

Model Name:G1.SNIPER A88X

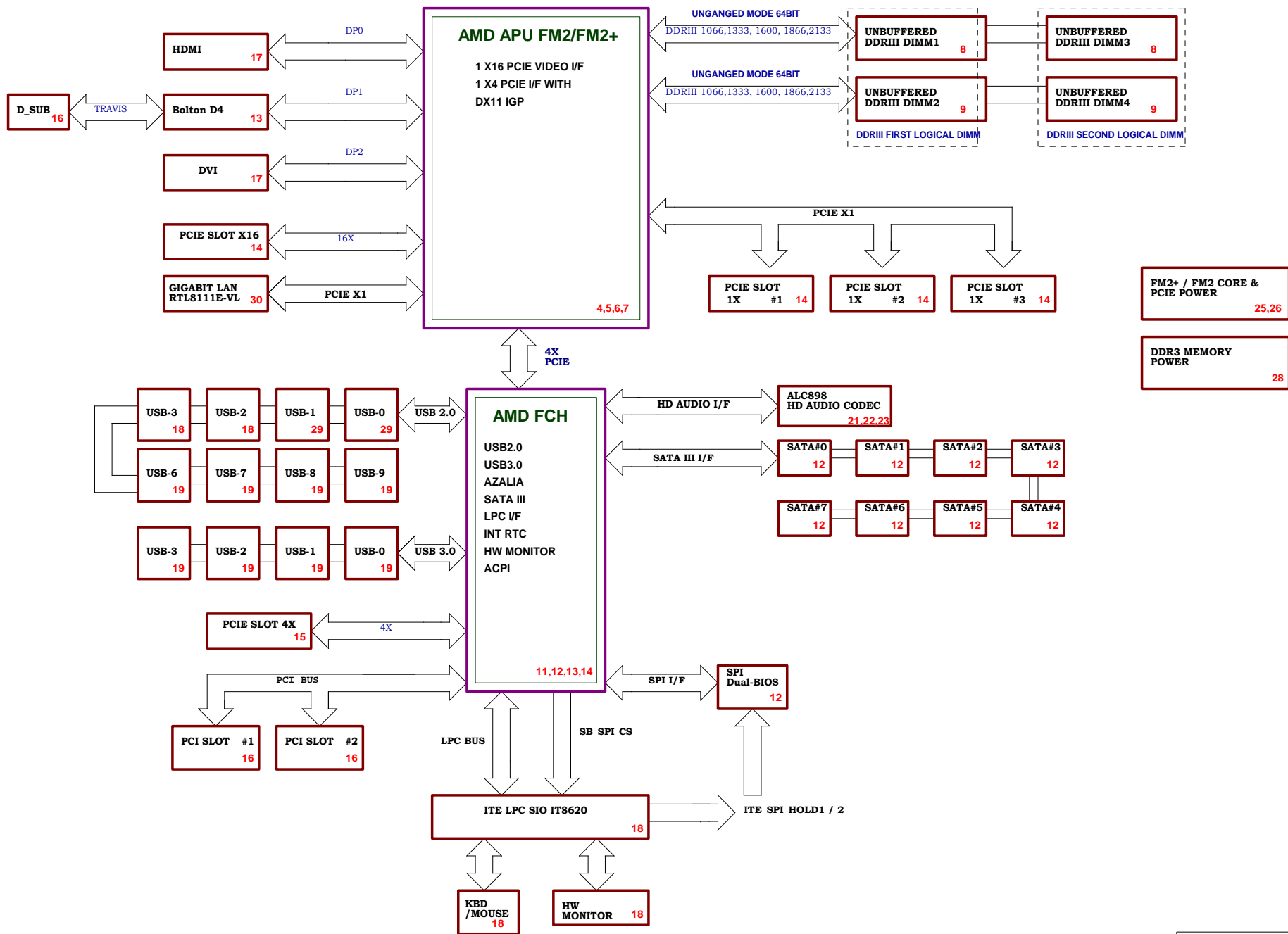
Component value change history

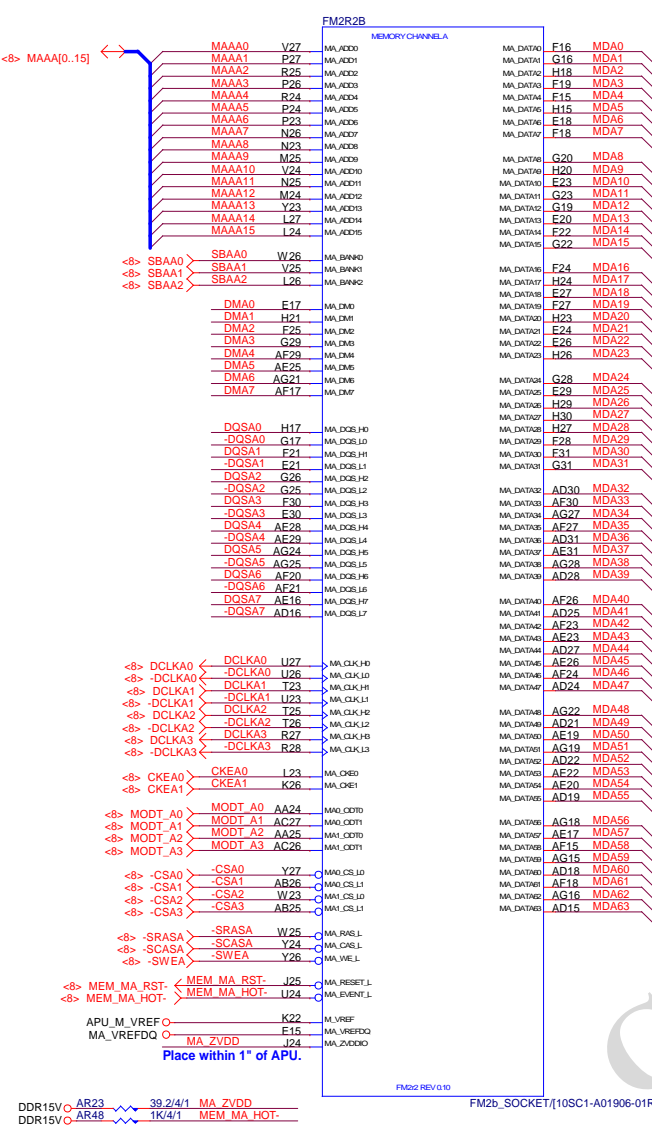
Version: 3.01
P-Code: U13061-0
Tip/Top : 9MG1SNP88-00

[illegible]

Circuit or PCB layout change for next version

[illegible]



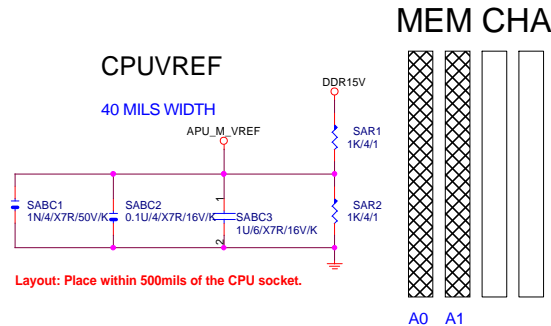


FM2 DDR Layout Guide Ver:1.0

| | Impedance | 4L-1080-20Z |
|--------------------|-----------|---------------|
| Clocks | 72 ohm | 20/7.5/7.5/20 |
| ADDR, CMD, Control | 40 ohm | 7 mil |
| DQS | 90 ohm | 20/5/6/5/20 |
| DATA, DM | 40 ohm | 7 mil |
| Others | 40-60 ohm | 7 mil |

