

PG142-B00

DP + DP + DP + HDMI/DP

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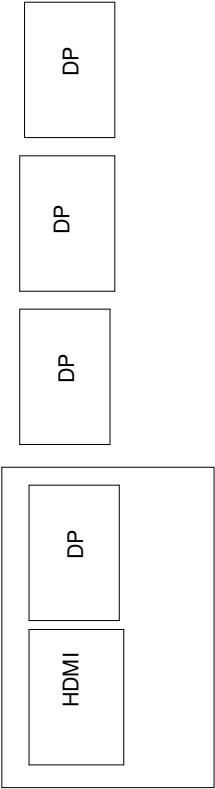
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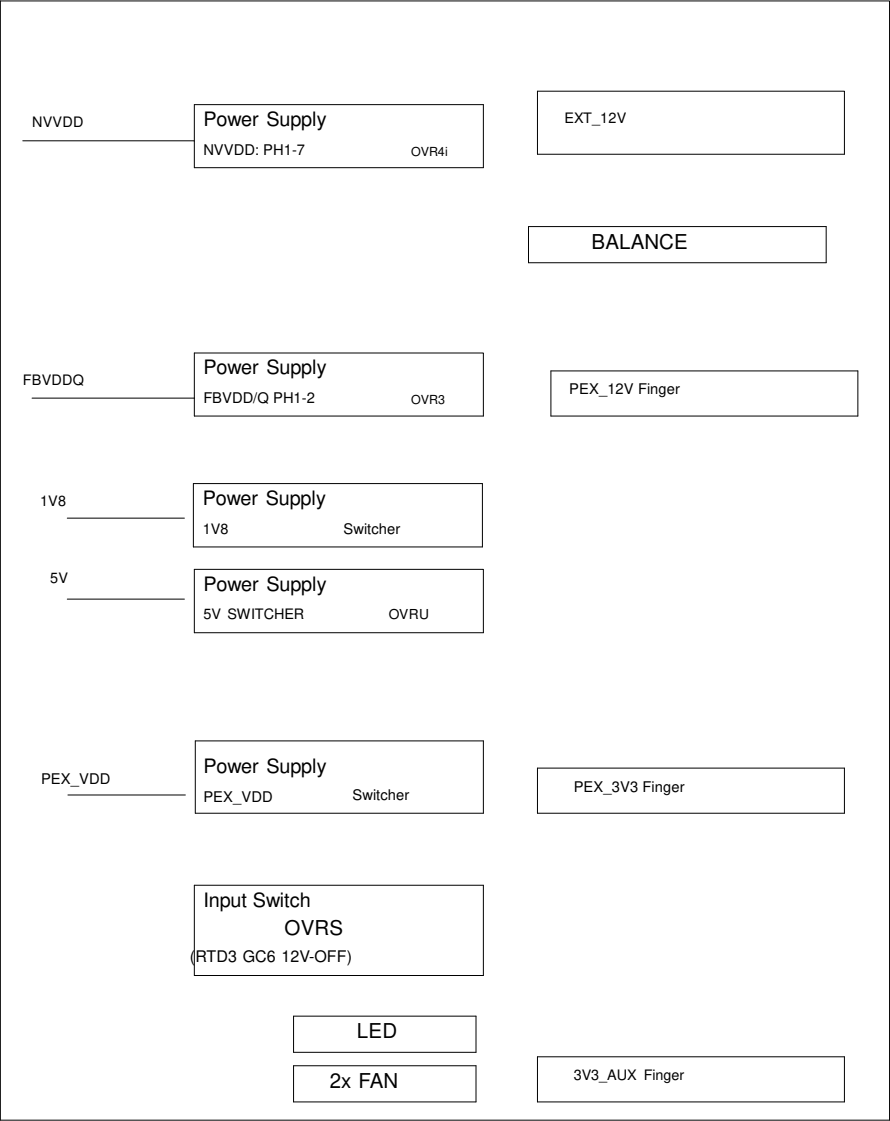
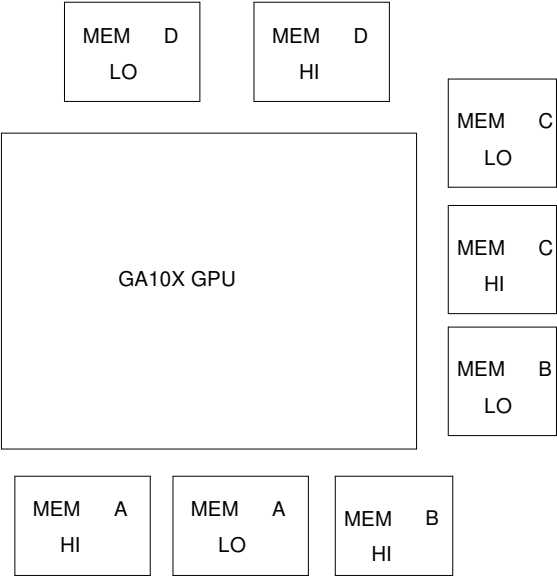
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| NV_PN   | 600-1G142-BASE-100 |      |             |
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| ASSEMBLY     | ASSEMBLY DESCRIPTION |
|--------------|----------------------|
| PAGE: DETAIL | Block Diagram        |

|                                                         |                    |      |             |
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| NV_PN                                                   | 600-1G142-BASE-100 | PAGE | 2 OF 54     |
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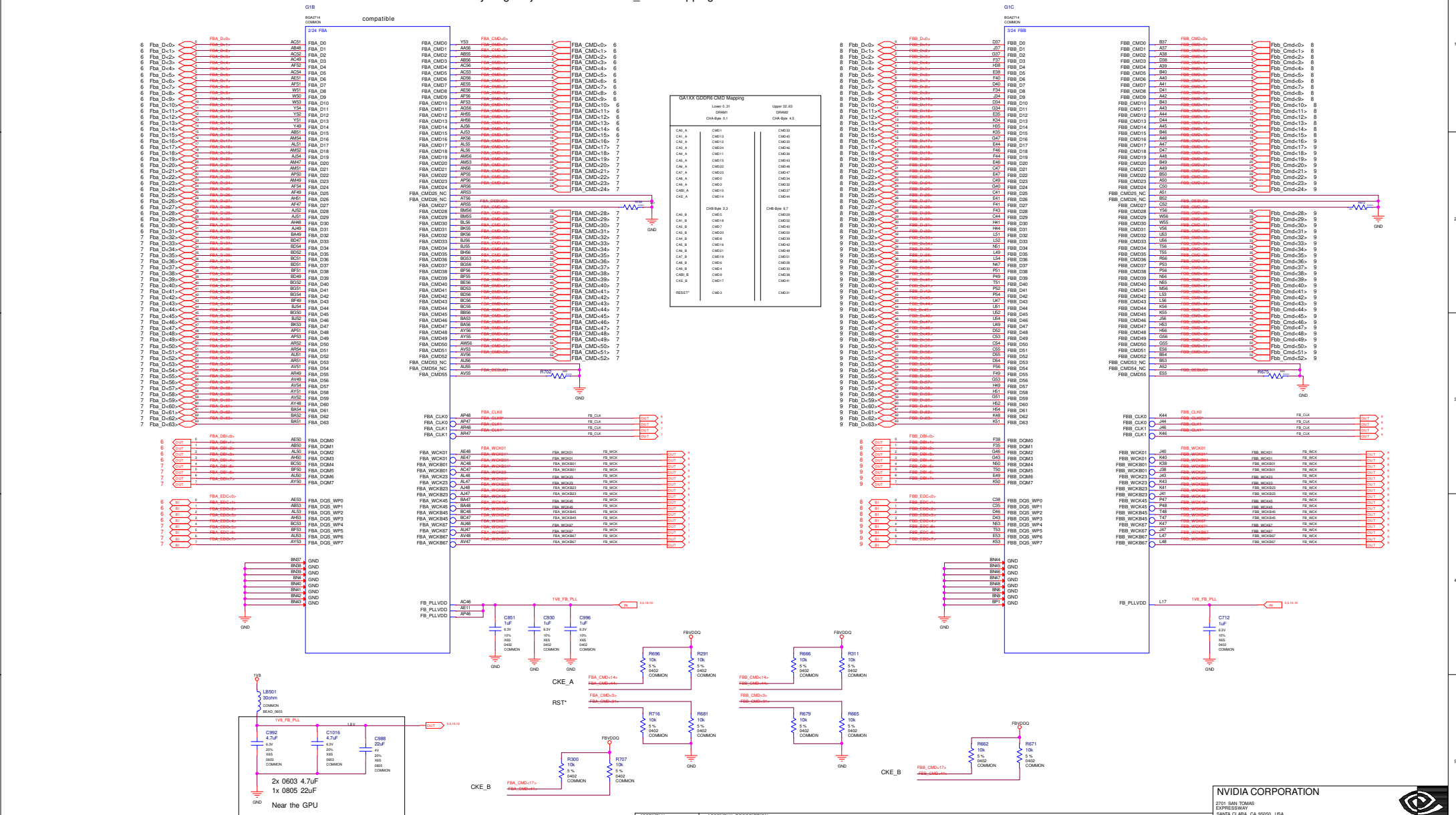
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//syseng/Projects/GA1xx/GA1XX\_CMD-Mapping.xlsx



