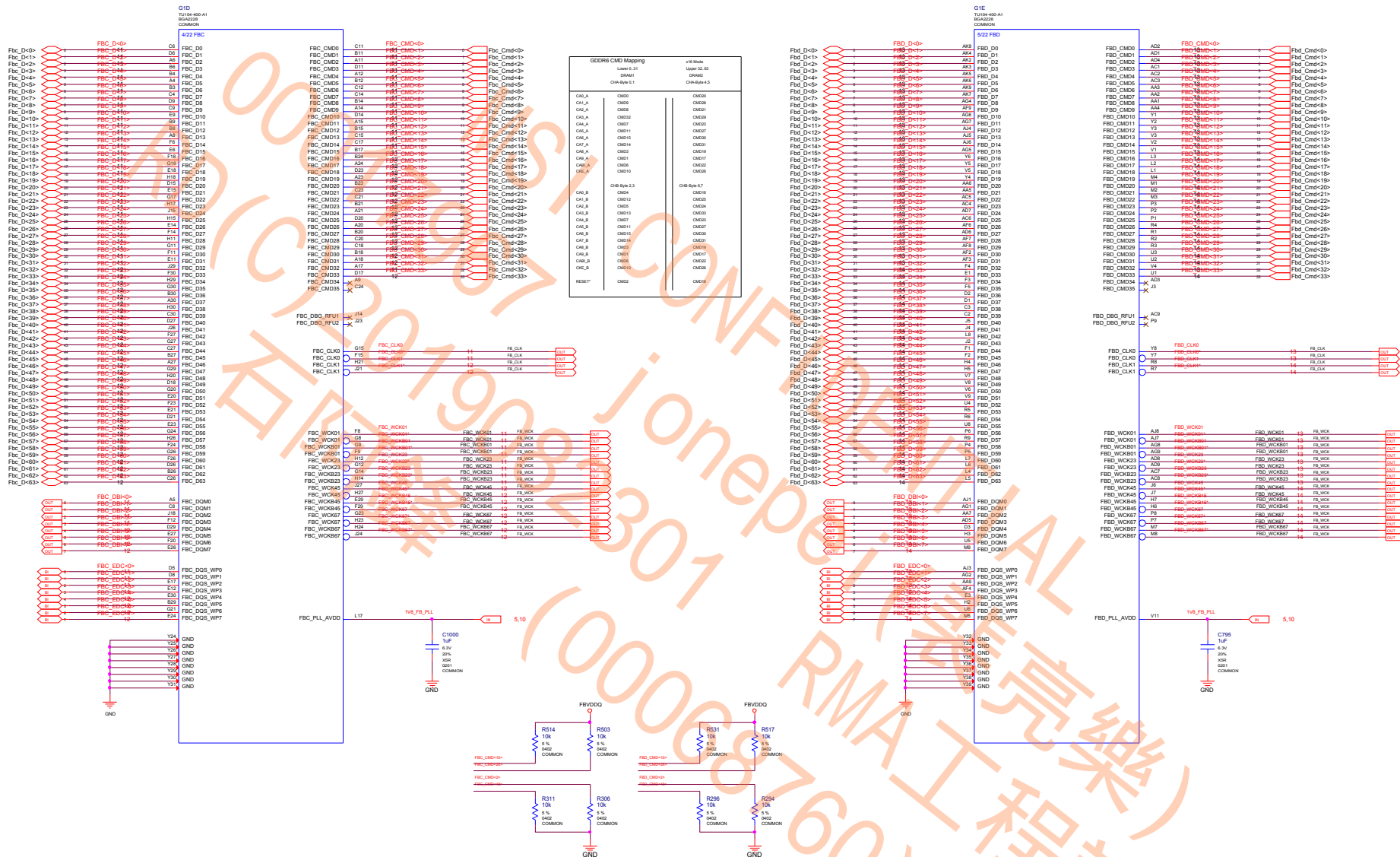


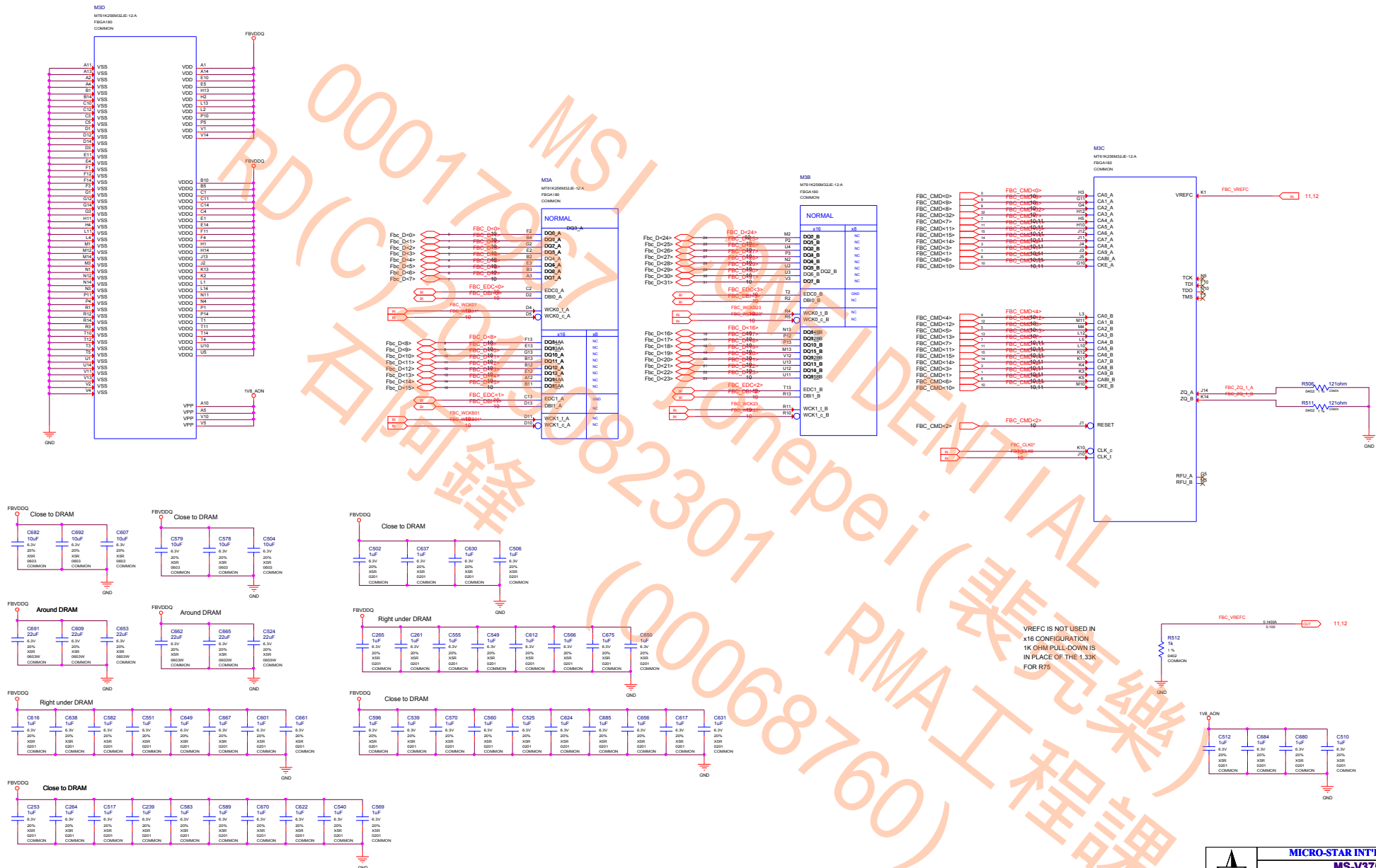


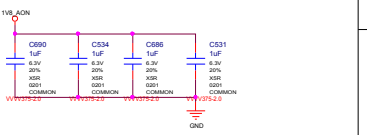
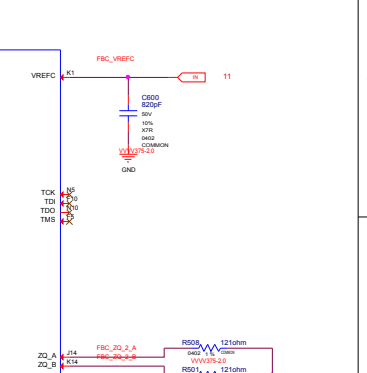
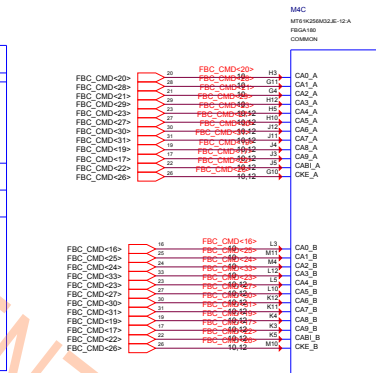
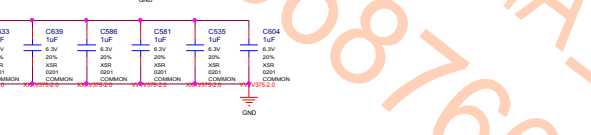
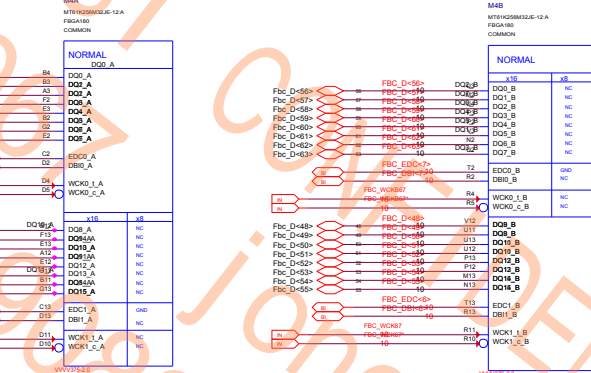
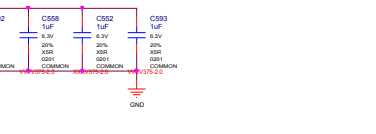
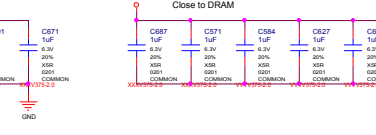
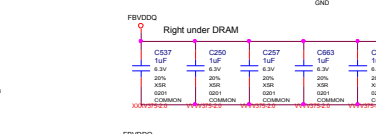
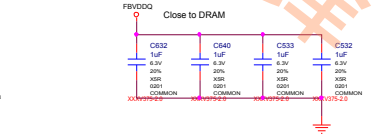
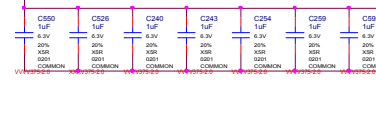
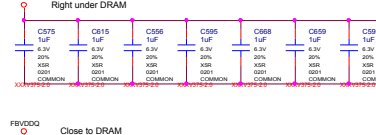
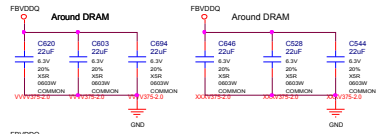
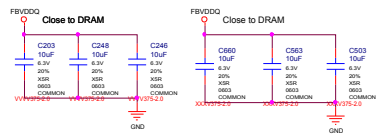
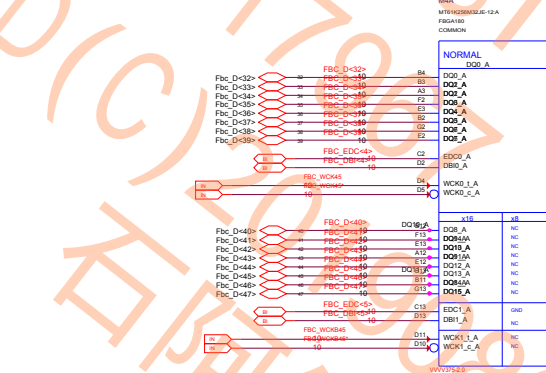
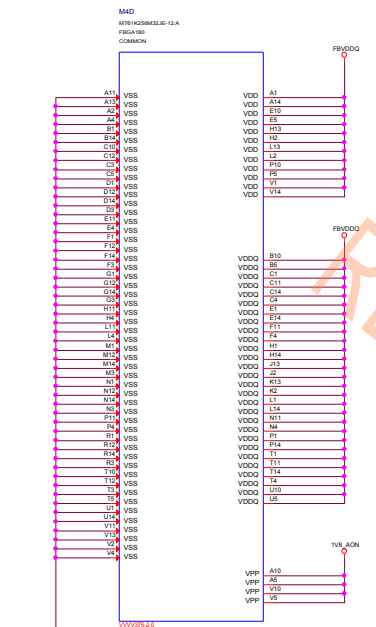