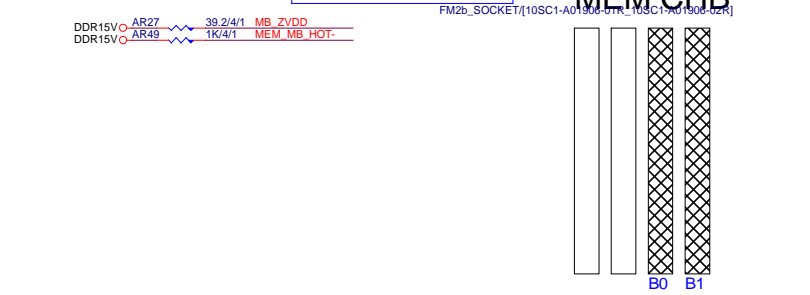
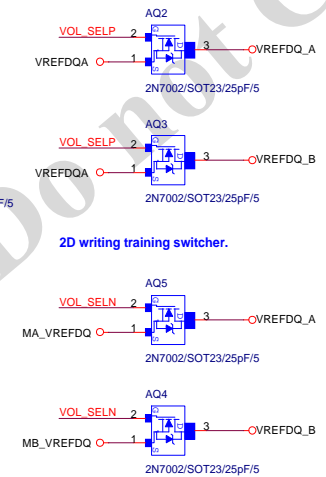
FM2 DDR Layout Guide Ver:1.01

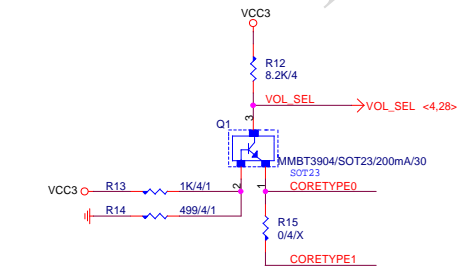
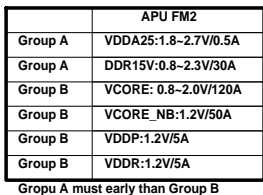
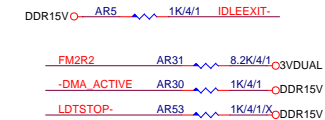
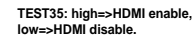
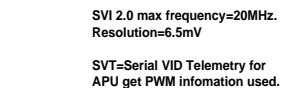
| | Impedance | 4L-1080-20Z |
|--------------------|-----------|-------------------|
| Clocks | 72 ohm | 20/8/5/8/20 |
| ADDR, CMD, Control | 40 ohm | 8 mil |
| DQS | 90 ohm | 20/4.5/7.5/4.5/20 |
| DATA, DM | 40 ohm | 7 mil |
| Others | 40-60 ohm | 4 mil |



MEM CHA

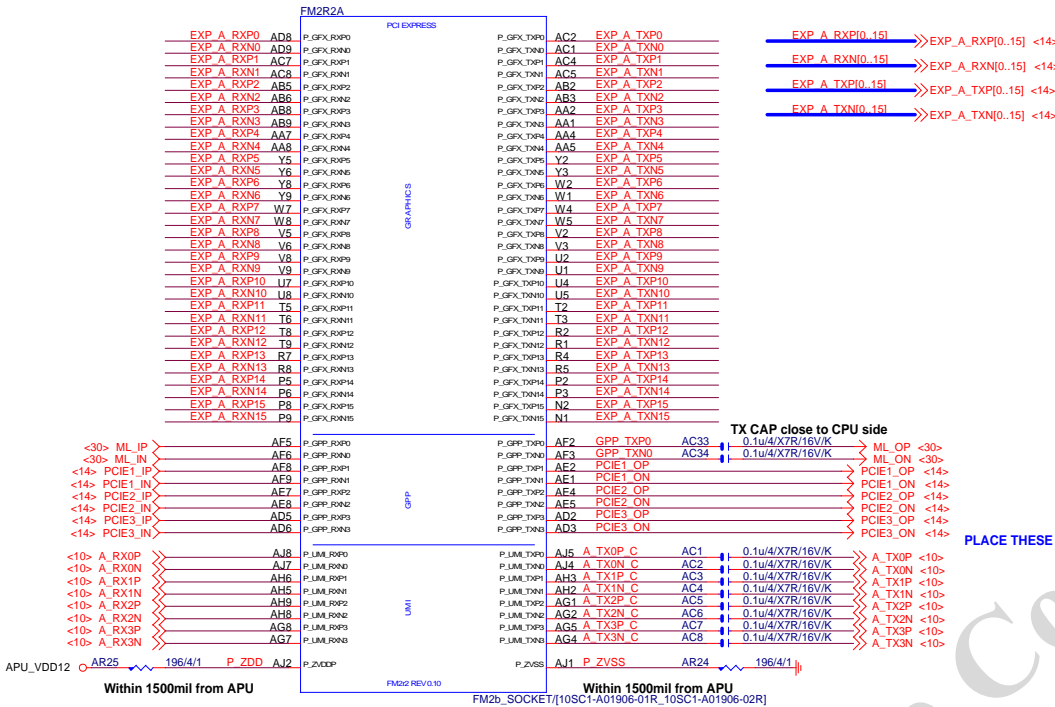
| VOL_SEL | 0 | 1 |
|----------------|---|---|
| KAVERI (FM2R2) | | |
| TRINITY (FM2) | | |



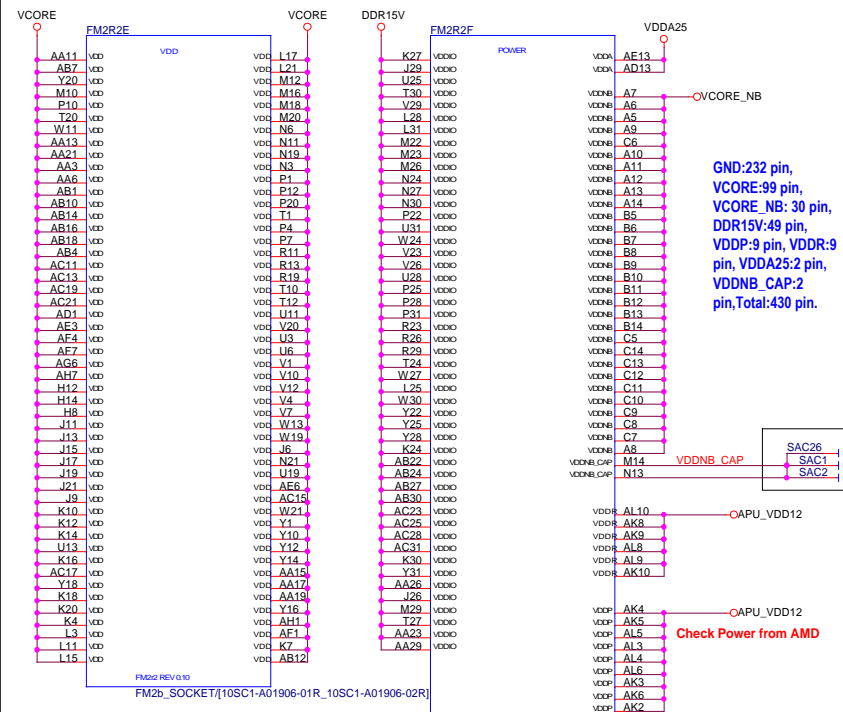


| APU | CORETYPE0 | CORETYPE1 |
|---------|-----------|-----------|
| TRINITY | 1 | 1 |
| KAVERI | 0 | 1 |
| TBD | 1 | 0 |
| TBD | 0 | 0 |