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ASSEMBLY DESCRIPTION  
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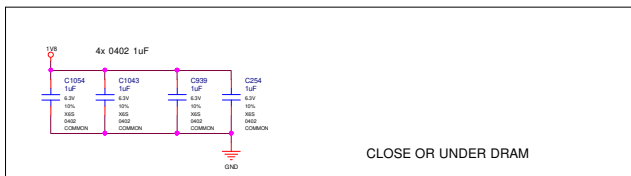
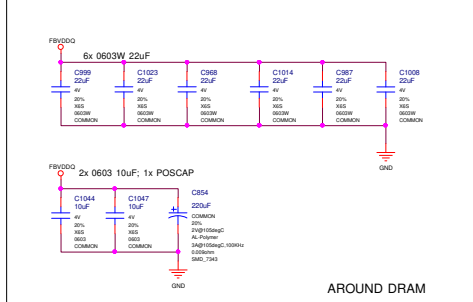
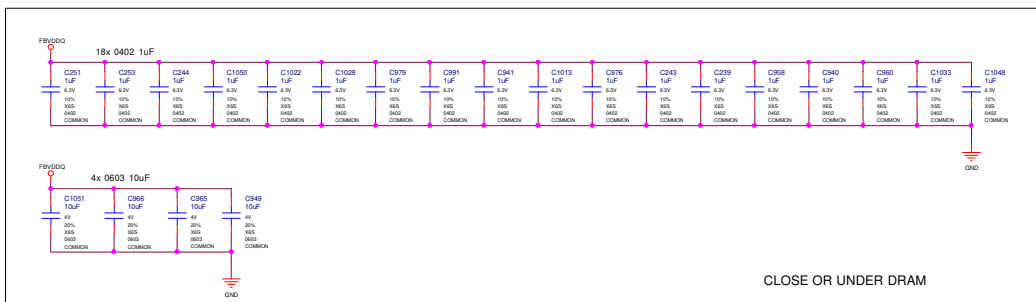
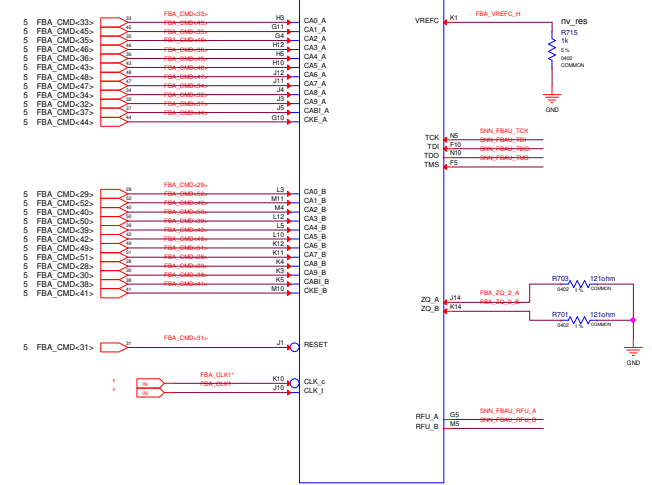
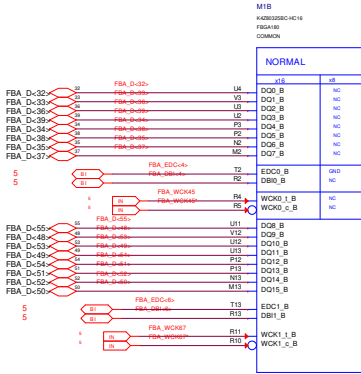
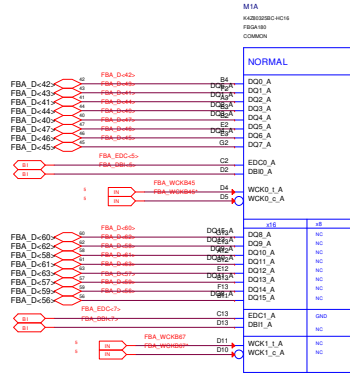
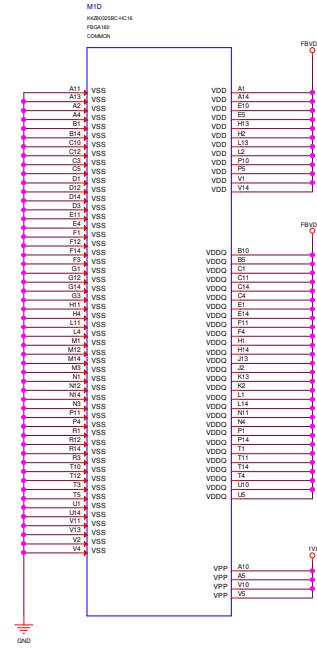
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600-IG142-BASE-100

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ASSEMBLY

ASSEMBLY DESCRIPTION

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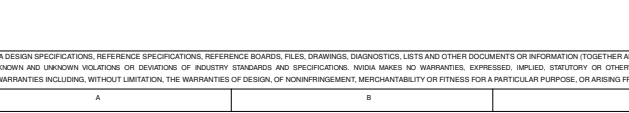
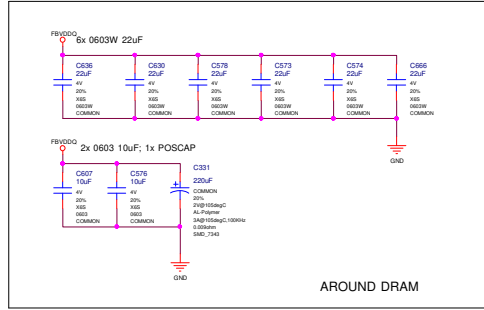
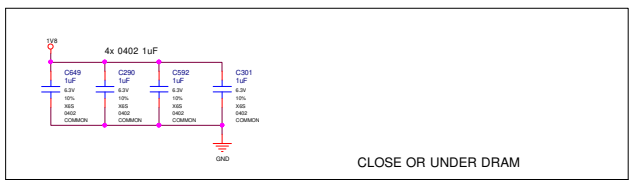
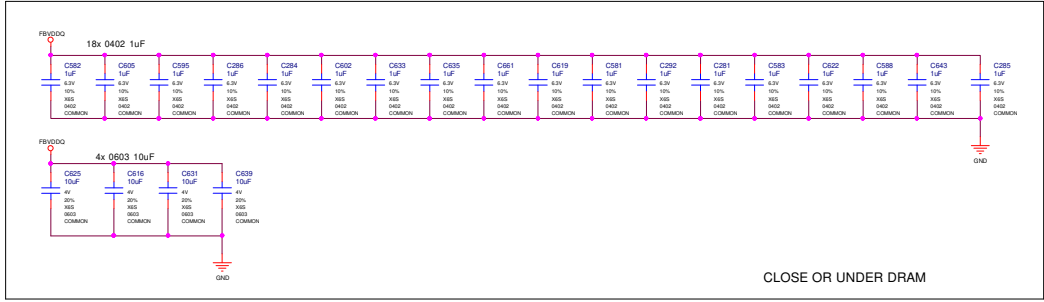
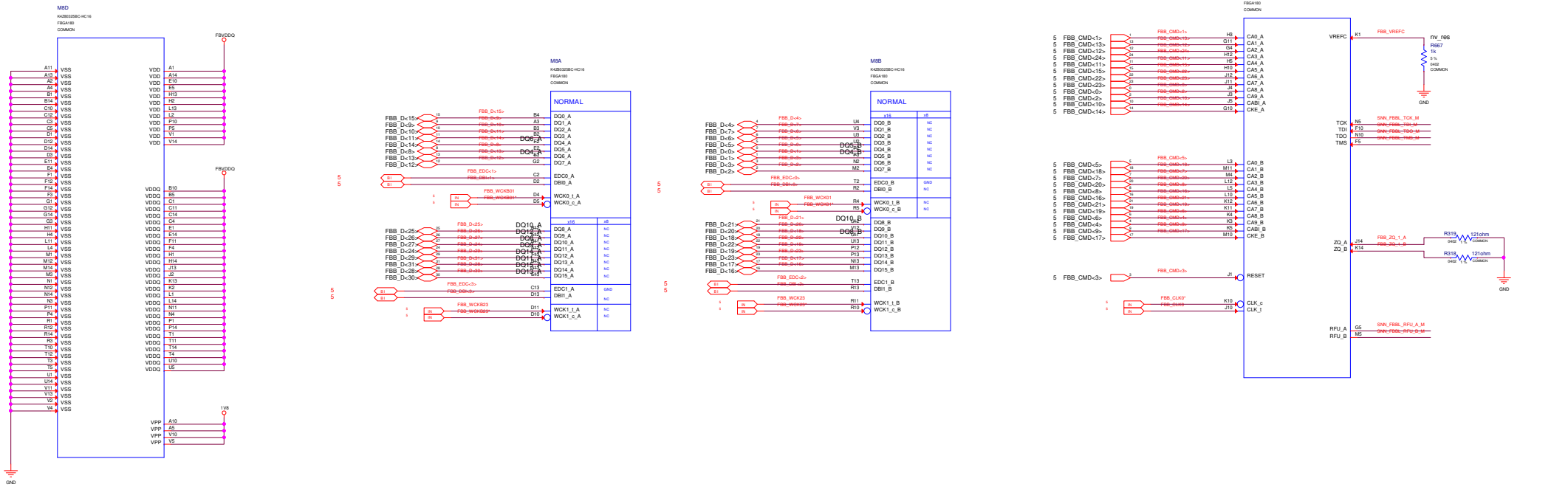
PG142-800