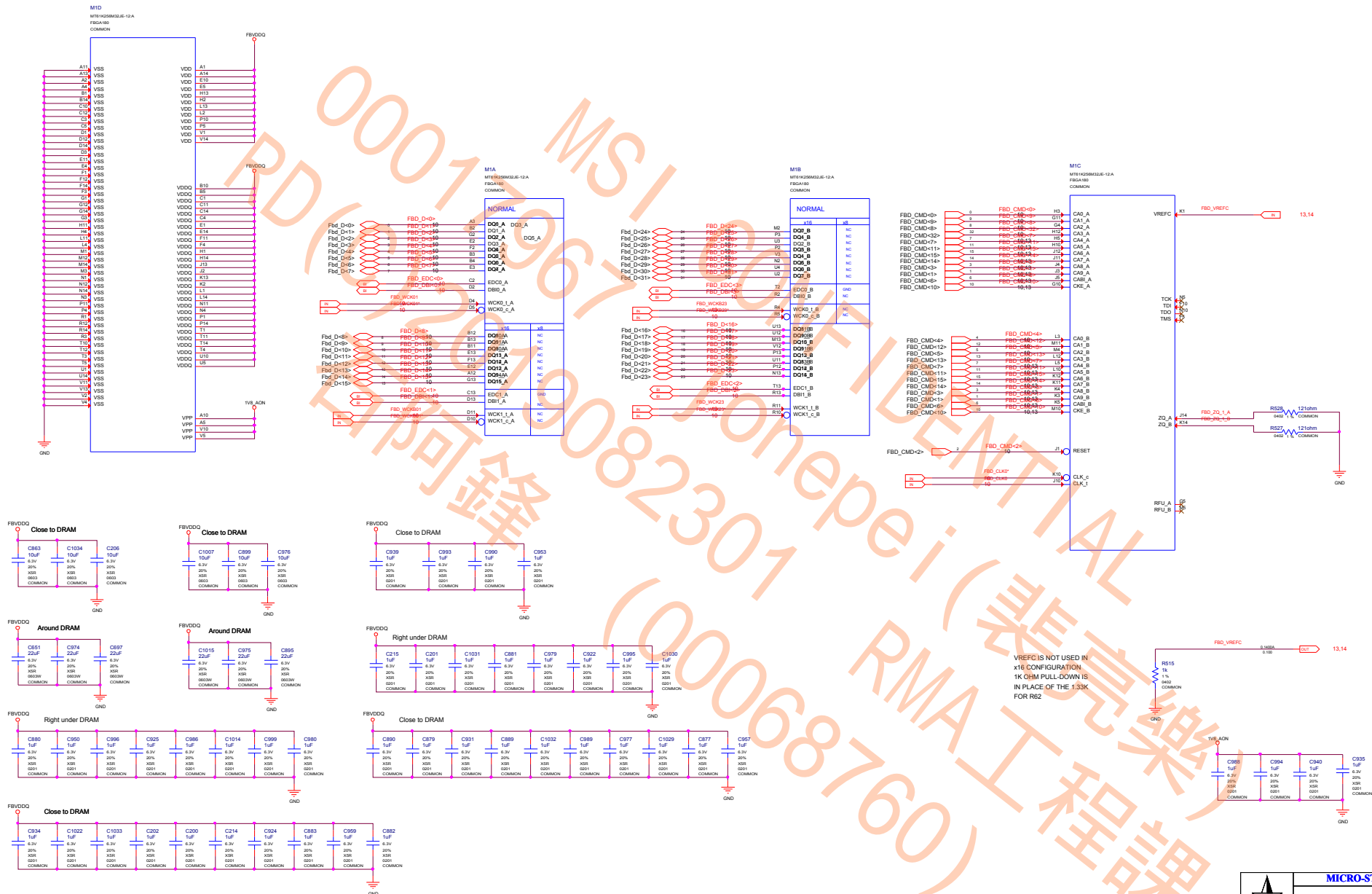


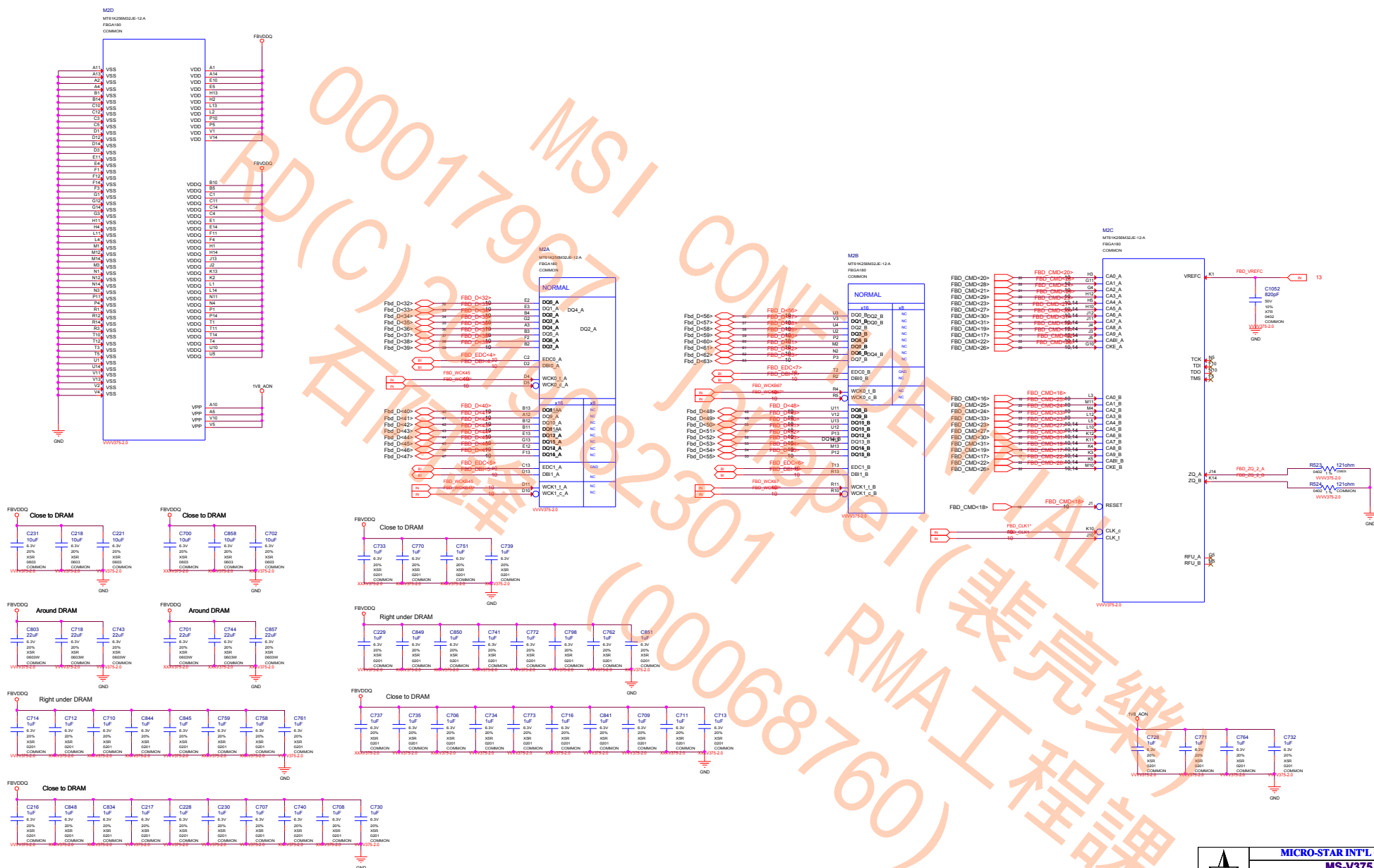




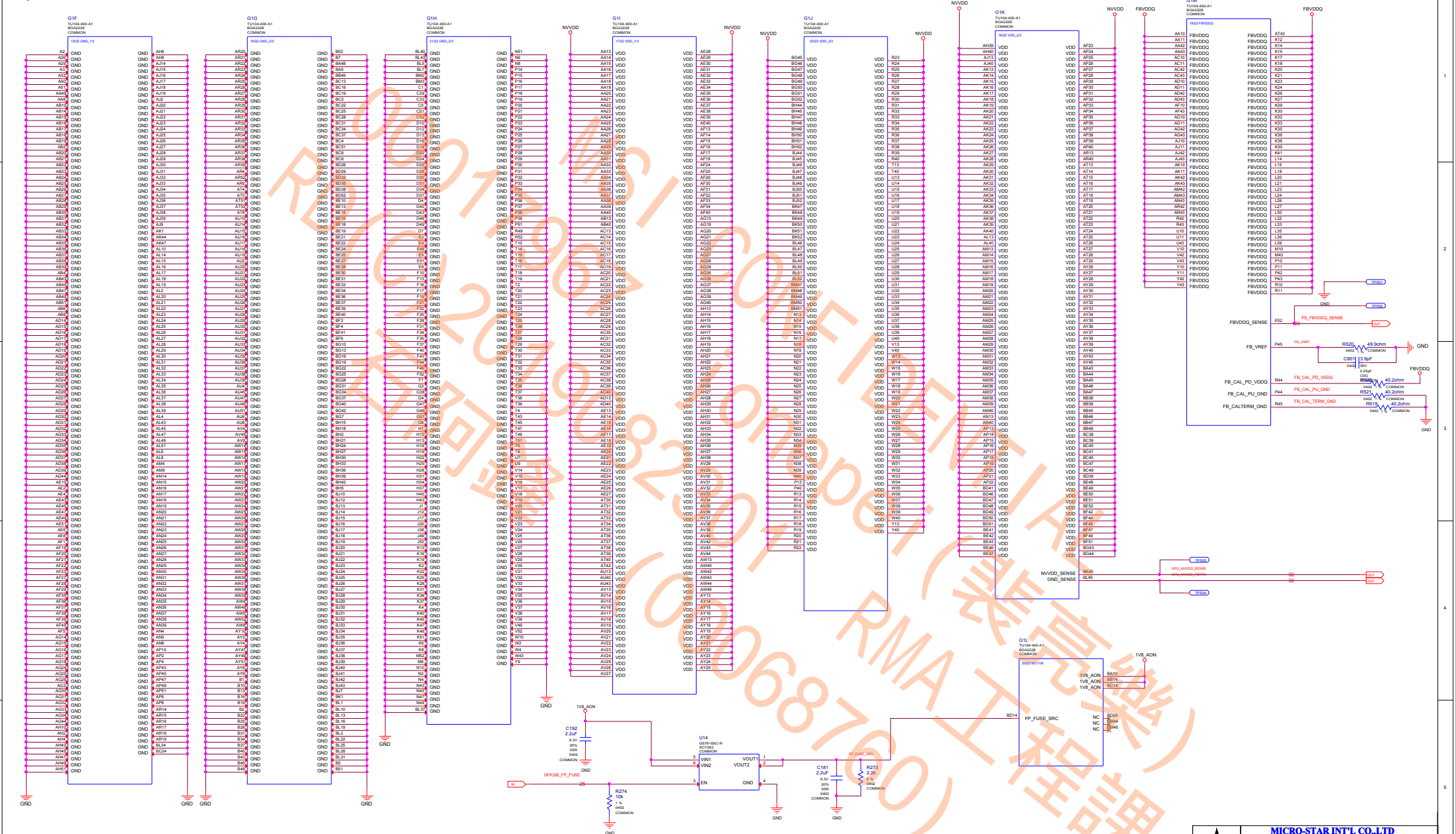








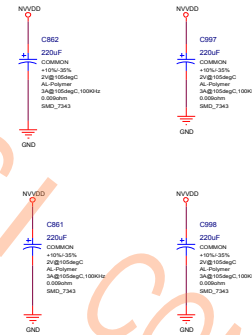




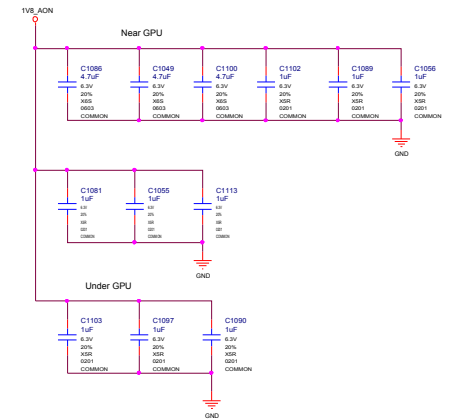
FBVDDQ



NVVDD



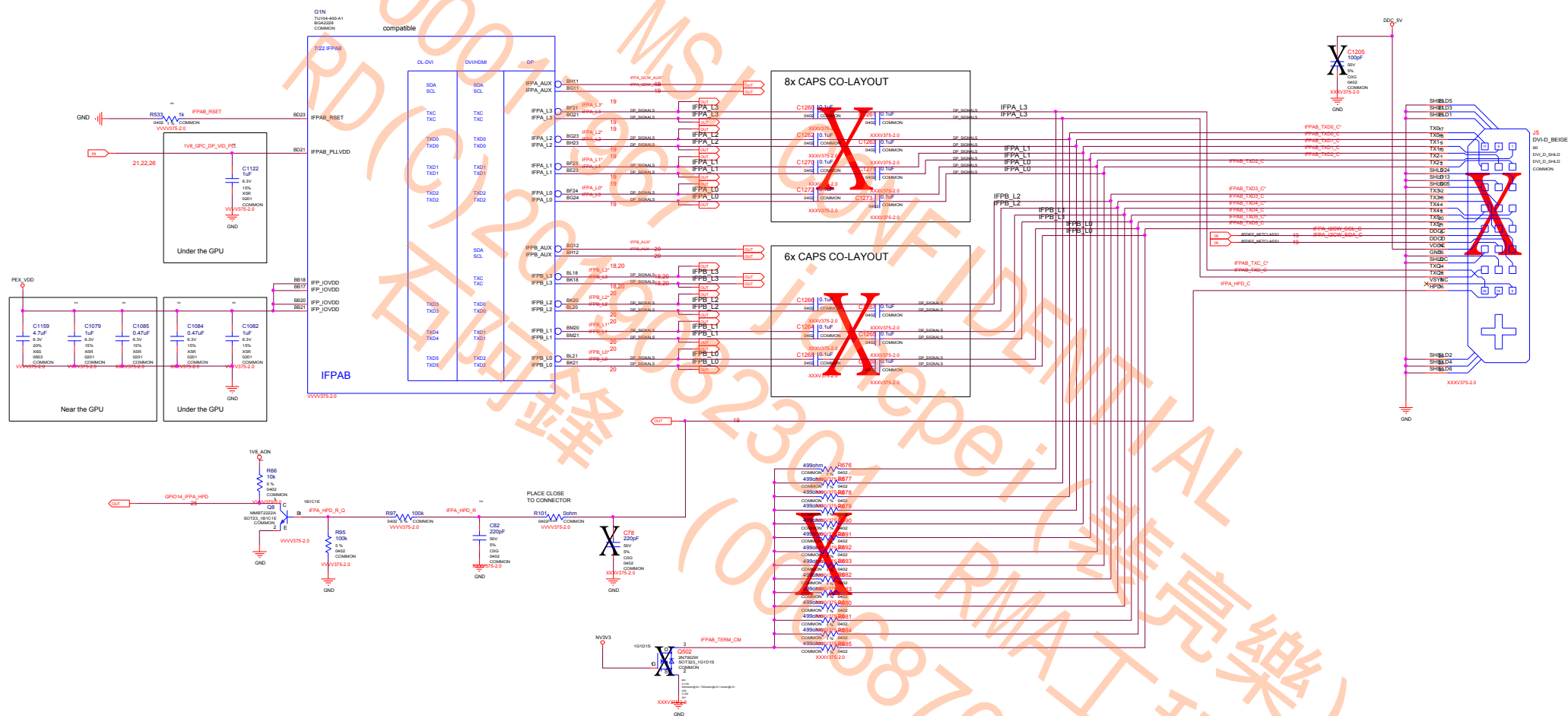
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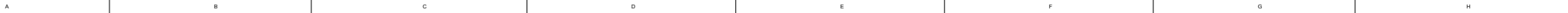




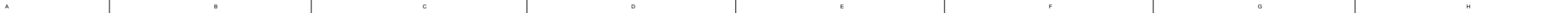


# IFPAB DVI-D-DL CO-LAYOUT WITH 2x DP

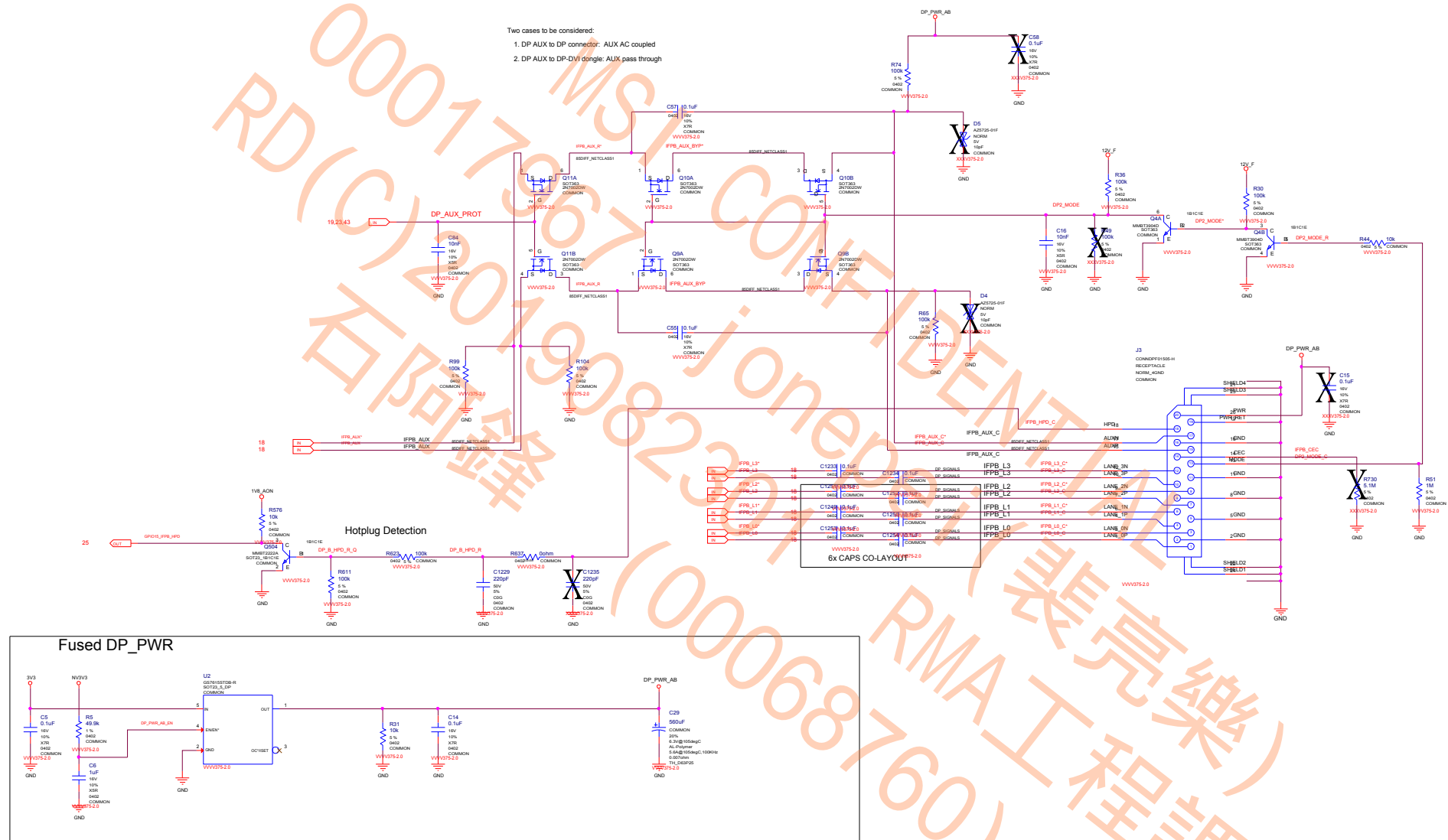