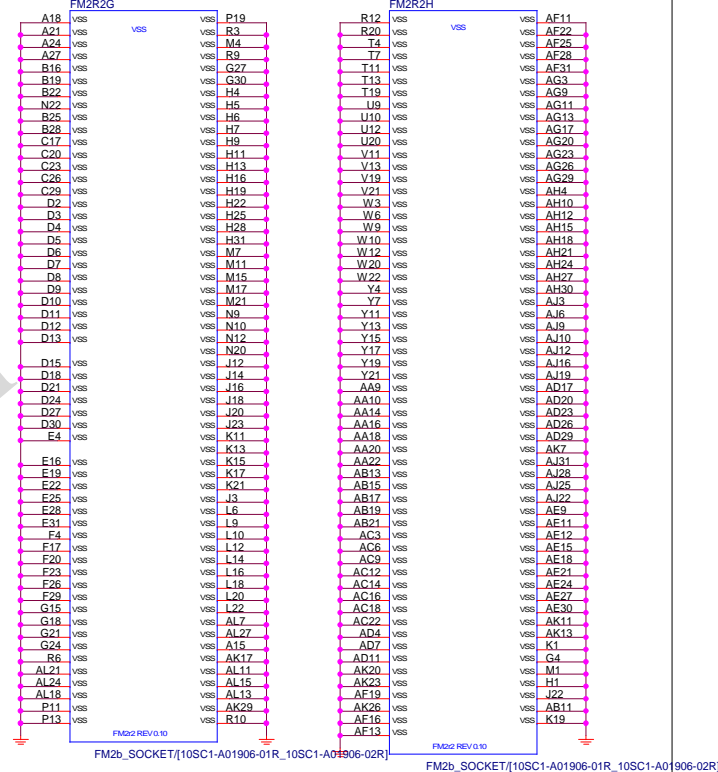
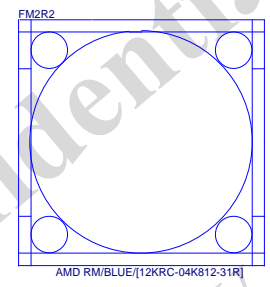
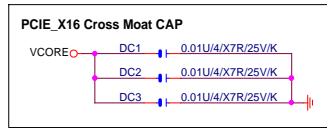
| VOL_SEL | 0 | 1 |
|---------|-------------------|------------------|
| | KAVERI (FM2R2) | TRINITY (FM2) |



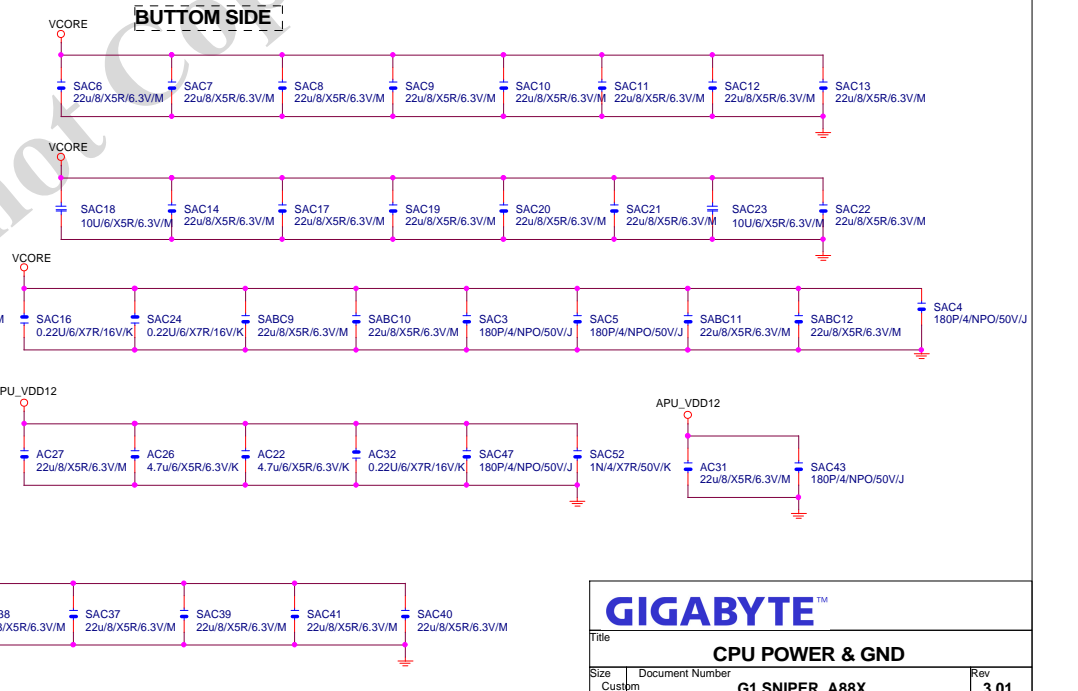
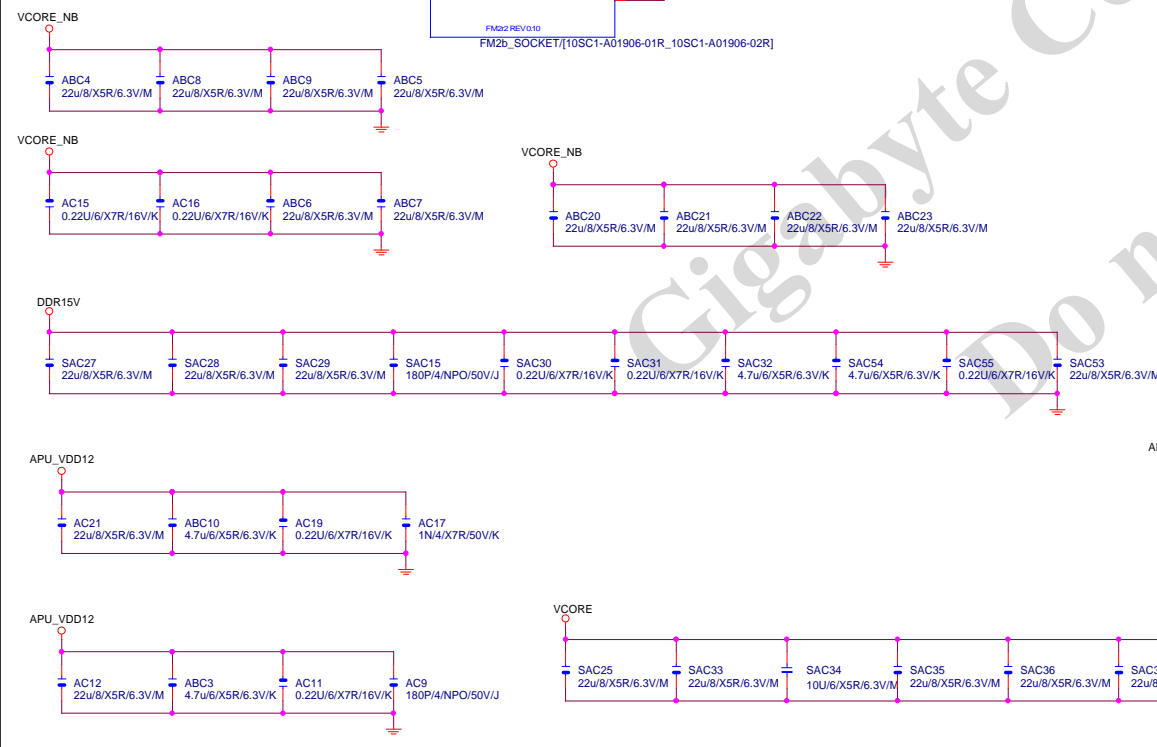
DDR15V=1.25V/1.35V/1.5V(DDR3)