DATE

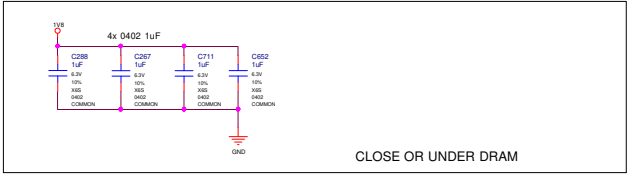
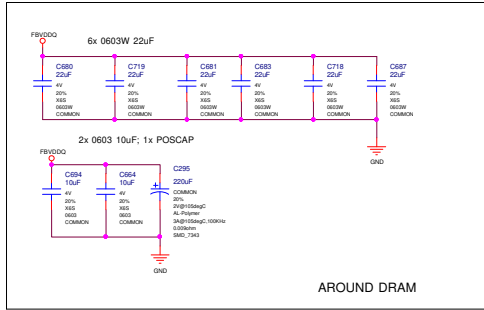
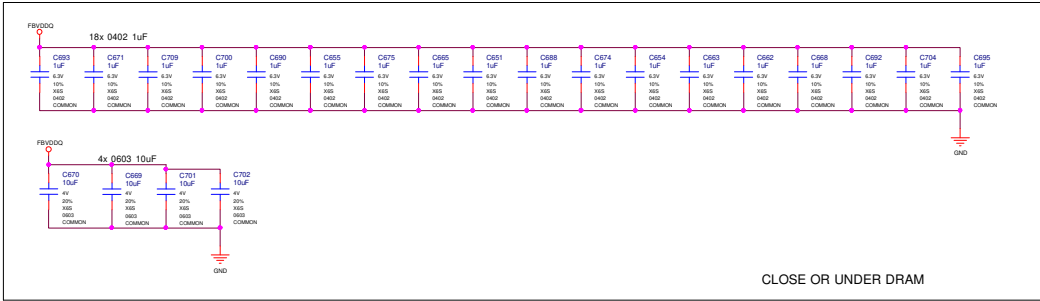
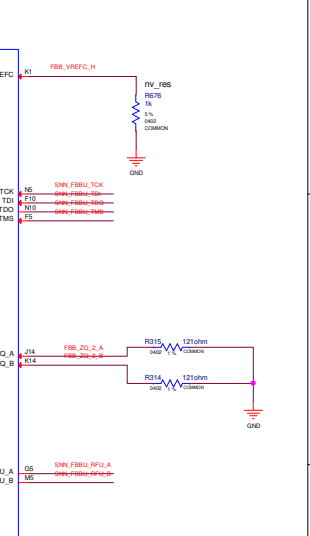
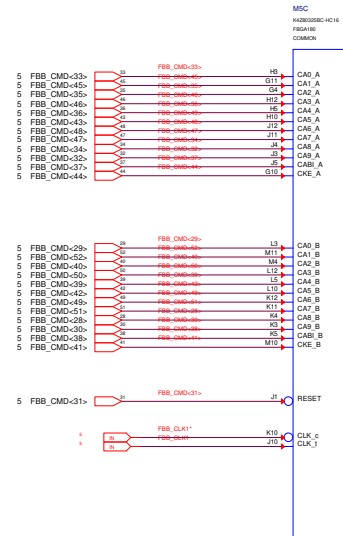
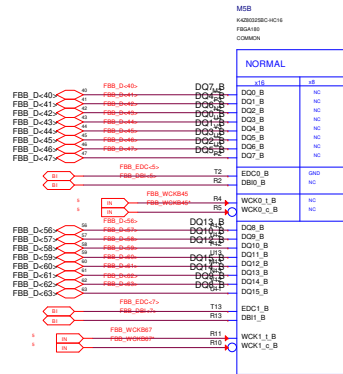
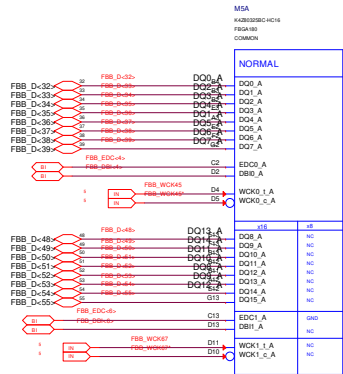
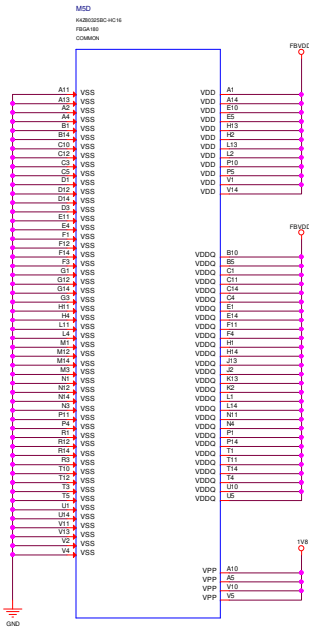
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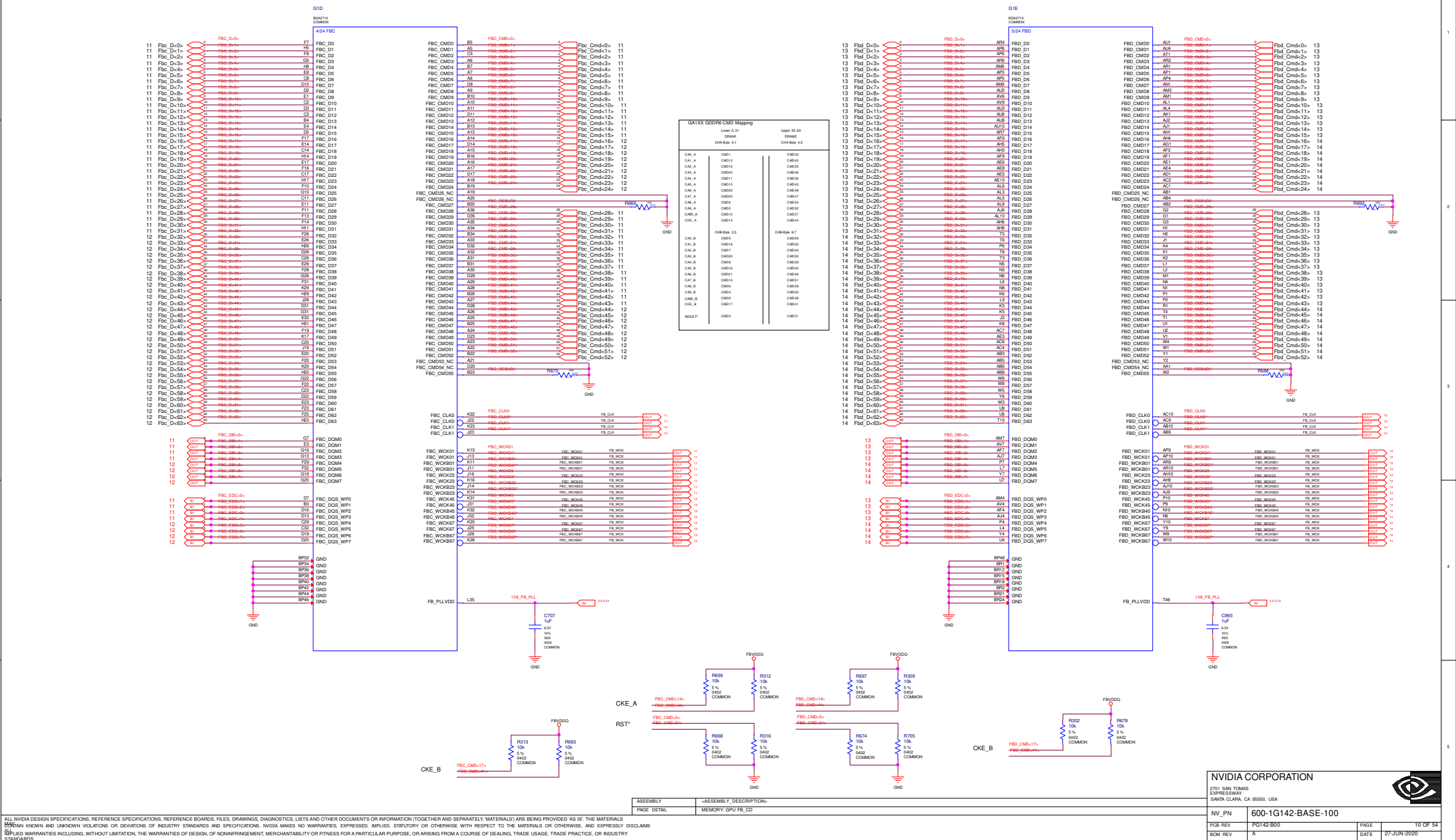
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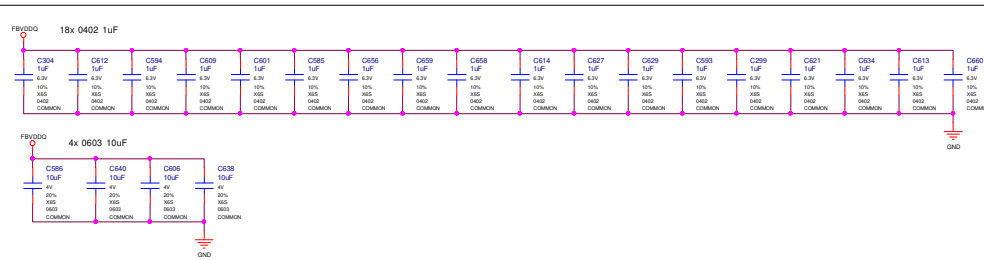
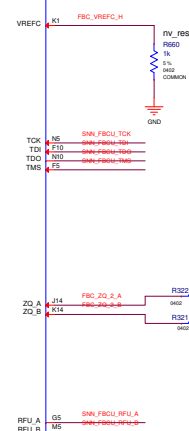
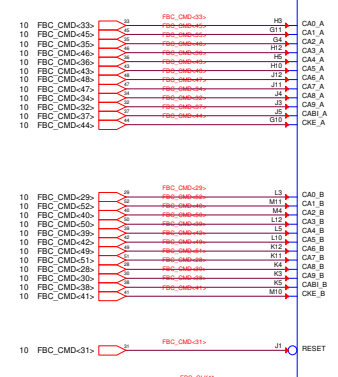
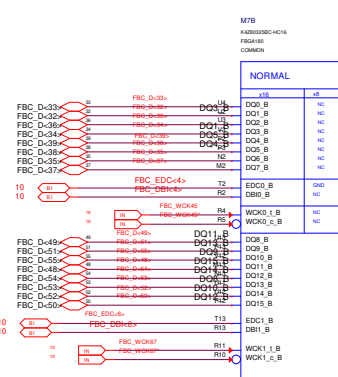
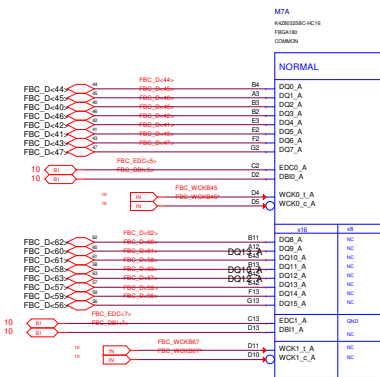
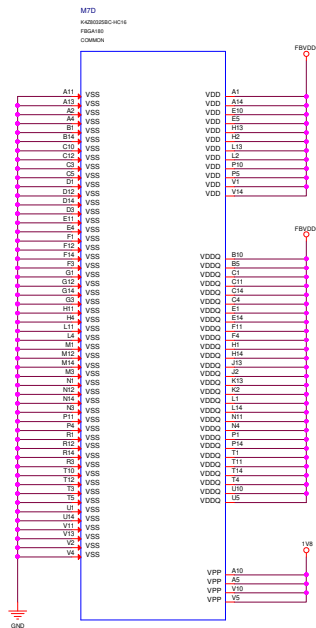
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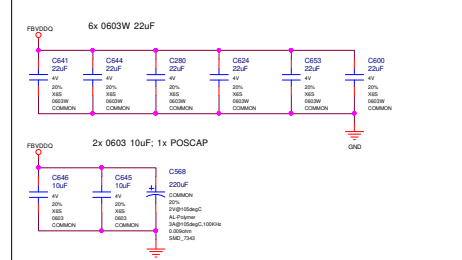
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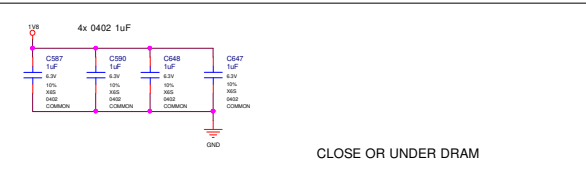




CLOSE OR UNDER DRAM



## AROUND DRAM



CLOSE OR UNDER DRAM

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| PAGE DETAIL | MEMORY: FBC[63:32]     |