|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|



## IFPB DP CO-LAYOUT WITH IFPAB DVI-D-DL



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**MS-V375**

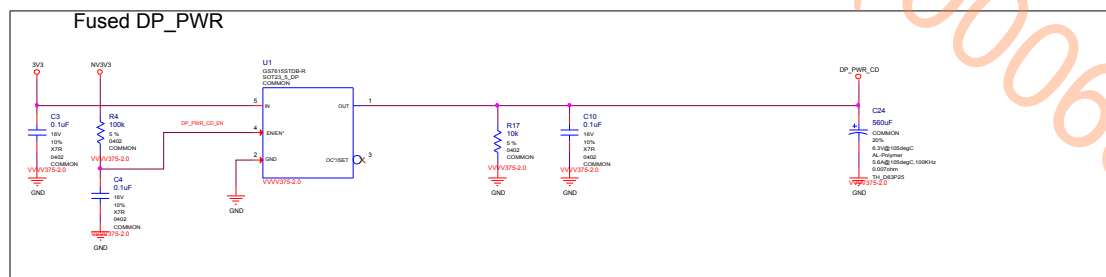
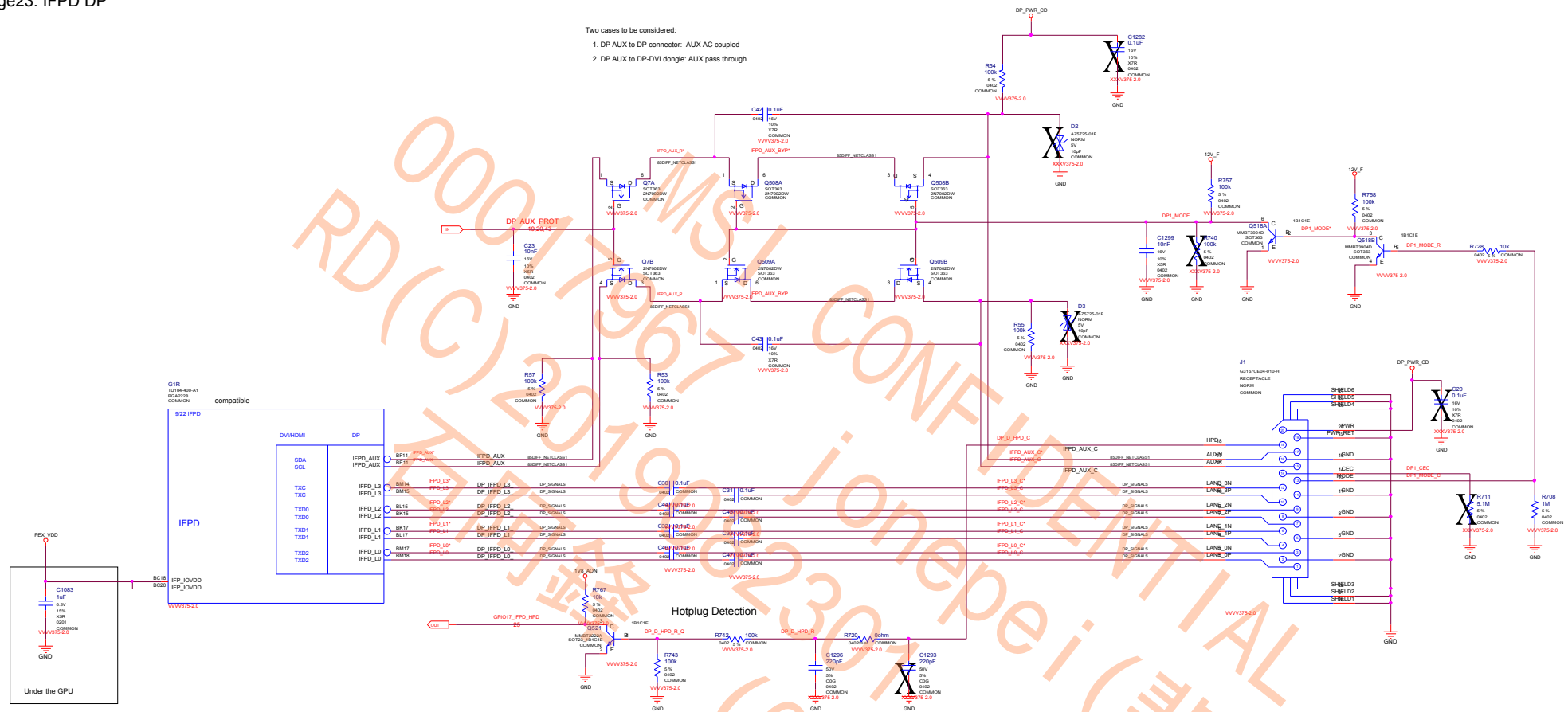
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| Date: Tuesday, November 13, 2018 |  | Sheet 20 of 53 |





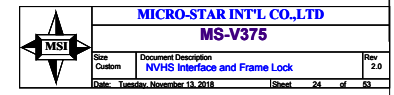
Two cases to be considered:

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

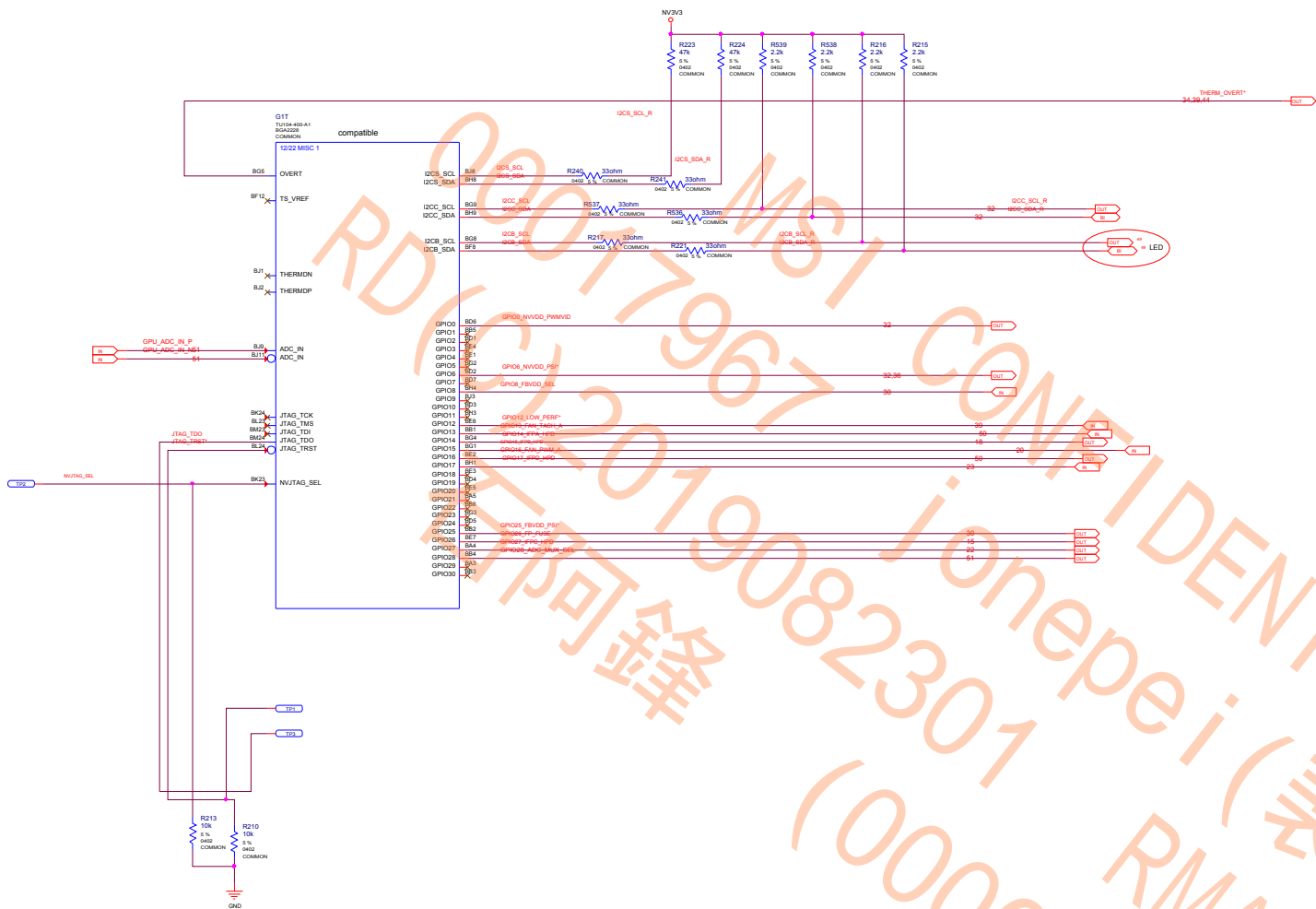


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**MS-V375**

|                                  |  |                |
|----------------------------------|--|----------------|
| Size<br>Custom                   | Document Description<br><b>IFPD DP</b> | Rev<br>2.0     |
| Date: Tuesday, November 13, 2018 |  | Sheet 23 of 53 |







| STRAP2 | STRAP1 | STRAP0 | RAMCFG[4:0] |
|--------|--------|--------|-------------|
| L      | L      | L      | 00000       |
| L      | L      | H      | 00001       |
| L      | H      | L      | 00010       |
| L      | H      | H      | 00011       |
| H      | H      | L      | 00110       |
| H      | H      | H      | 00111       |
| L      | L      | M      | 01000       |

| RAMCFG[4:0] | DENSITY | WIDTH   | VENDOR  | DIE |
|-------------|---------|---------|---------|-----|
| 00000       | 8Gb     | 256-bit | Samsung | C   |
| 00001       | 8Gb     | 256-bit | Micron  | A   |
| 00010       | 8Gb     | 256-bit | Hynix   | M   |
| 00011       | 8Gb     | 256-bit | Samsung | C   |
| 00100       | 8Gb     | 256-bit | Micron  | A   |
| 00101       | 8Gb     | 256-bit | Hynix   | M   |
| 00110       | 16Gb    | 256-bit | Samsung | M   |
| 00111       |         |         |         |     |

| ROM_SO | ROM_SI | ROM_SCLK | DUMMY[2:0].FS_OVERT | 1.ENABLE 0.DISABLE | DEFAULT |
|--------|--------|----------|---------------------|--------------------|---------|
| L      | L      | L        | XXX1                | FS_OVERT ENABLE    |         |
| L      | L      | M        | XXX0                | FS_OVERT DISABLE   |         |

| STRAP5 | STRAP4 | STRAP3 | SMB_ALT_ADDR | DEVID_SEL | PCIE_CFG | VGA_DEVICE |
|--------|--------|--------|--------------|-----------|----------|------------|
| M      | H      | H      | 1            | 1         | 1        | 1          |
| M      | H      | L      | 1            | 1         | 1        | 0          |
| M      | L      | H      | 1            | 1         | 0        | 1          |
| M      | L      | L      | 1            | 1         | 0        | 0          |
| L      | H      | M      | 1            | 0         | 1        | 1          |
| L      | M      | H      | 1            | 0         | 1        | 0          |
| L      | L      | M      | 1            | 0         | 0        | 0          |
| H      | H      | H      | 0            | 1         | 1        | 1          |
| H      | H      | L      | 0            | 1         | 1        | 0          |
| H      | L      | H      | 0            | 1         | 0        | 1          |
| H      | L      | L      | 0            | 1         | 0        | 0          |
| L      | H      | H      | 0            | 0         | 1        | 1          |
| L      | H      | L      | 0            | 0         | 1        | 0          |
| L      | L      | H      | 0            | 0         | 0        | 1 DEFAULT  |
| L      | L      | L      | 0            | 0         | 0        | 0          |

H=High :Tied to 1.8V  
M=Middle:Tied to 0.9V  
L=Low :Tied to 0V

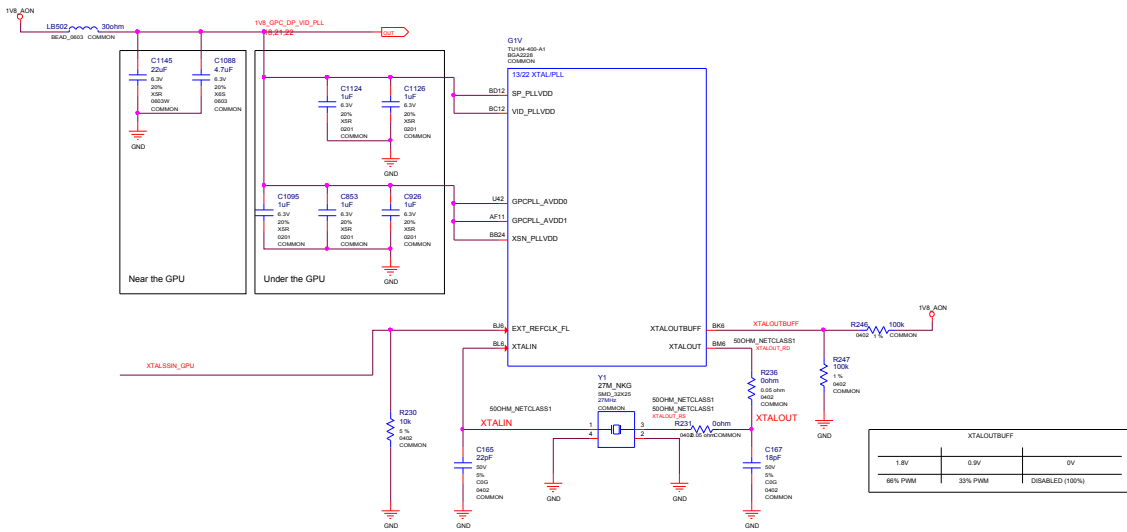
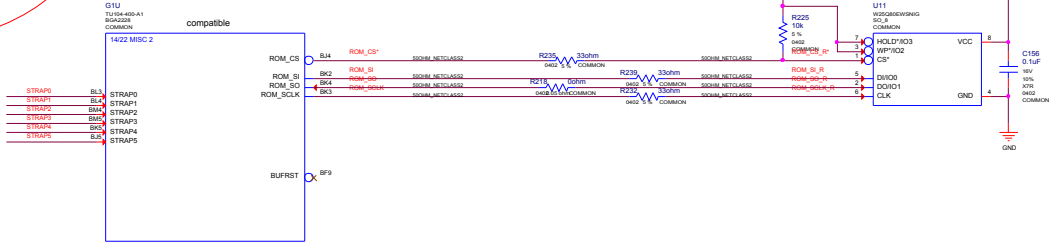
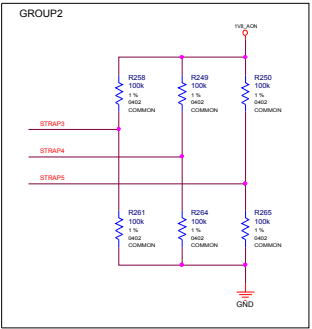
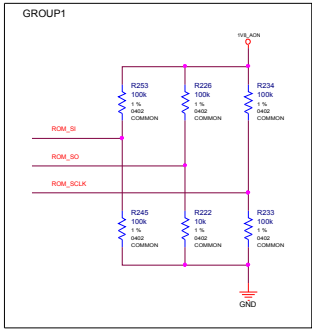
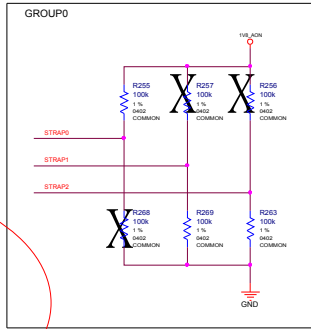
1:SMB\_ALT\_ADDR ENABLE  
0:SMB\_ALT\_ADDR DISABLE

1:DEVID\_SEL REBRAND  
0:DEVID\_SEL ORIGINAL

1:PCIE\_CFG LOW POWER  
0:PCIE\_CFG HIGH POWER

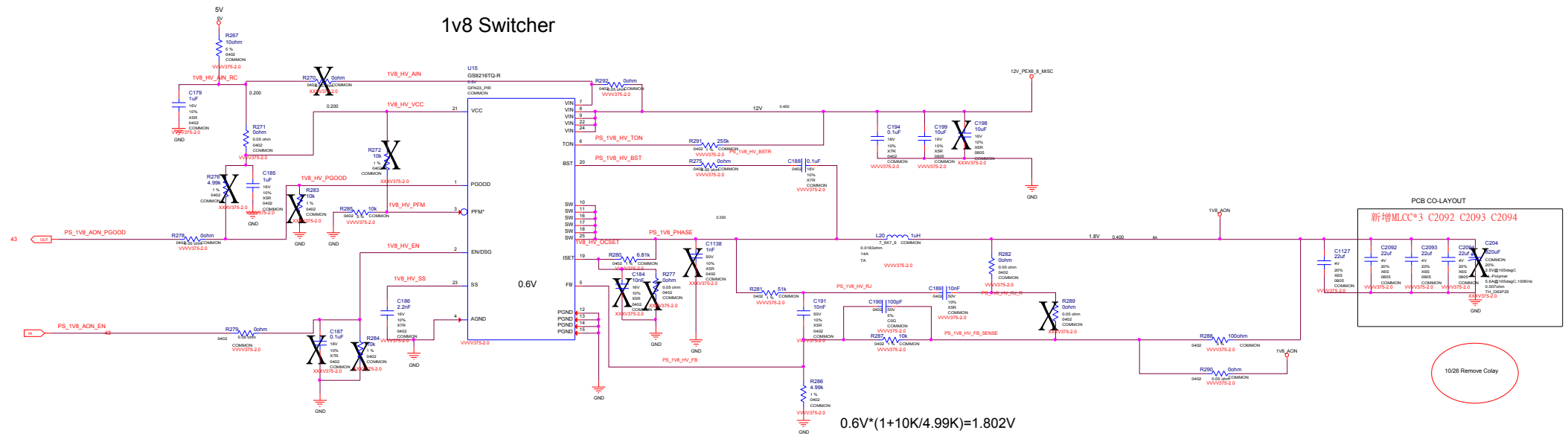
1:VGA\_DEVICE ENABLE  
0:VGA\_DEVICE DISABLE


注意上件的MEM Straps



| XTALOUTBUFF |         |                 |
|-------------|---------|-----------------|
| 1.8V        | 0.9V    | 0V              |
| 66% PWM     | 33% PWM | DISABLED (100%) |