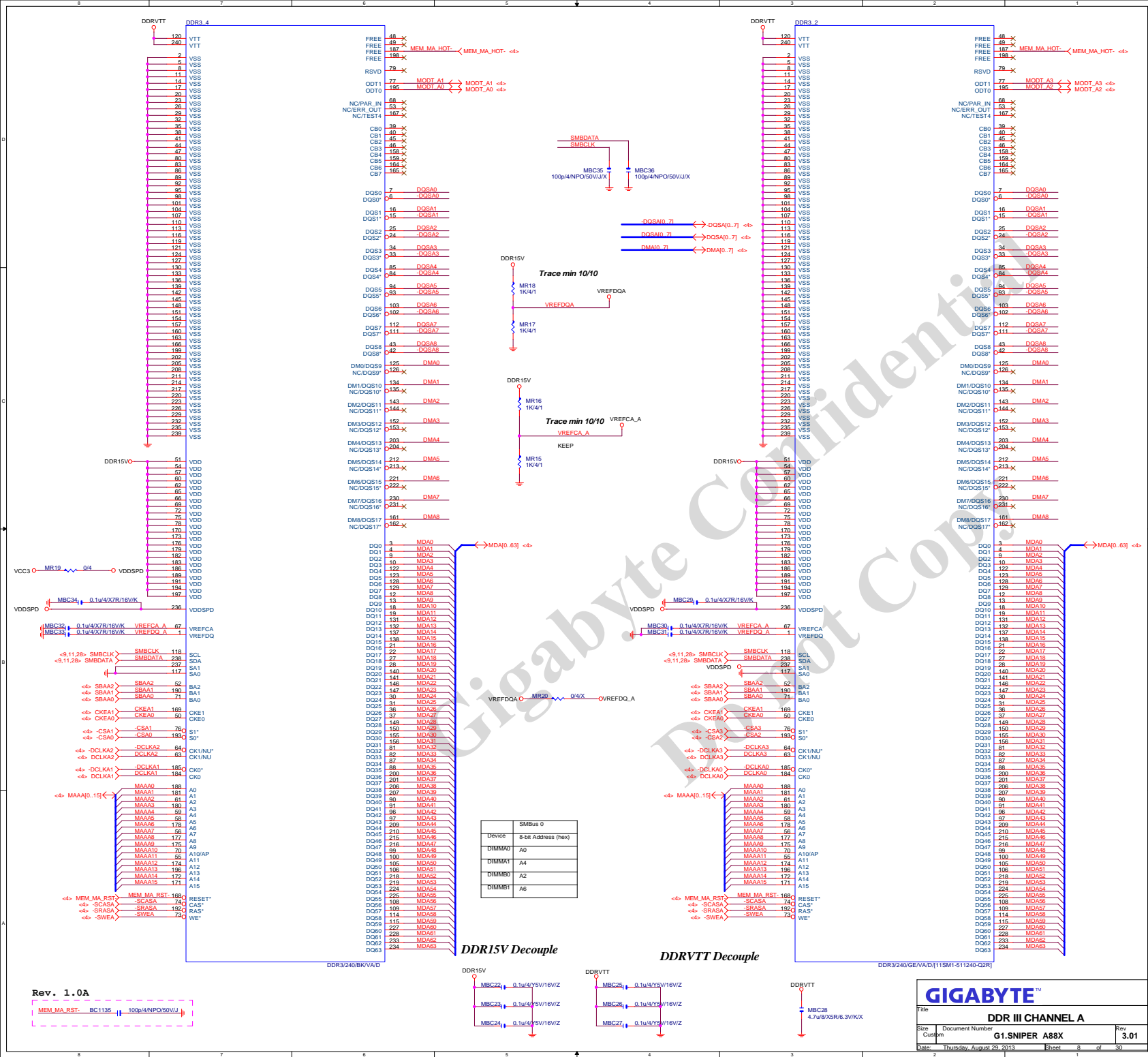


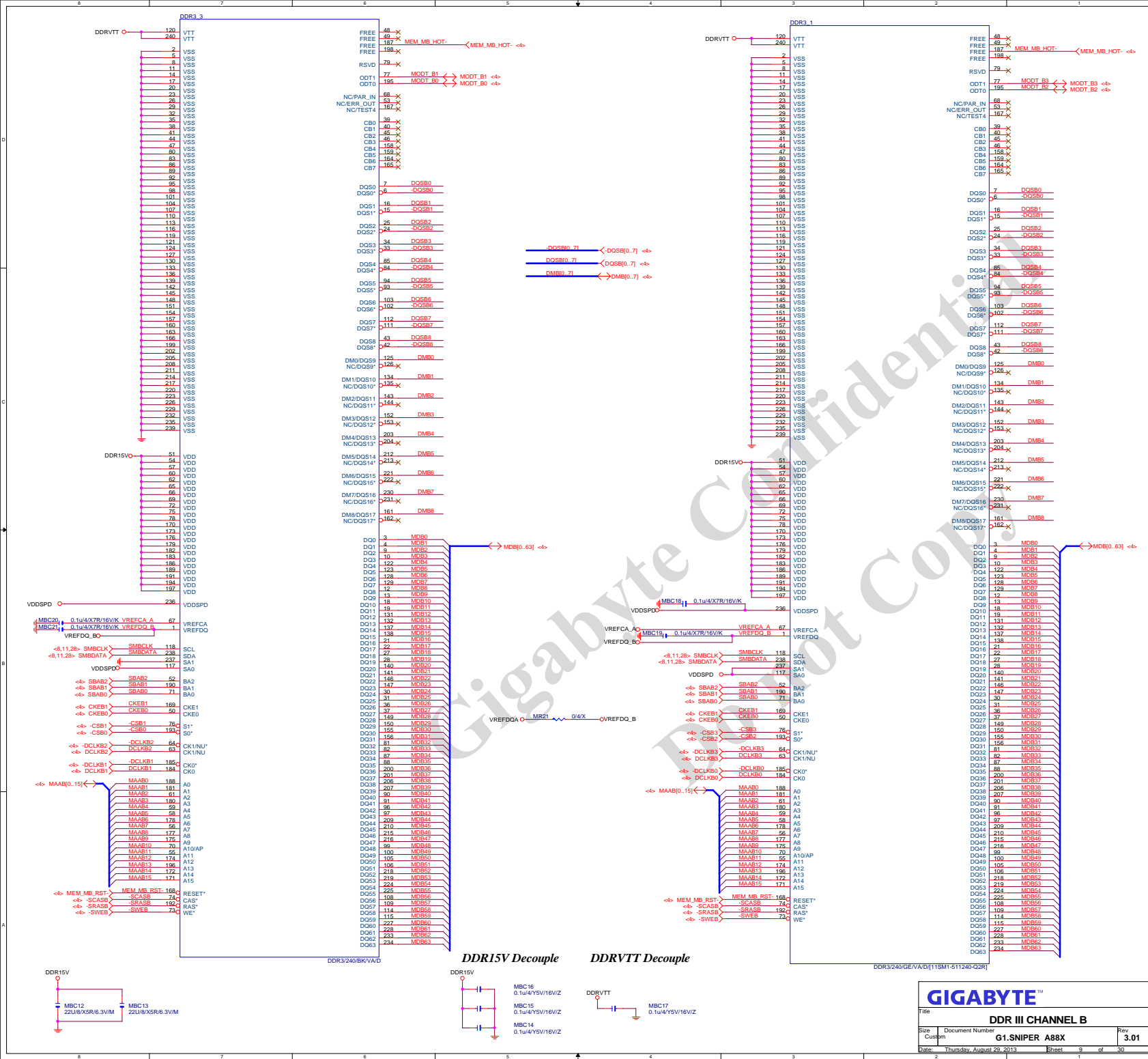
GND:232 pin,
Vcore:99 pin,
DDR15V:49 pin,
VDDP:9 pin, VDDR:9
pin, VDDA25:2 pin,
VDDNB_CAP:2
pin, Total:430 pin.