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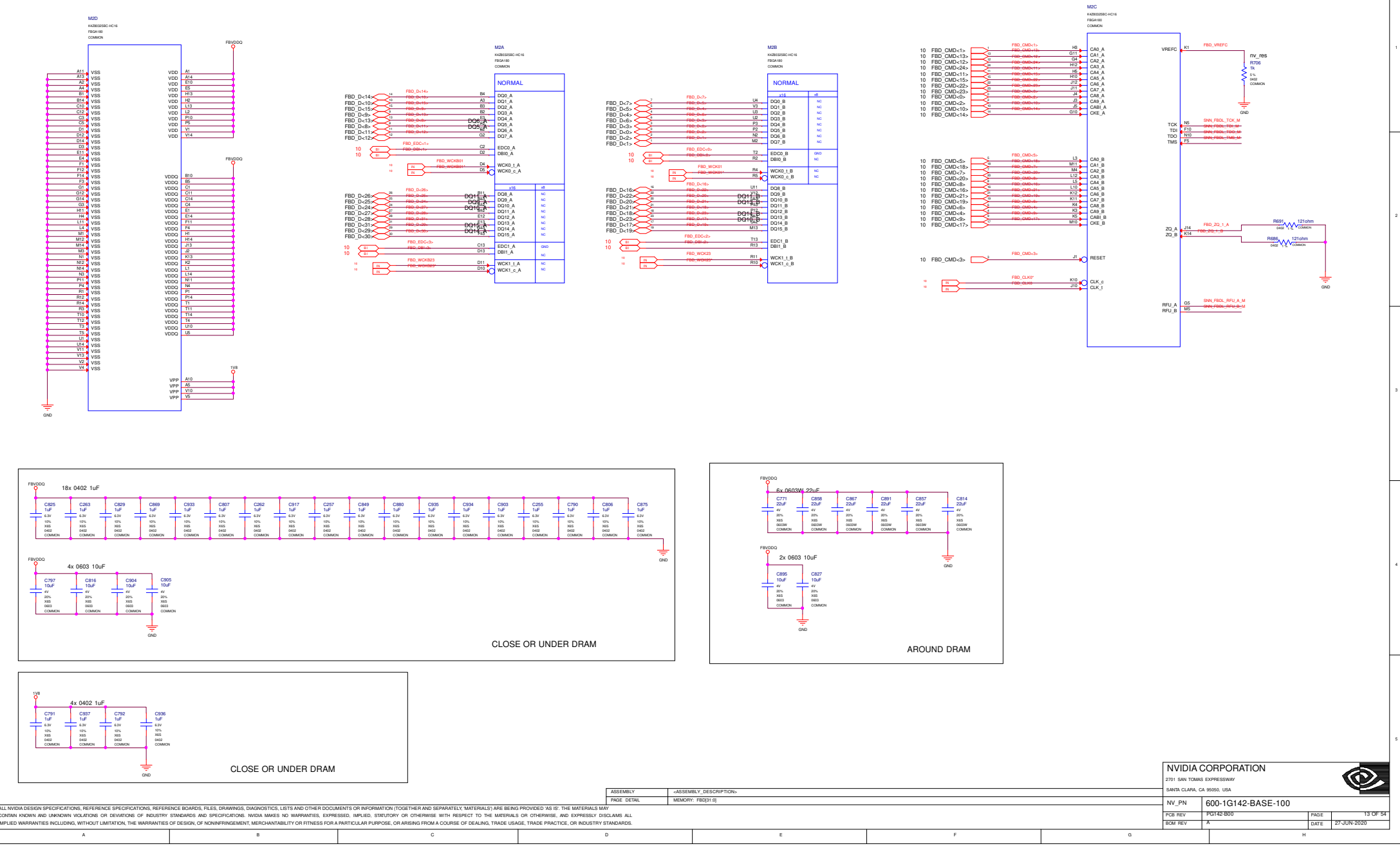
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| NV_PN | 600-1G142-BASE-100 |
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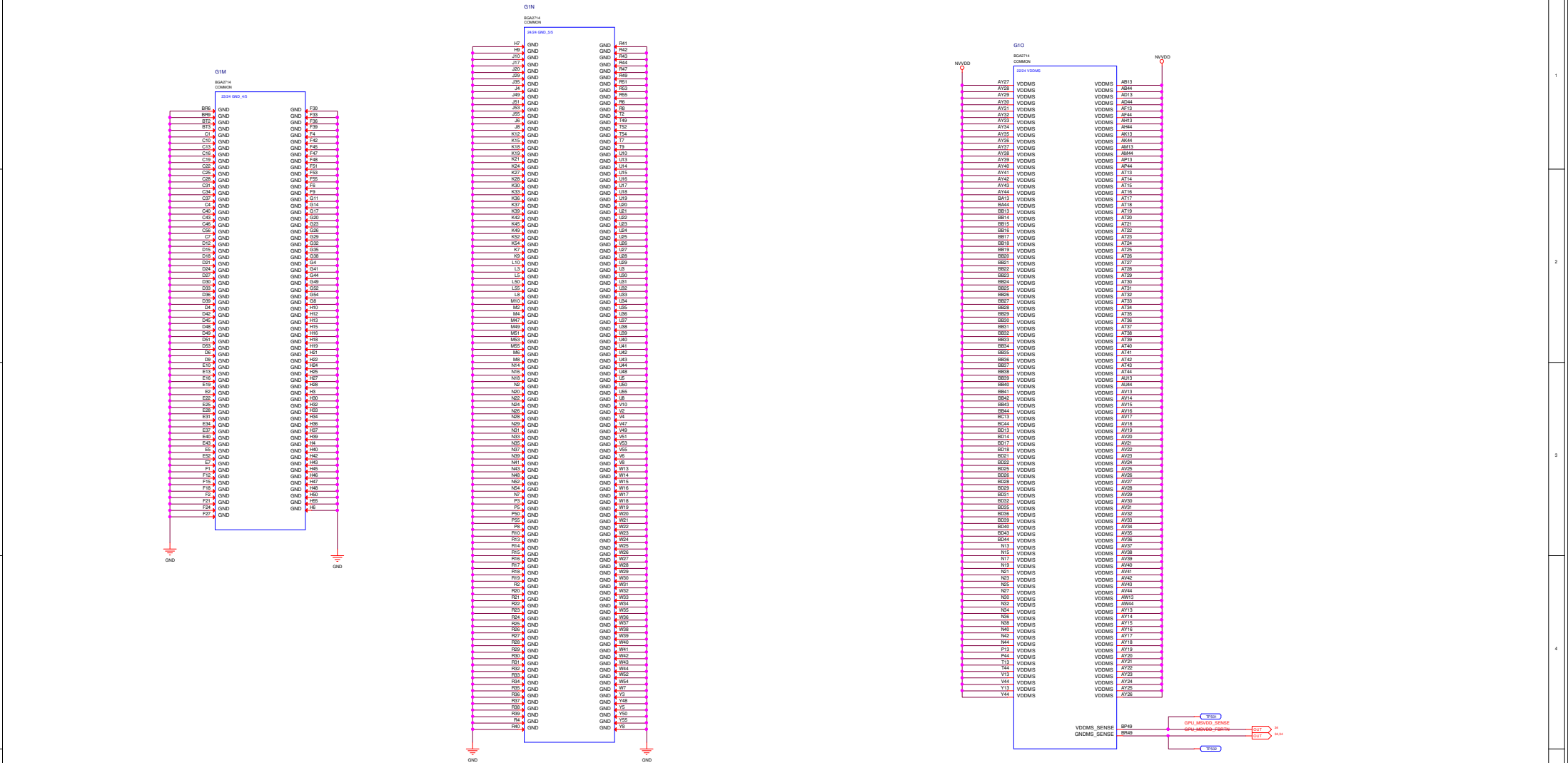
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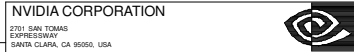






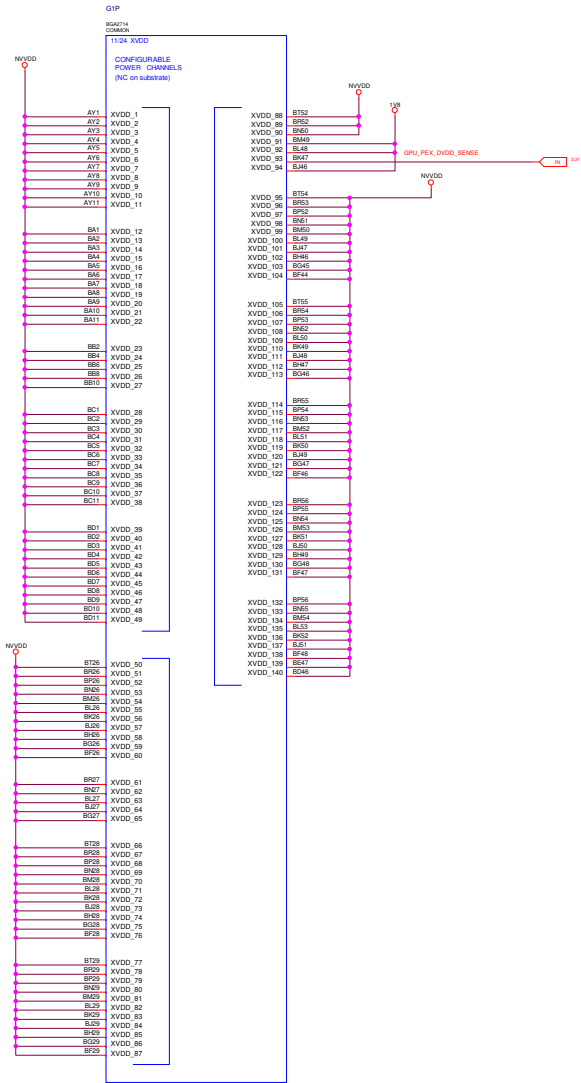
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| ASSEMBLY      | ASSEMBLY DESCRIPTION |
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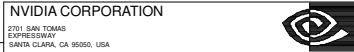


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FBVDDQ

FBVDDQ

UNDER GPU: 24x 0402 1uF; 8x 0603 10uF

Partition A

8x 1uF and 2x 10uF



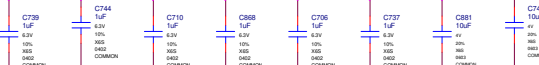
Partition B

8x 1uF and 2x 10uF



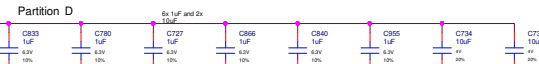
Partition C

8x 1uF and 2x 10uF



Partition D

8x 1uF and 2x 10uF

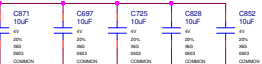


UNDER GPU

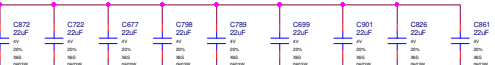
FBVDDQ

5x 0603 10uF; 9X 0603 22uF

5x 10uF



9x 22uF



CLOSE TO GPU

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|             |                        |
|-------------|------------------------|
| ASSEMBLY    | <ASSEMBLY_DESCRIPTION> |
| PAGE DETAIL | GPU DECOUPLING FBVDDQ  |