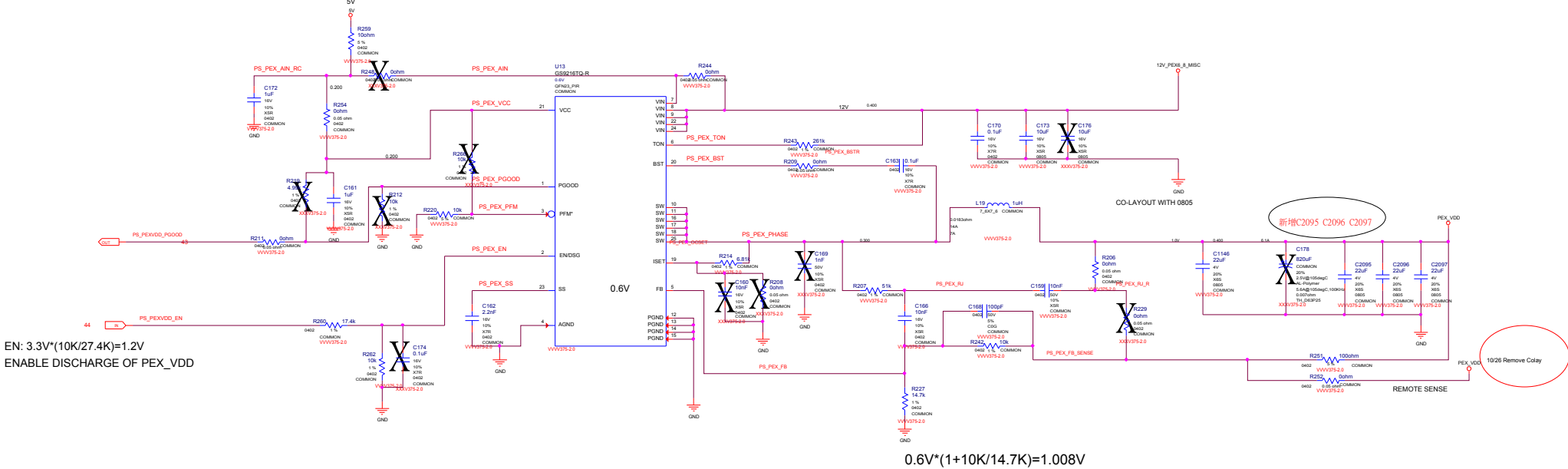
## 1v8 Switcher

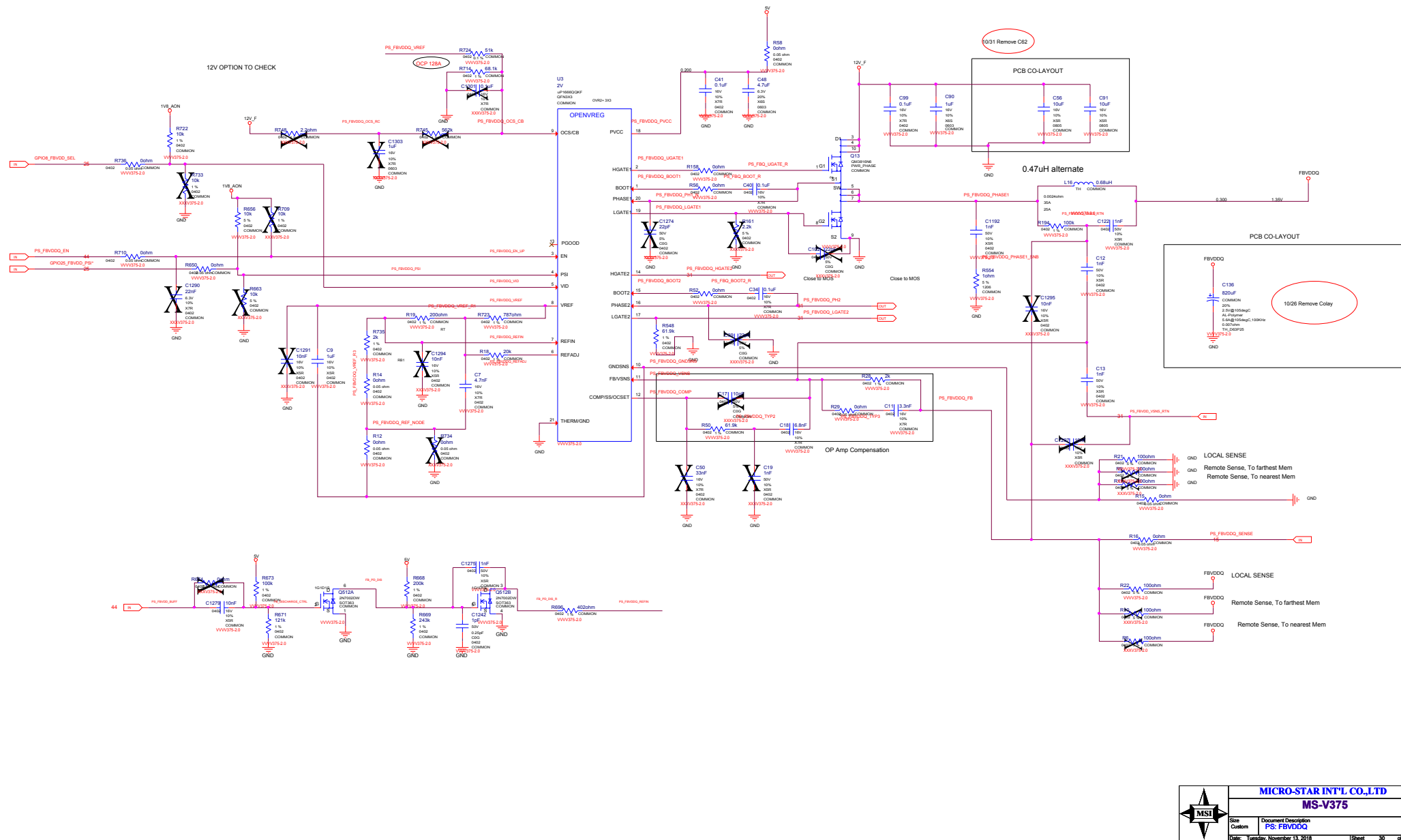


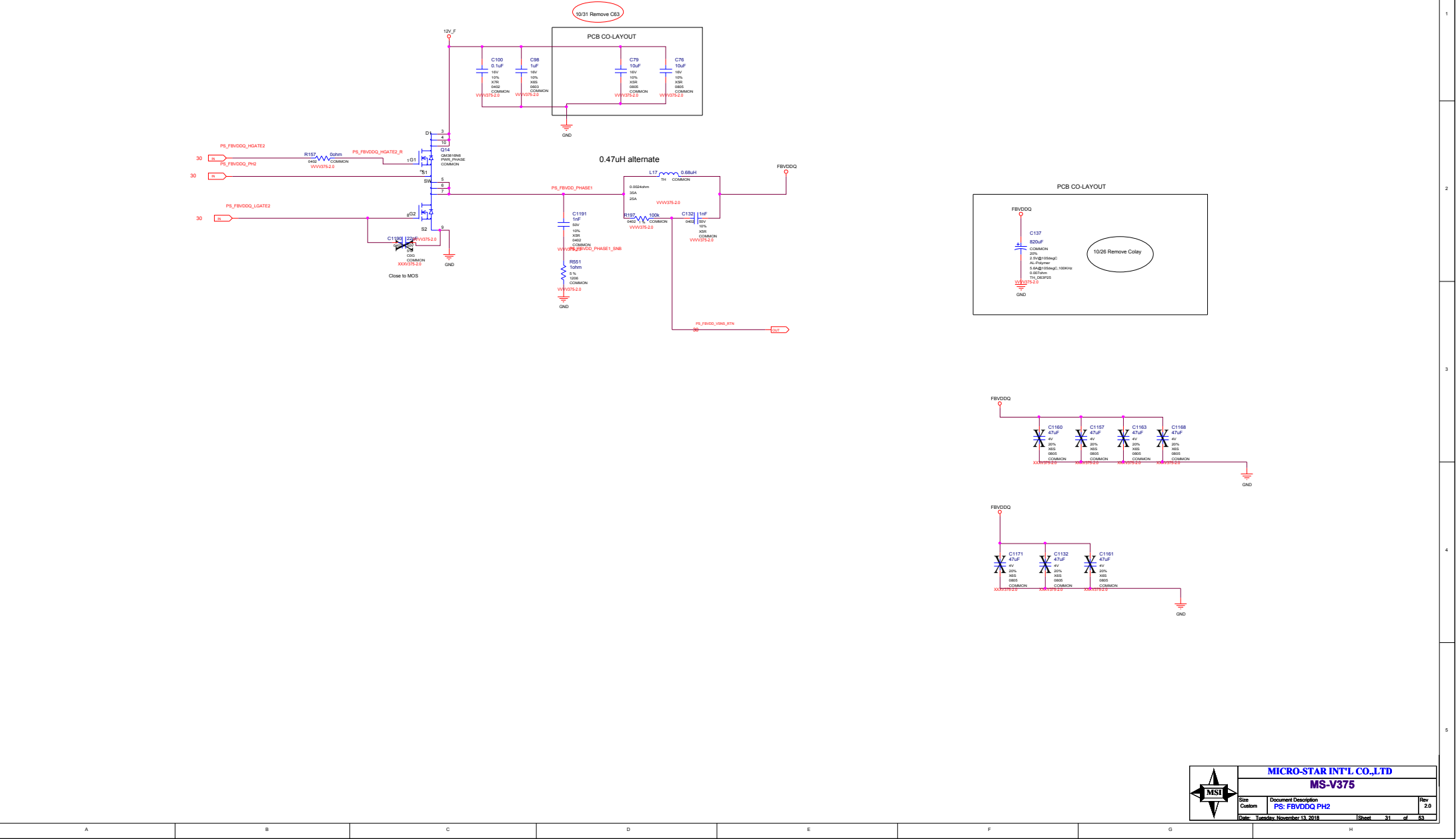
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|   | <b>MS-V375</b>                   |  |            |
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|   | Date: Tuesday, November 13, 2018 | Sheet 27 of 33                             |            |

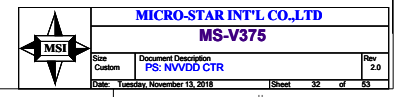
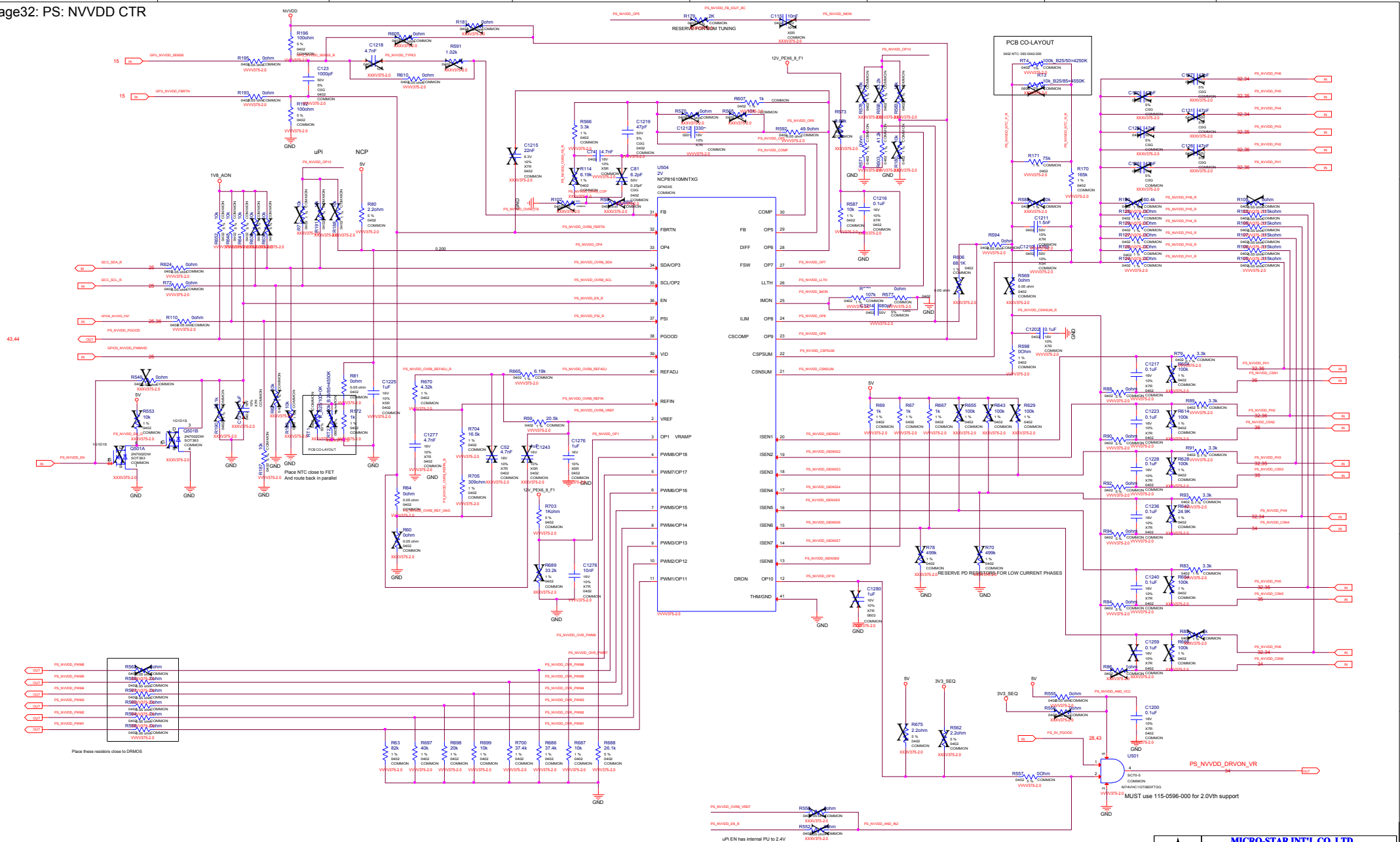