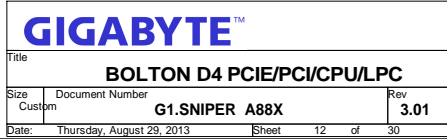


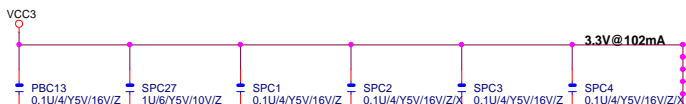
BOTTOM SIDE











REV:1.0

| | |
|-----------|--------|
| 3.3V@47mA | VCC3 |
| 3.3V@20mA | 3VDUAL |
| 3.3V@12mA | VCC3 |
| 3.3V@30mA | VCC3 |
| 3.3V@11mA | VCC3 |
| 3.3V@14mA | VCC3 |
| 3.3V@11mA | VCC3 |
| 3.3V@12mA | VCC3 |

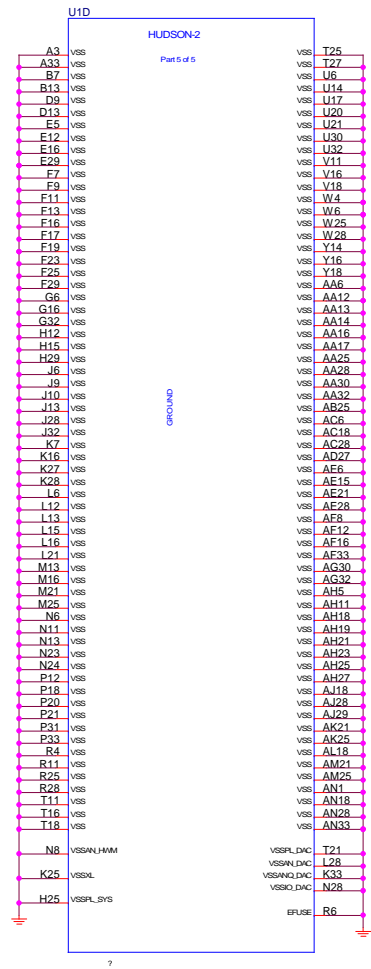
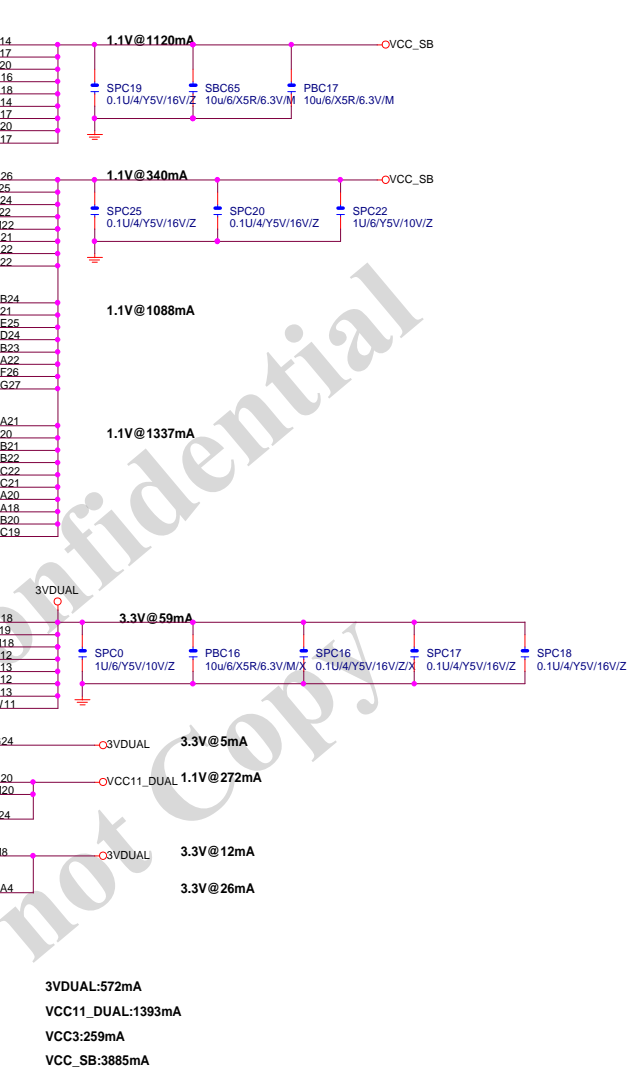
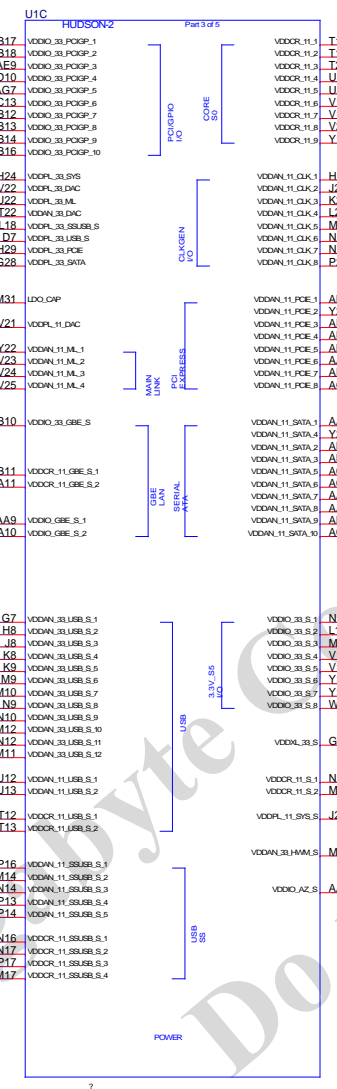
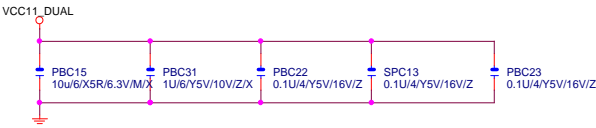
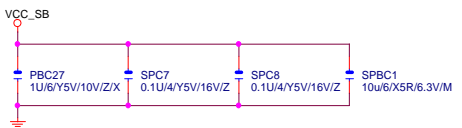
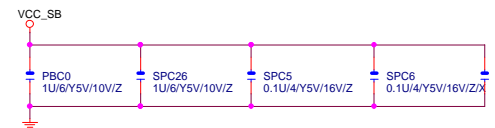
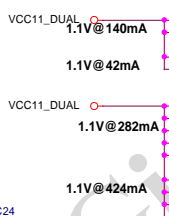
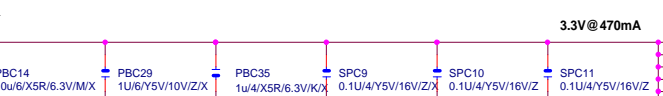
2.2U/6/X5R/6.3V/K/X M31 LDO CAP