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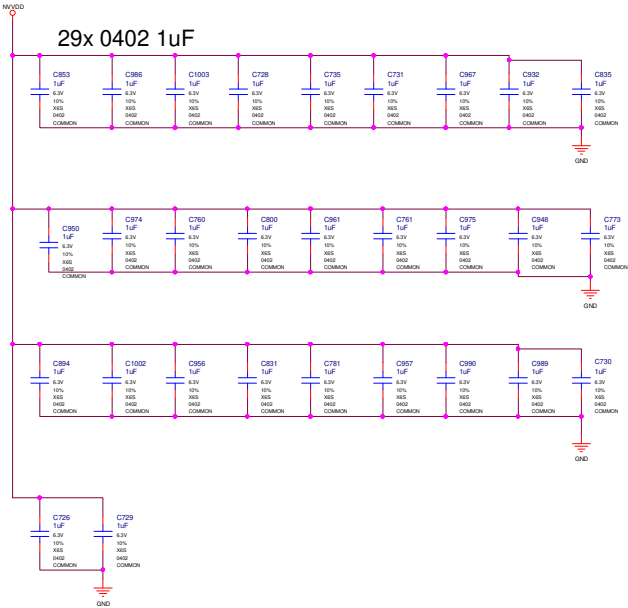
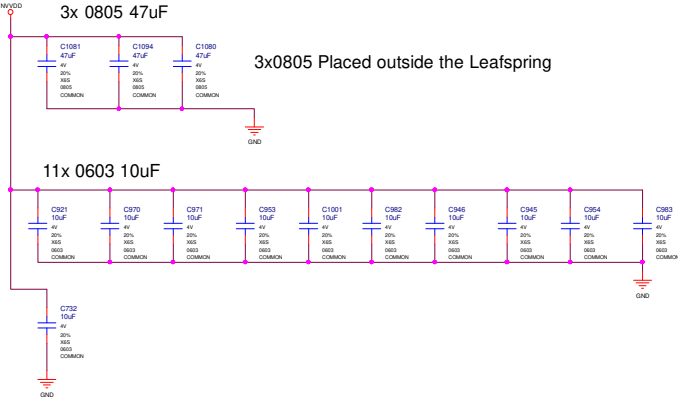
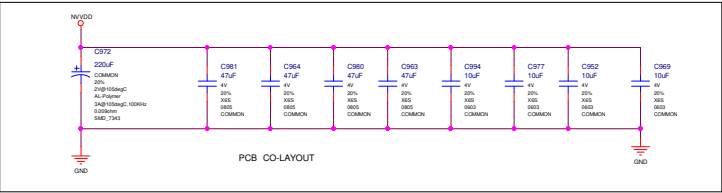
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|-------------|------------------------|
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| PAGE DETAIL | GPU DECOUPLING NVVDD   |

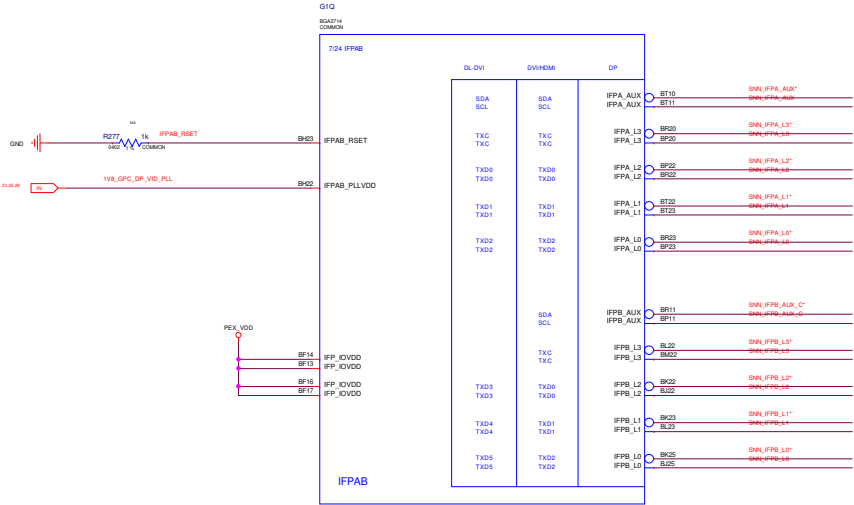
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|  |                    |
| NV_PN                                                                                 | 600-1G142-BASE-100 |
| PCB REV                                                                               | PG142-B00          |
| BCM REV                                                                               | A                  |
| PAGE                                                                                  | 19 OF 54           |
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UNDER GPU

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| NV_PN                      | 600-1G142-BASE-100 |      |             |
| PCB REV                    | PG142-B00          | PAGE | 20 OF 54    |
| BCM REV                    | A                  | DATE | 27-JUN-2020 |



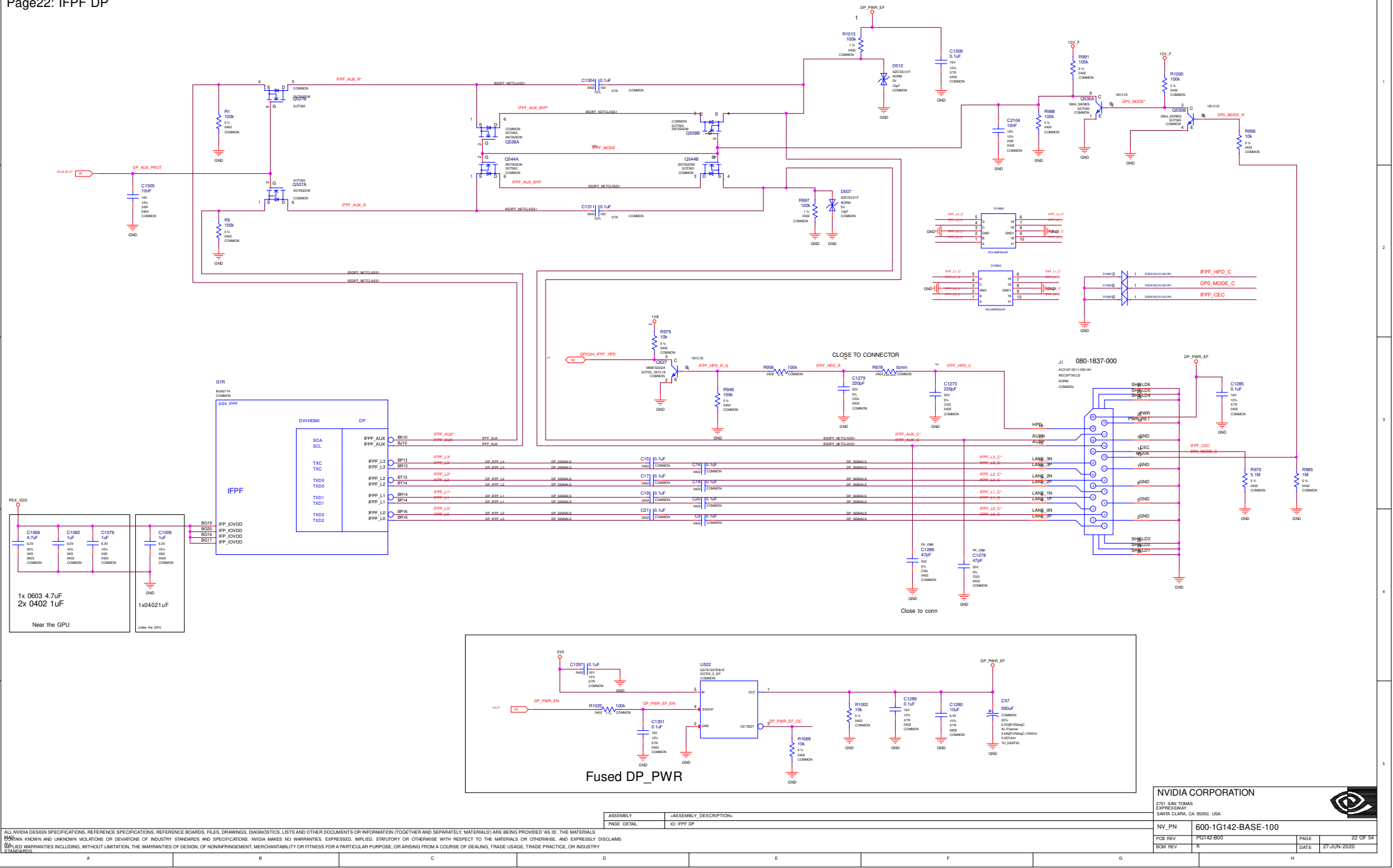
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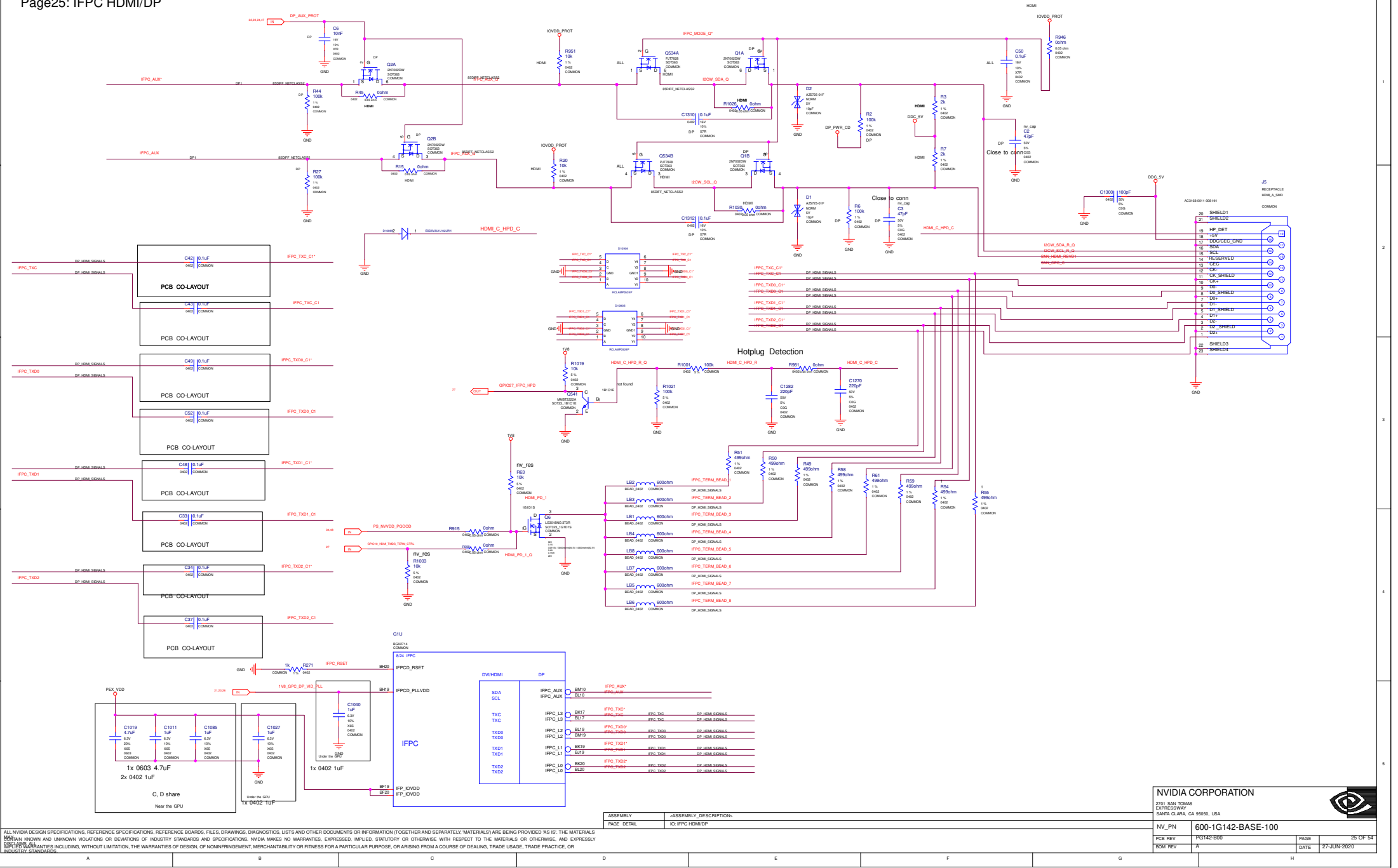
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| NV_PN   | 600-1G142-BASE-100 |      |             |
| PCB REV | PG142-B00          | PAGE | 21 OF 54    |
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| ASSEMBLY   | ASSEMBLY DESCRIPTION |
| PCB DETAIL | IFPC HDMI/DP         |