PEX Switcher







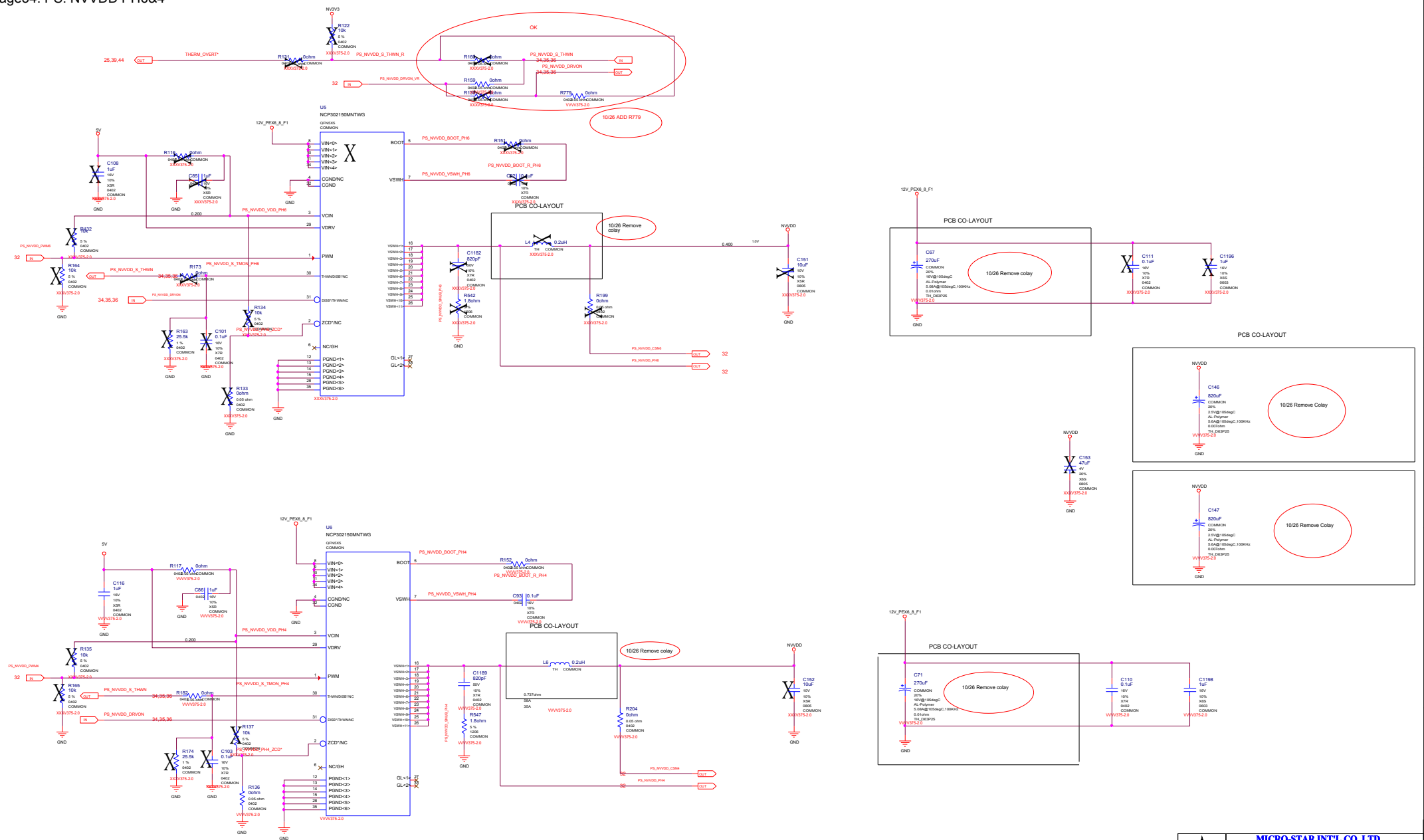


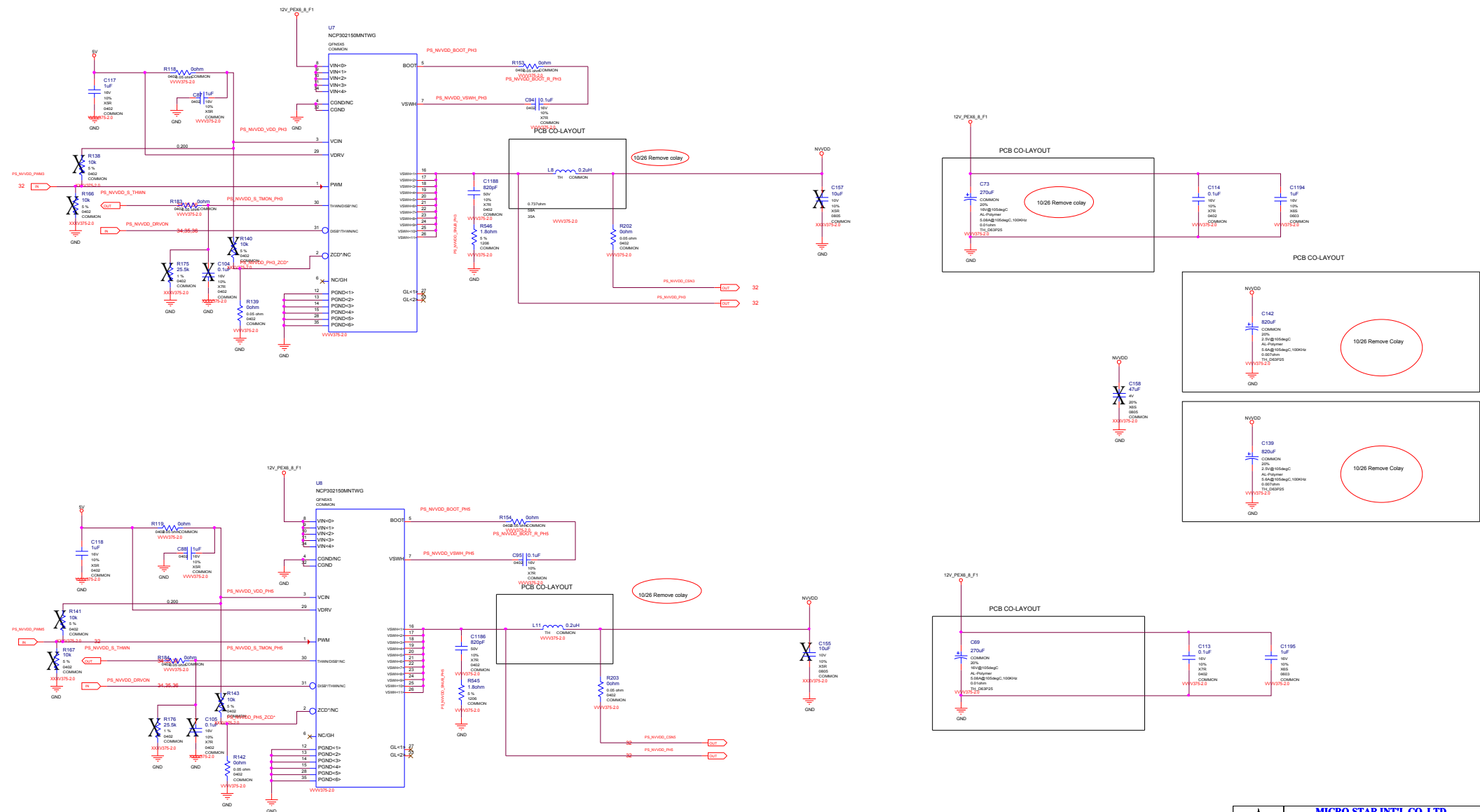


DROP OVR3i SOLUTION




|                          |                            |                |
|--------------------------|----------------------------|----------------|
| MICRO-STAR INT'L CO.,LTD |                            |                |
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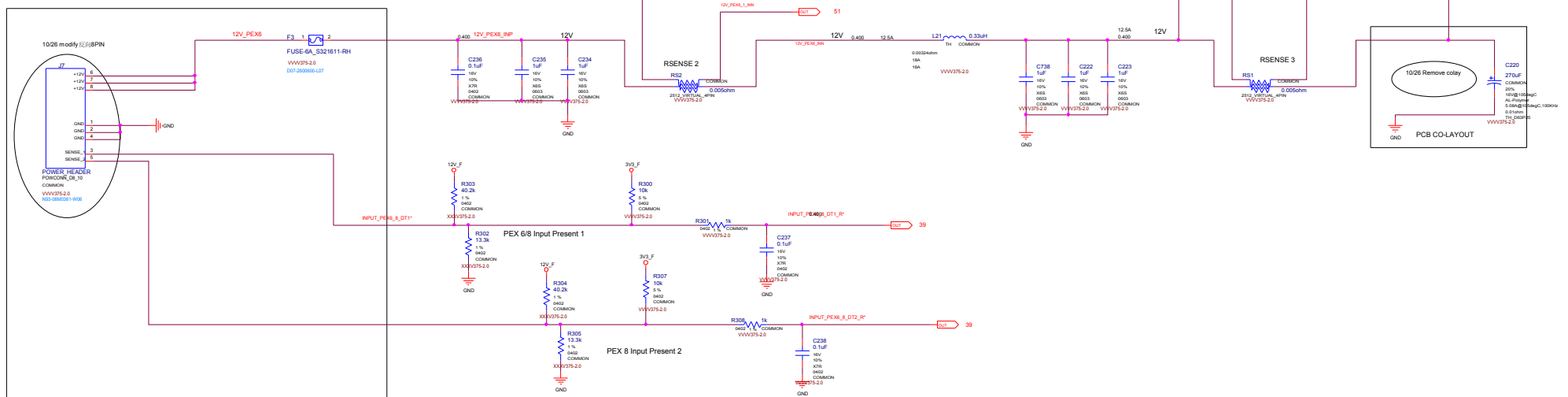




DELETE RAIL BALANCE CIRCUIT

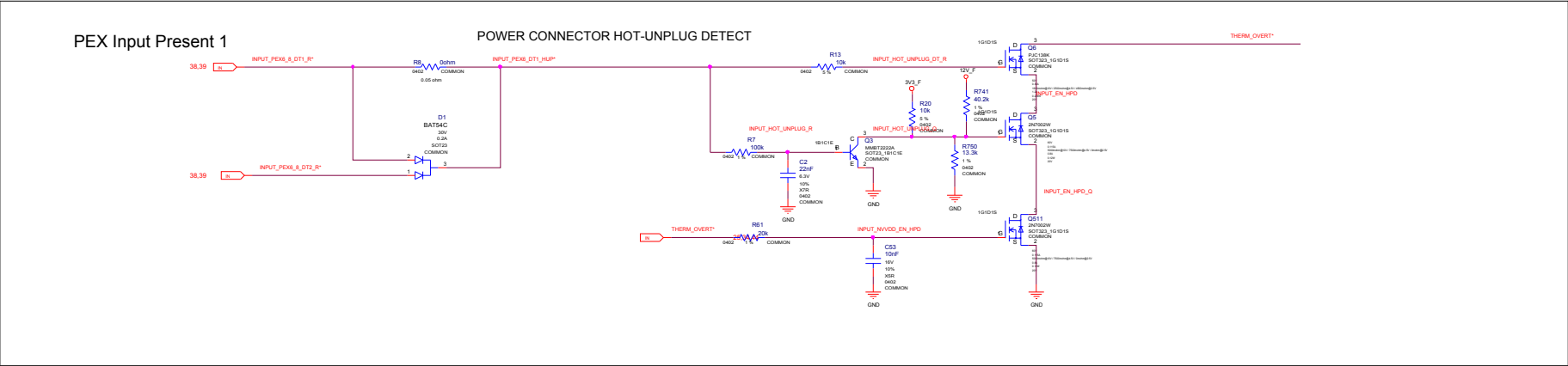


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| MICRO-STAR INT'L CO.,LTD |                                |                |
| MS-V375                  |                                |                |
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| Custom                   | Input Power Balancing Switcher | 2.0            |
| Date:                    | Tuesday, November 13, 2018     | Sheet 37 of 53 |