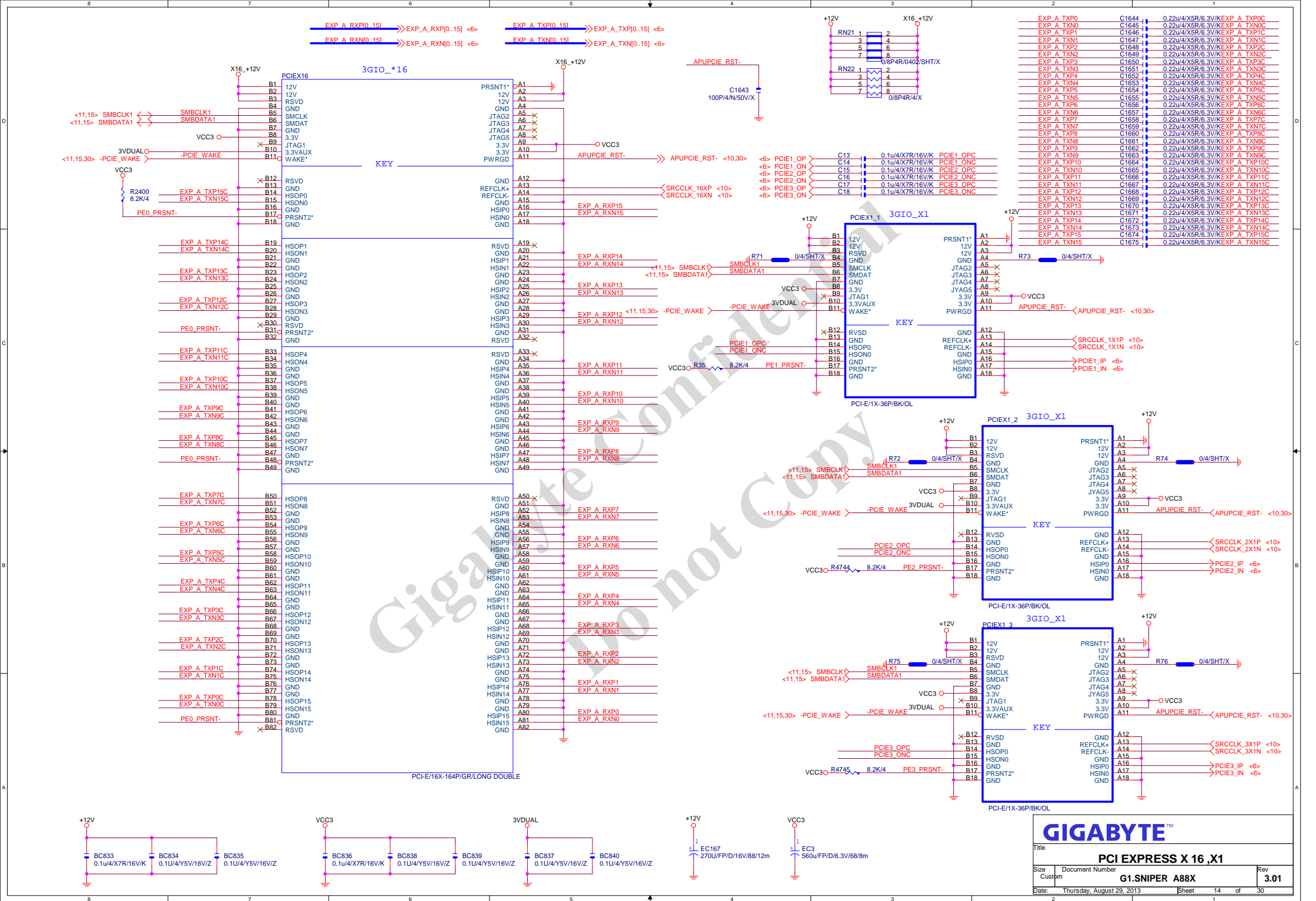
VCC_SB 1.1V@7mA

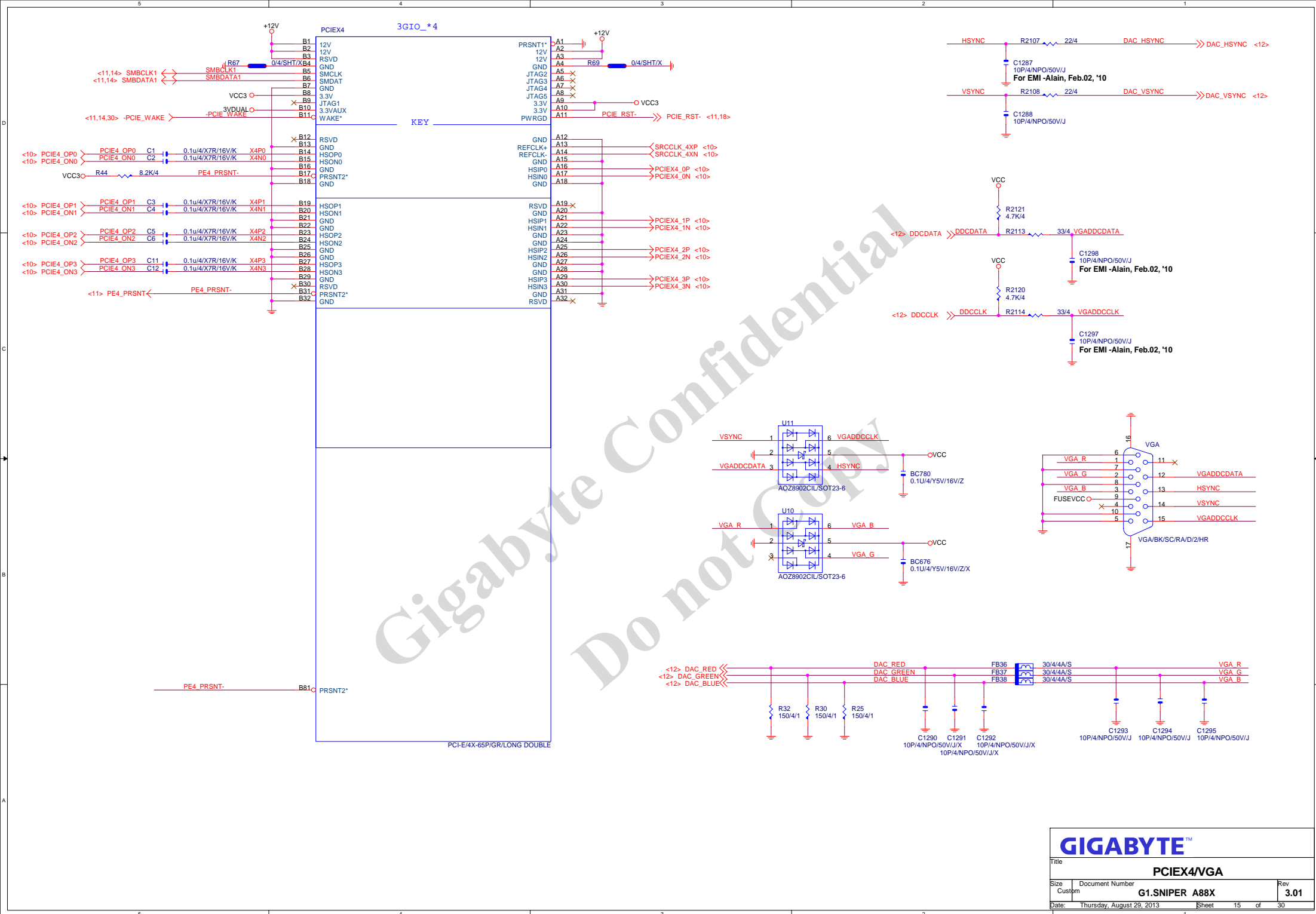
1.1V@226mA

PLACE ALL THE DECOUPLING CAPS ON THIS SHEET CLOSE TO SB AS POSSIBLE.