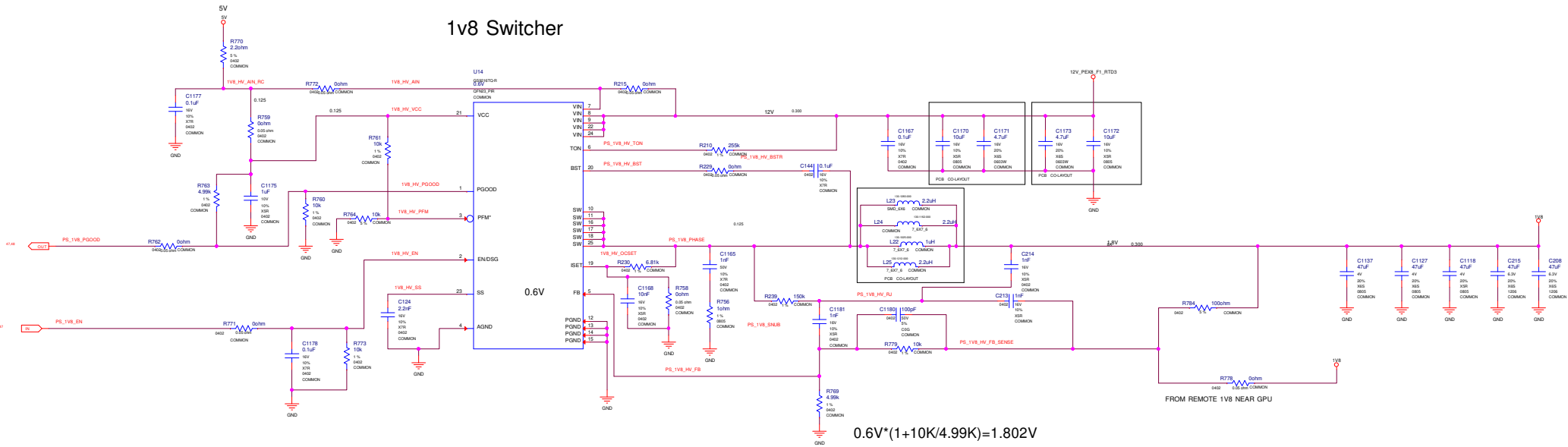
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| NV_PN                                                    | 600-1G142-BASE-100 |
| PCB REV                                                  | PG142-B00          |
| BOB REV                                                  | A                  |
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| DATE                                                     | 27-JUN-2020        |







1v8 Switcher



$0.6V \times (1 + 10K / 4.99K) = 1.802V$

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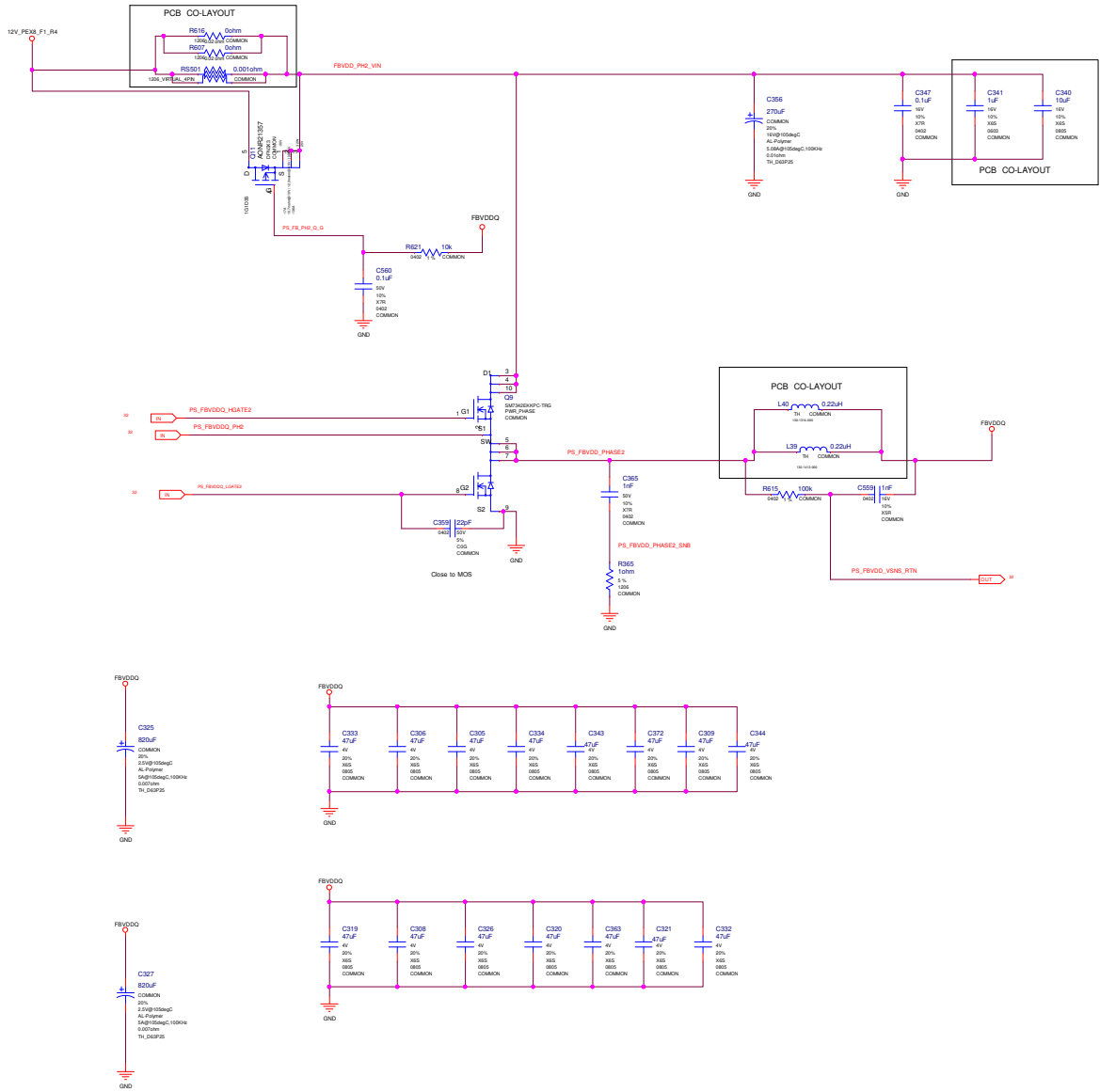




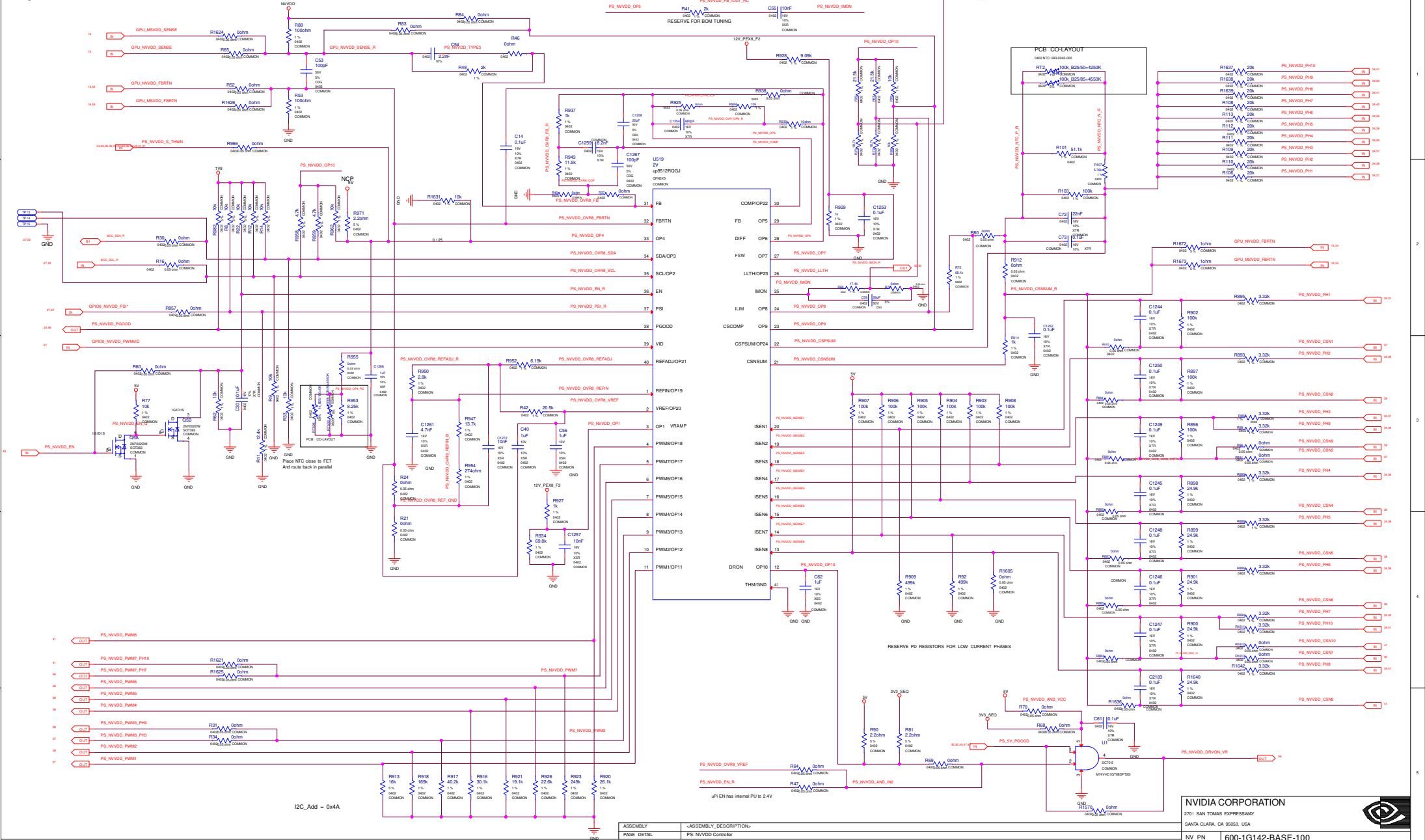




FBVDD PH2 INPUT ANTI-BACKDRIVE



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| FCM REV A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>PG147: B00</p> <p>DATE: 27-JUN-2020</p> <p>34 OF 54</p> |