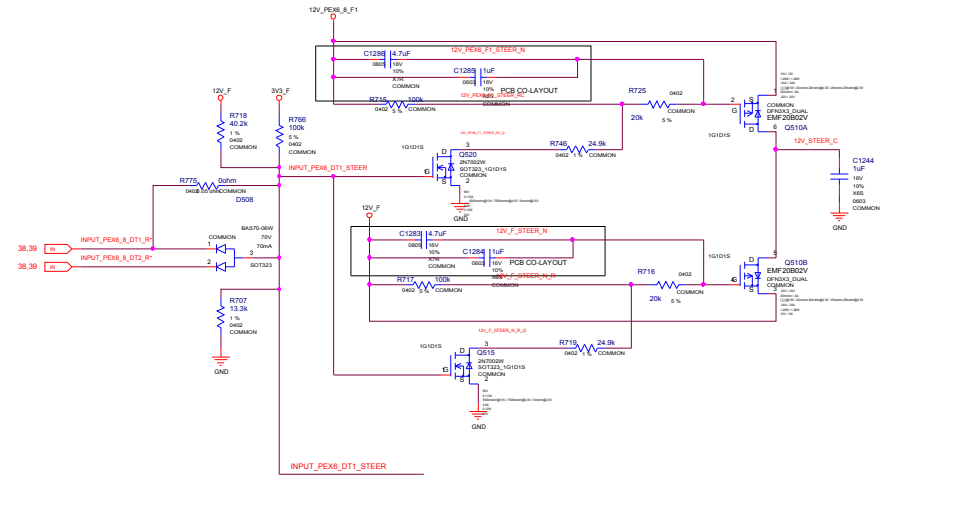
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**MS-V375**

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| Date: Tuesday, November 13, 2018 |  | Sheet 38 of 53 |

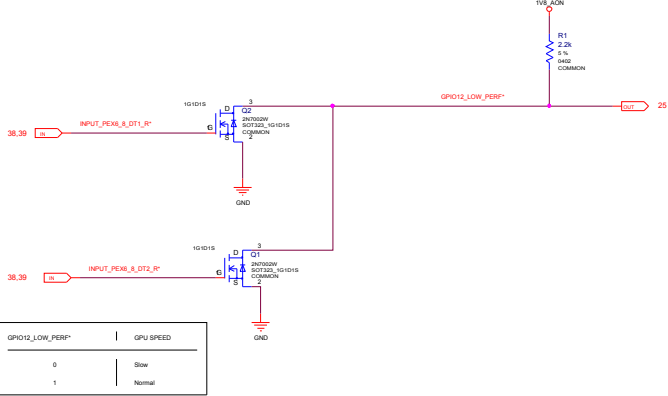


12V CURRENT STEERING (UNDER POWER BOOT):

GUIDES CURRENT FROM PEX EDGE TO PEX 8 PIN INPUT AREA



PEX Input - Power Level/PSI\* Control





MICRO-STAR INT'L CO.,LTD

MS-V375

|                                  |                      |                |
|----------------------------------|----------------------|----------------|
| Size                             | Document Description | Rev            |
| Custom                           | BUCKBOOST            | 2.0            |
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MICRO-STAR INT'L CO.,LTD

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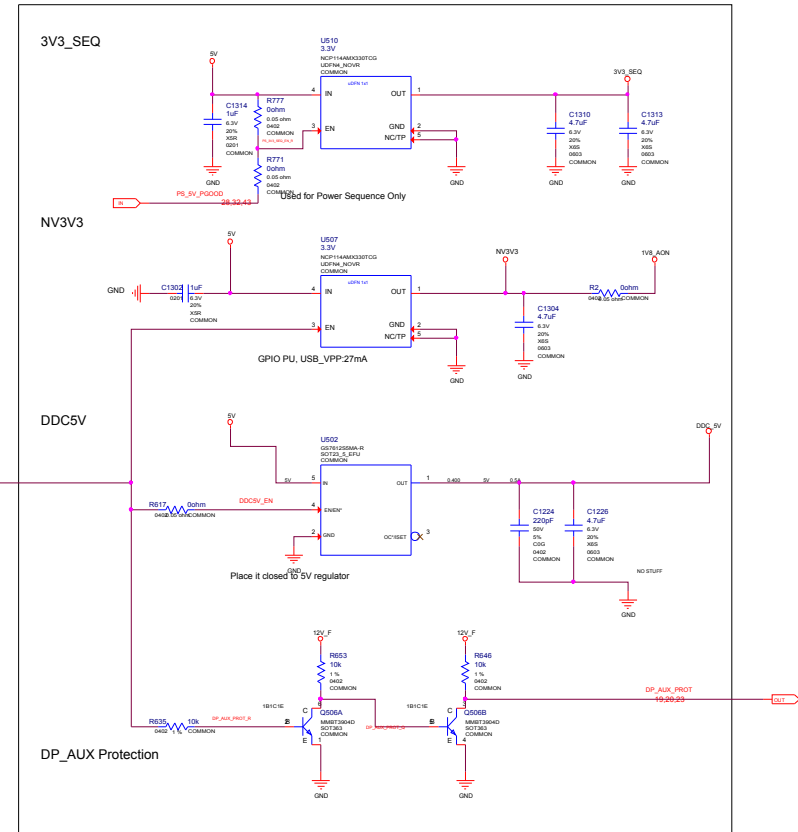
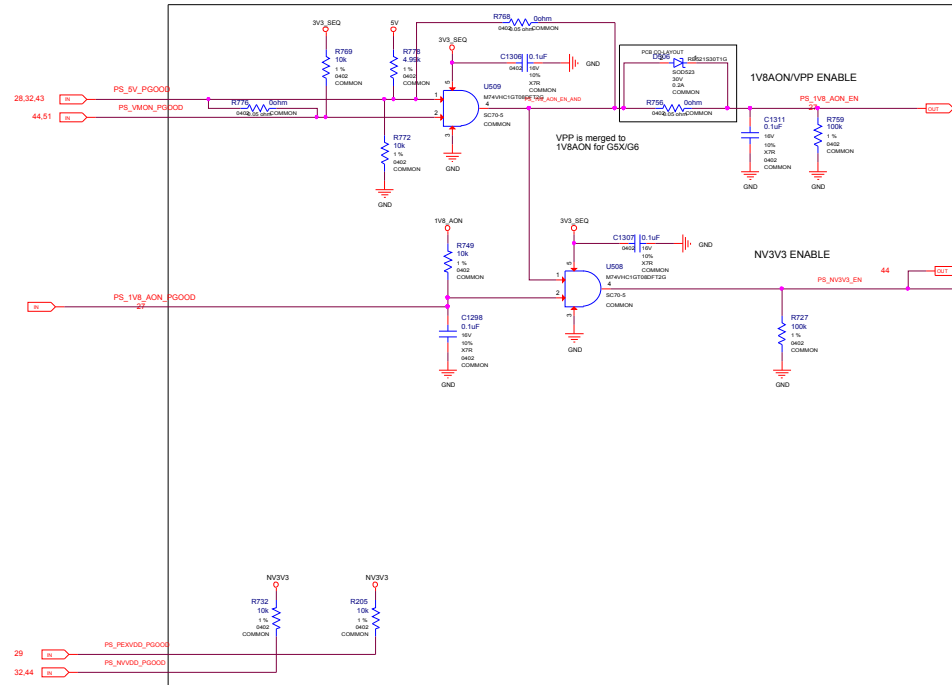
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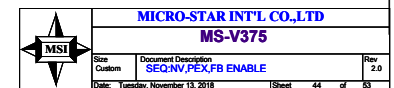
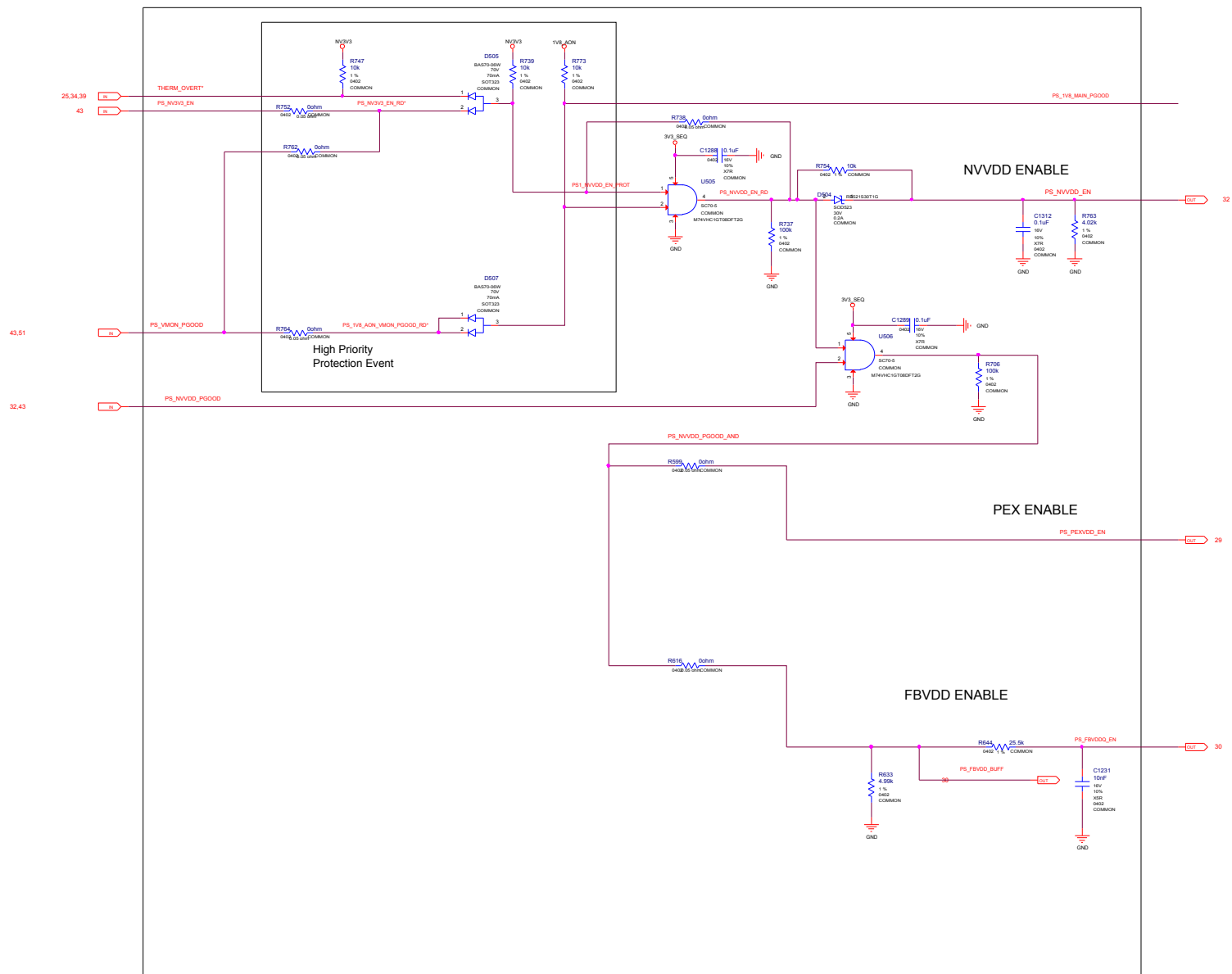


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| Custom | 12V & 3V3_A SWITCHER       | 2.0            |
| Date   | Tuesday, November 13, 2018 | Sheet 42 of 53 |