Hudson 3/4 does not support an RGMII/MII interface.







PCI SLOT 1,2

<10> AD[0..31] <-> AD[0..31]

PCI SLOT

PCI1

B1 -12V

B2 +12V

B3 GND

B4 TDO

B5 +5V

B6 INTA

B7 INTB

B8 INTC

B9 INTD

B10 PRSNT1

B11 PRSNT2

B12 GND

B13 GND

B14 GND

B15 GND

B16 GND

B17 GND

B18 GND

B19 GND

B20 GND

B21 GND

B22 GND

B23 GND

B24 GND

B25 GND

B26 GND

B27 GND

B28 GND

B29 GND

B30 GND

B31 GND

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B268 GND

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B274 GND

B275 GND

B276 GND

B277 GND

B278 GND

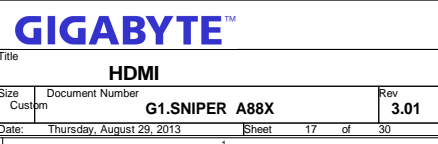
B279 GND

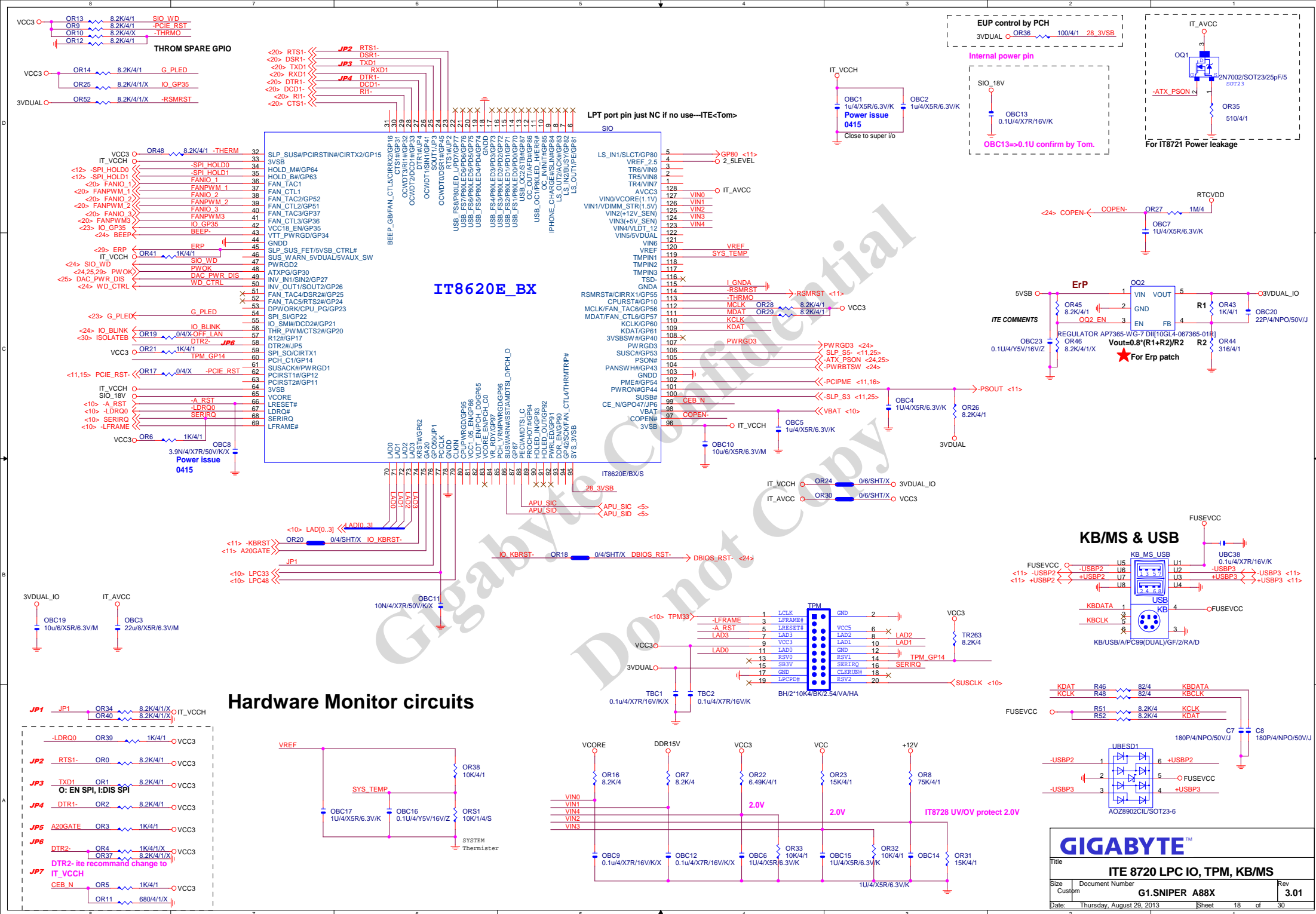
B280 GND

B281 GND

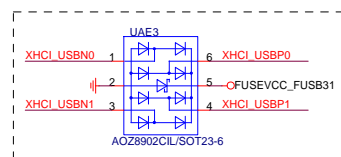
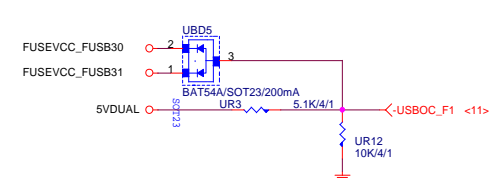
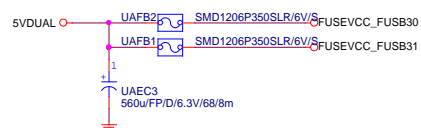
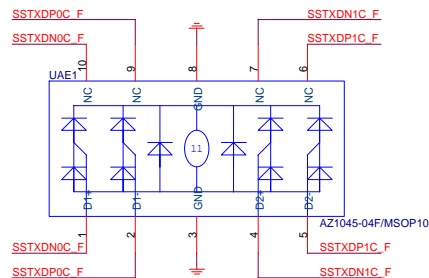
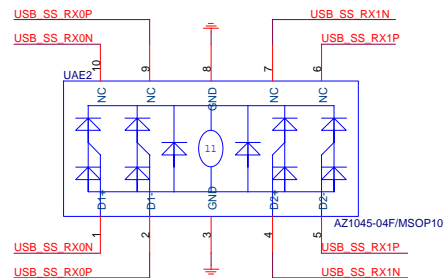
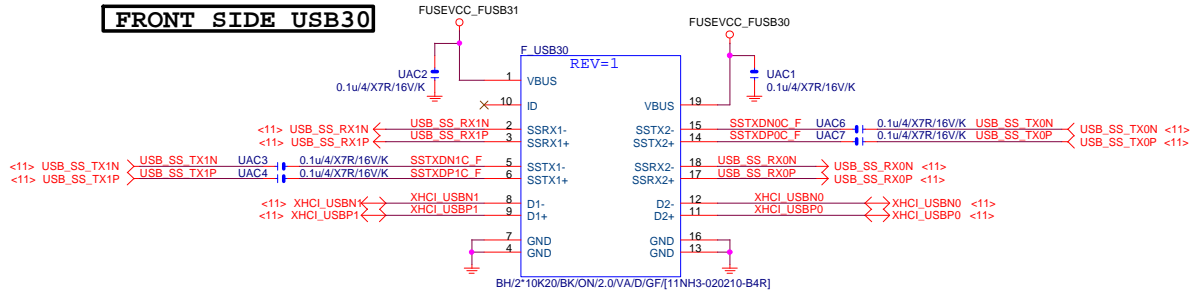
B282 GND