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| ASSEMBLY     | ASSEMBLY DESCRIPTION |
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| NV_PN                                                                                 | 600-1G142-BASE-100 |      |             |
| PCB REV                                                                               | PG142-B00          | PAGE | 35 OF 54    |
| BCM REV                                                                               | A                  | DATE | 27-JUN-2020 |

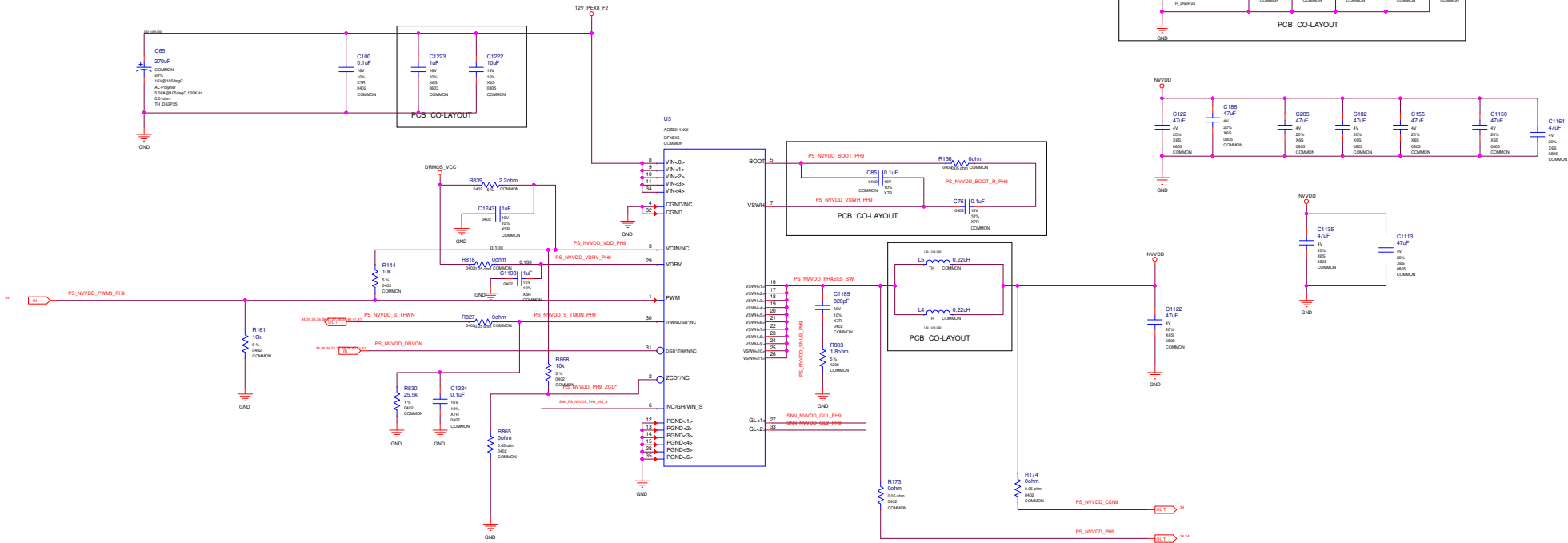
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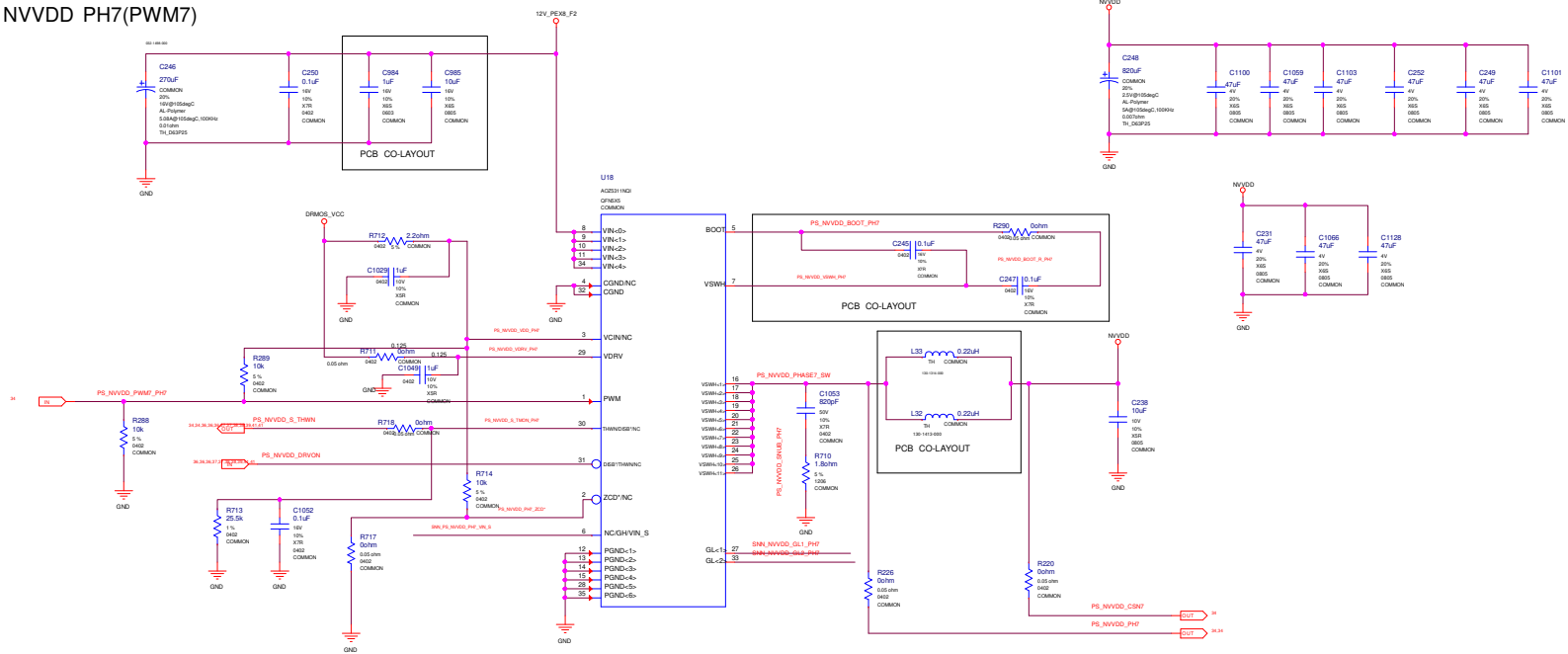




NVVDD PH9(PWM3)