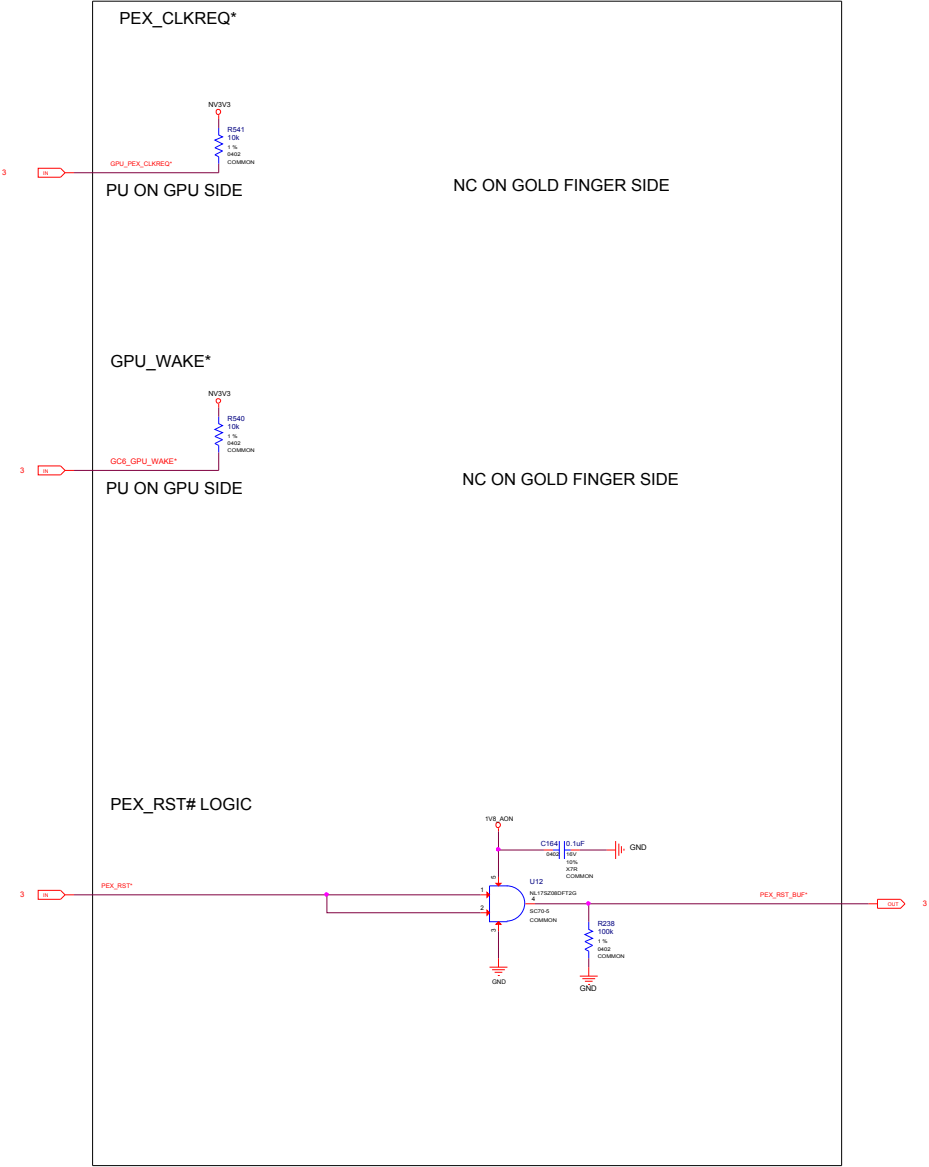
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| Custom                   | SEQUENCE:Voltage Monitor   | 2.0            |
| Date:                    | Tuesday, November 13, 2018 | Sheet 45 of 53 |



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|        |                            |                |
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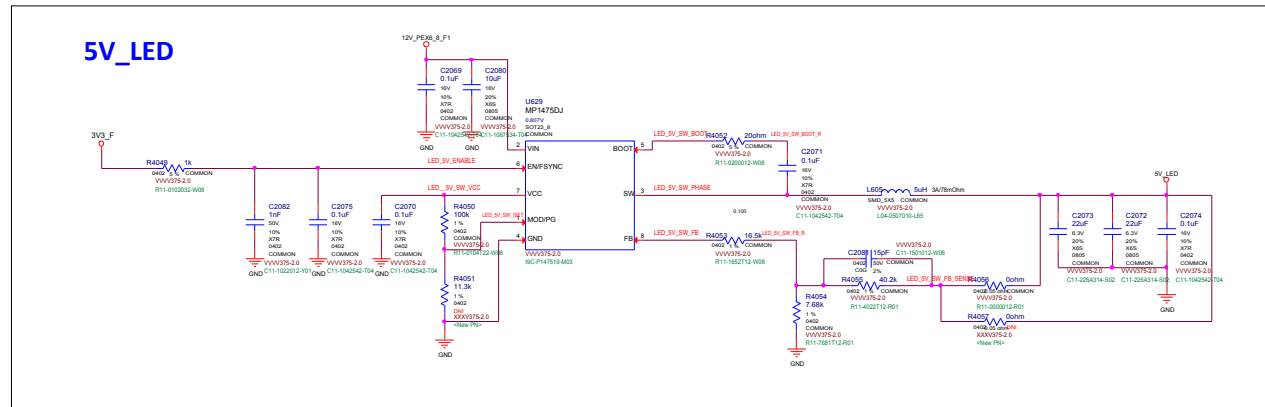
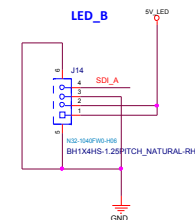
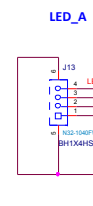
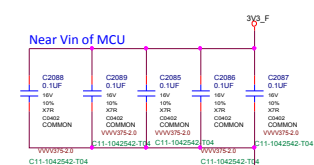
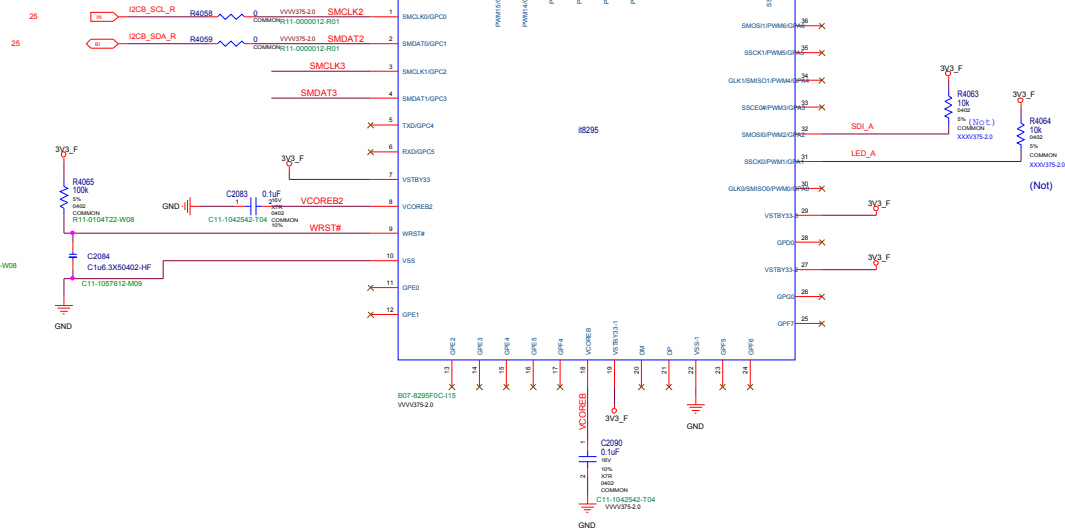
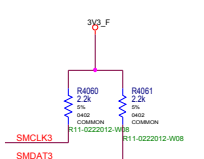
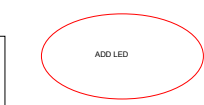
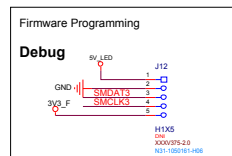


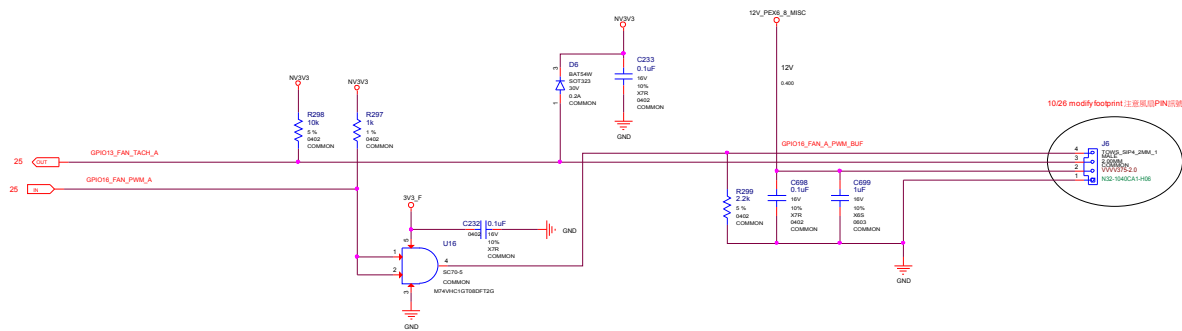
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|---|--|--|--|--|--|--|--|--|--|
| 1 |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |

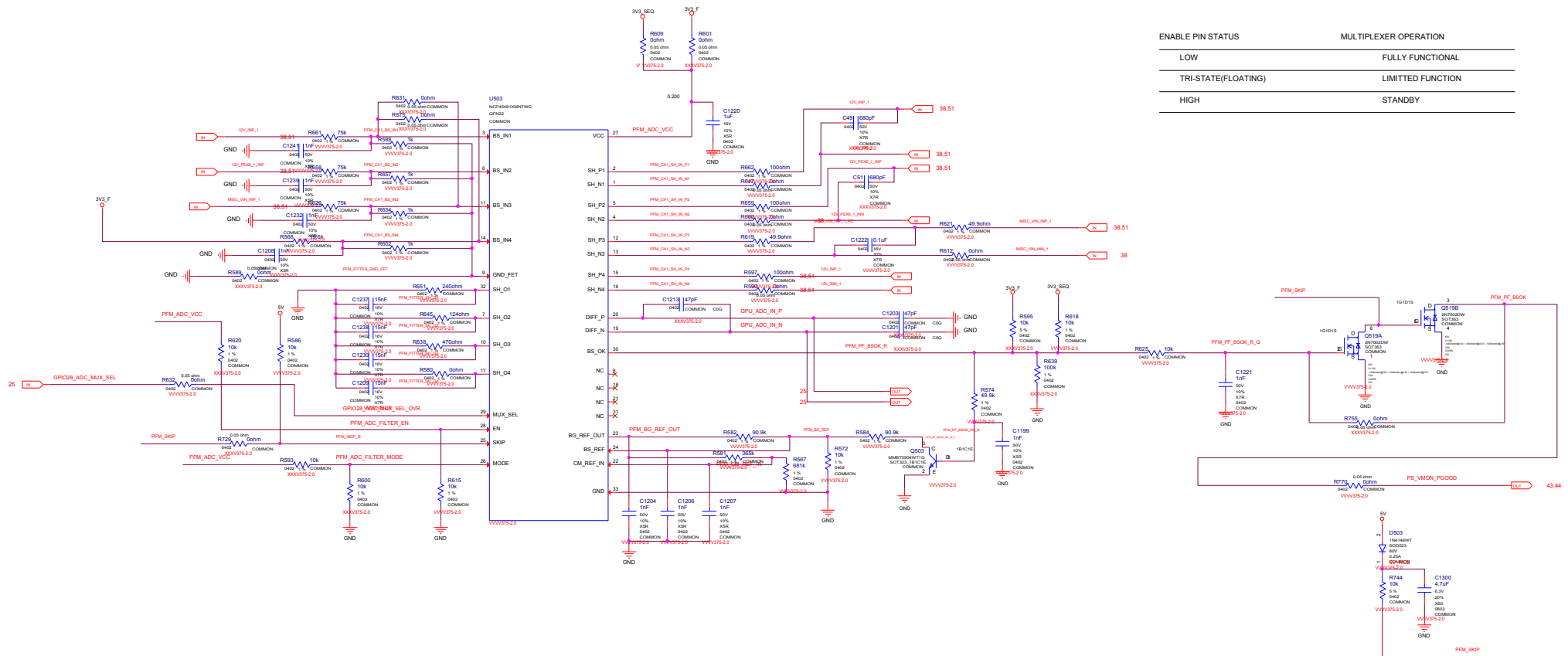


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| MICRO-STAR INT'L CO.,LTD         |                                  |                |
| MS-V375                          |                                  |                |
| Size<br>Custom                   | Document Description<br>LOGO LED | Rev<br>2.0     |
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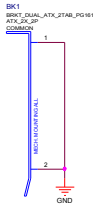




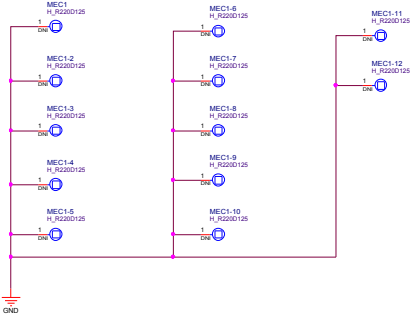




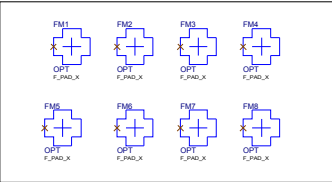
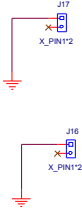
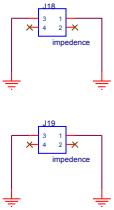
Bracket:



MOUNTING HOLES FOR HS:



BACK STIFFENER:





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| Size                             | Document Description | Rev            |
| Custom                           | PTC                  | 2.0            |
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