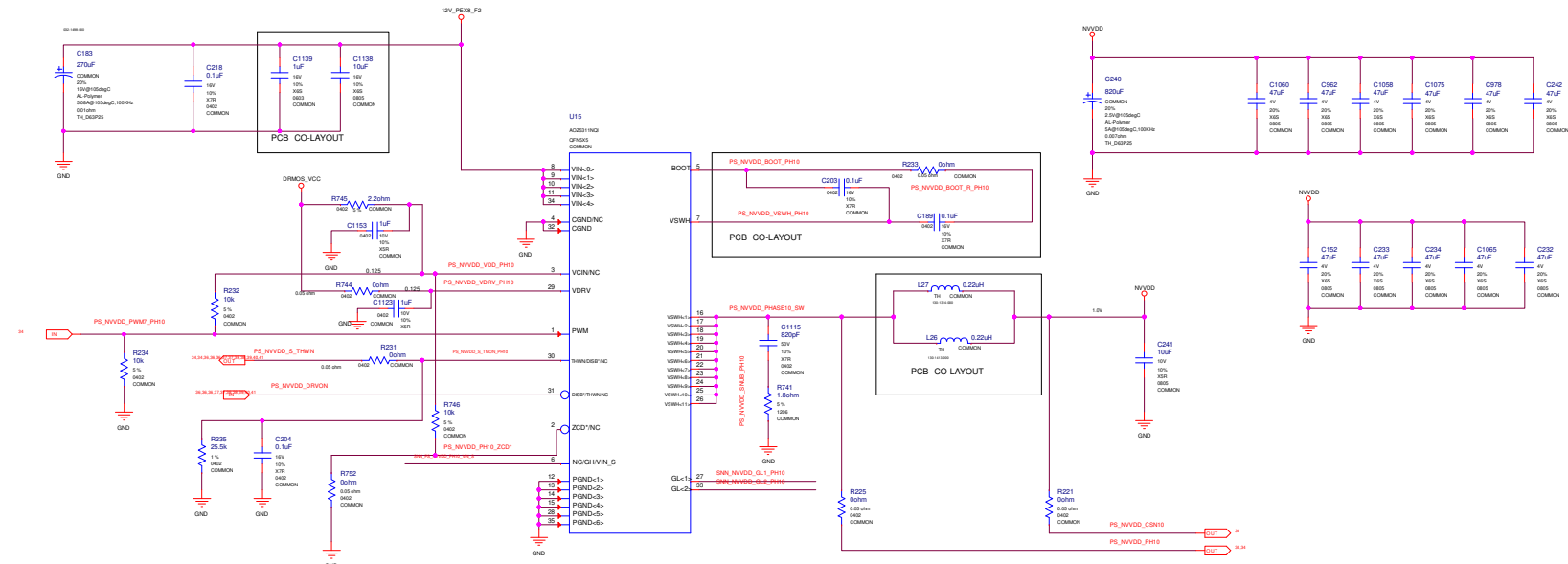


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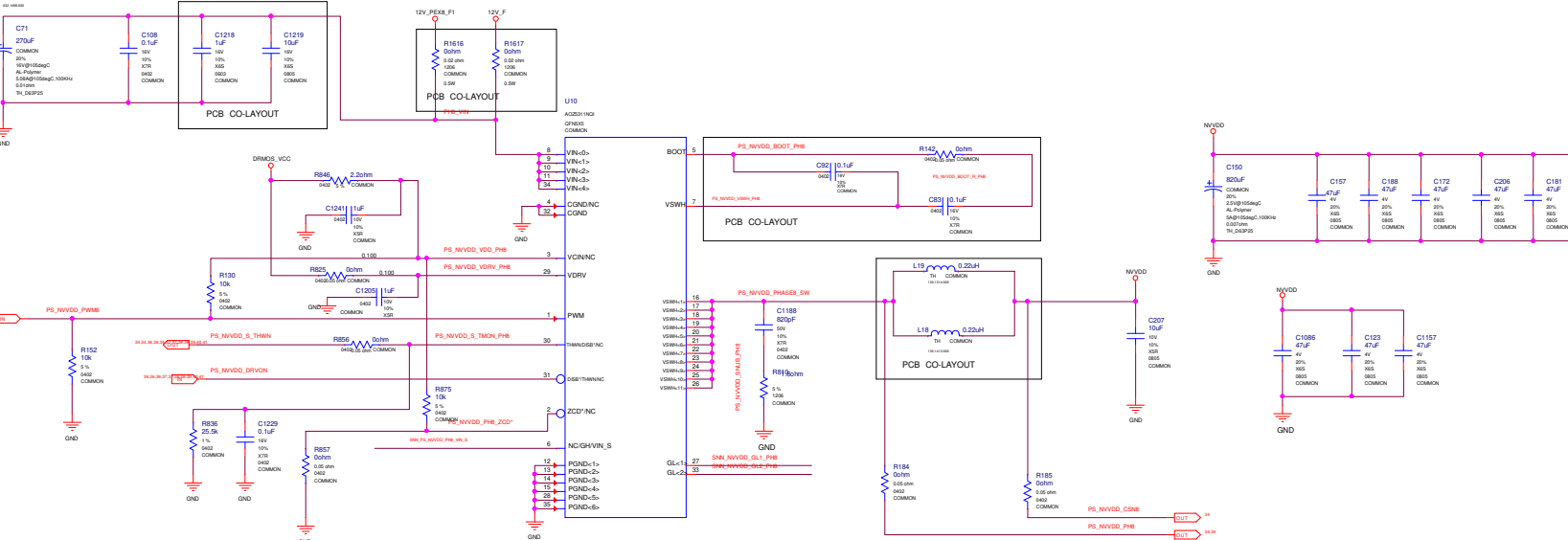


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NVVDD PH8(PWM8)









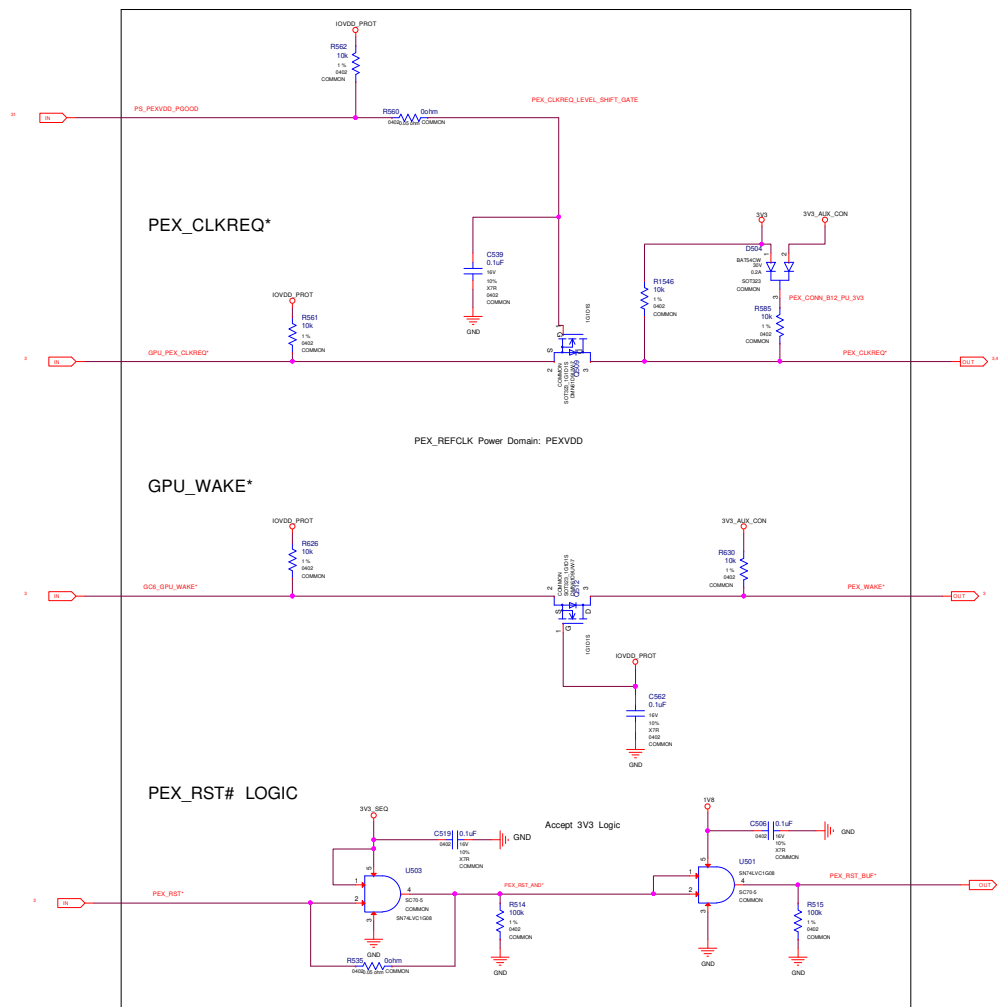








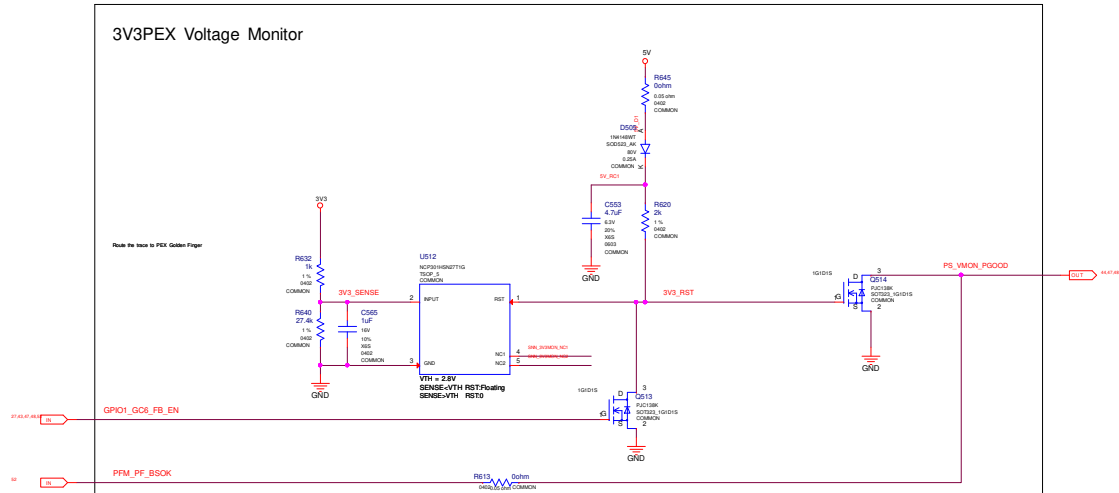




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| NV_PN                      | 600-1G142-BASE-100 |
| PCB REV                    | PG142-B00          |
| BCM REV                    | A                  |
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| DATE                       | 27 JUN 2020        |



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## BOM Configuration

| OPTIONS        | PEX3V3_SENSE    | PEX12V_SENSE    | OTHER_12V_SENSE |
|----------------|-----------------|-----------------|-----------------|
| Use Pre-Filter | Pre-Filter      | Pre-Filter      | Pre-Filter      |
| NO Pre-Filter  | Voltage_Monitor | Voltage_Monitor | N/A             |

| Signal         | Direction  | Function                                                              |
|----------------|------------|-----------------------------------------------------------------------|
| 3V3            | INPUT      | Sense the 3V3 Voltage from PCIE golden finger                         |
| 12V            | INPUT      | Sense the 12V Voltage from PCIE golden finger                         |
| PS_VMON_PGGOOD | OPEN-DRAIN | Floating(t <sub>H</sub> ) once both 3V3 and 12V reach V <sub>th</sub> |
| GC6_FB_EN      | INPUT      | Indicator for RTD5/GC6 residence.Use to Mask the VMON_PGGOOD          |
| PS_PF_SKIP     | INPUT      | From INA3221 (VPU) or Pre-filter(SKIP)                                |
| PS_PF_BSKOK    | INPUT      | From INA3221 (PV) or Pre-filter(BS_OK)                                |

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|       |                    |
|-------|--------------------|
| NV_PN | 600-1G142-BASE-100 |
|-------|--------------------|

|         |           |
|---------|-----------|
| PCB REV | PG142-B00 |
|---------|-----------|

|         |   |
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| BCM REV | A |
|---------|---|

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| PAGE | 50 OF 54    |
| DATE | 27-JUN-2020 |

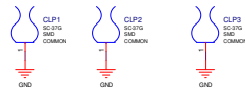
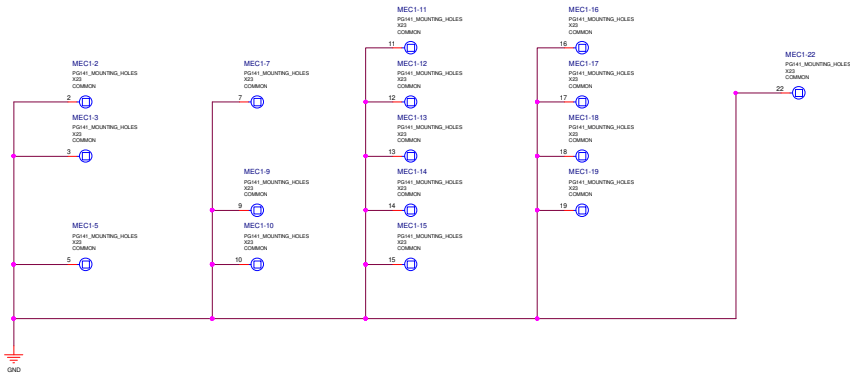
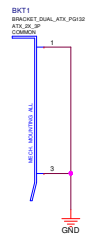
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Bracket:



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| PCB REV                    | PG142-B00 | PAGE               | 53 OF 54    |
| BCM REV                    | A         | DATE               | 27 JUN 2020 |