B283 GND

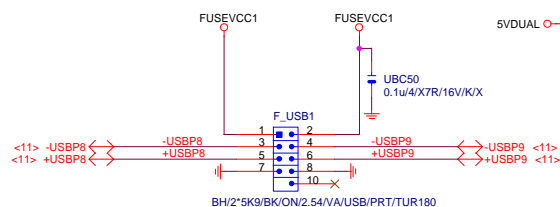




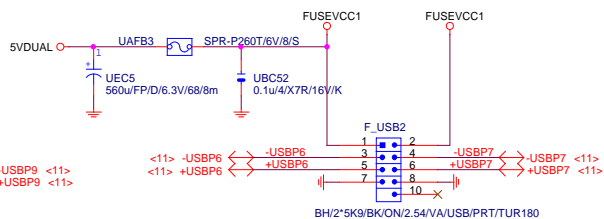
FRONT SIDE USB30



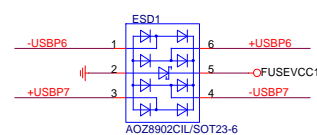
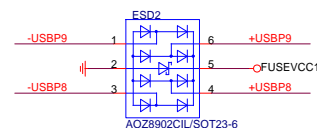
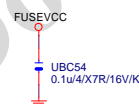
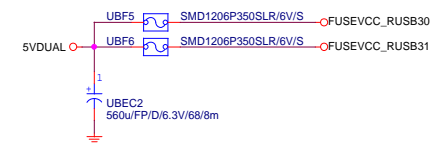
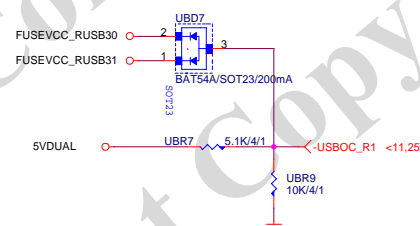
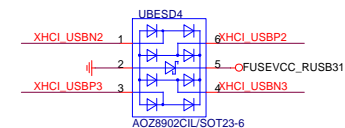
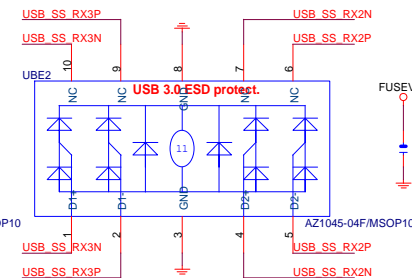
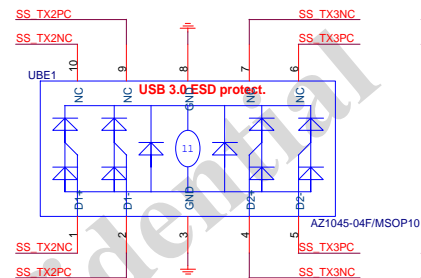
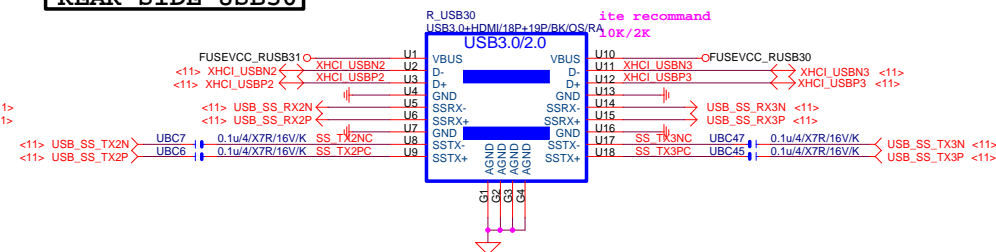
FRONT SIDE USB1



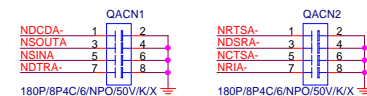
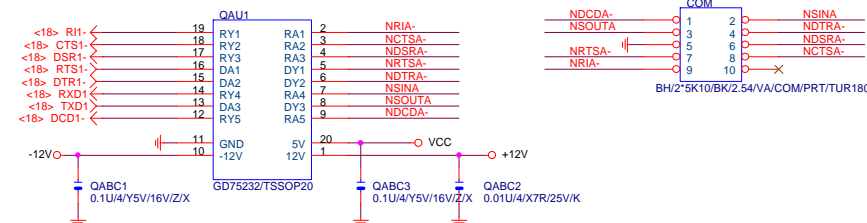
FRONT SIDE USB2



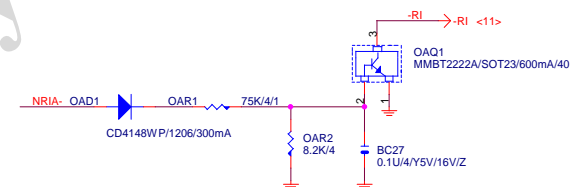
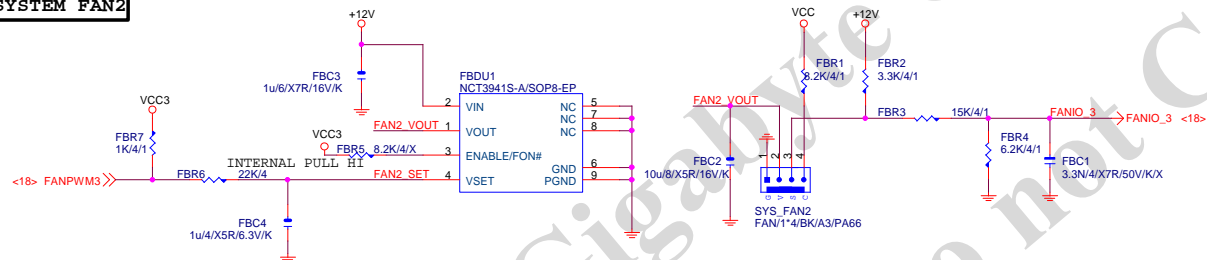
REAR SIDE USB30



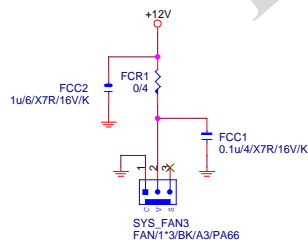
SYSTEM FAN1



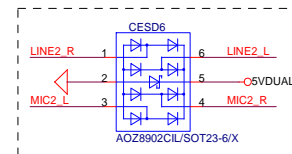
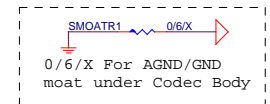
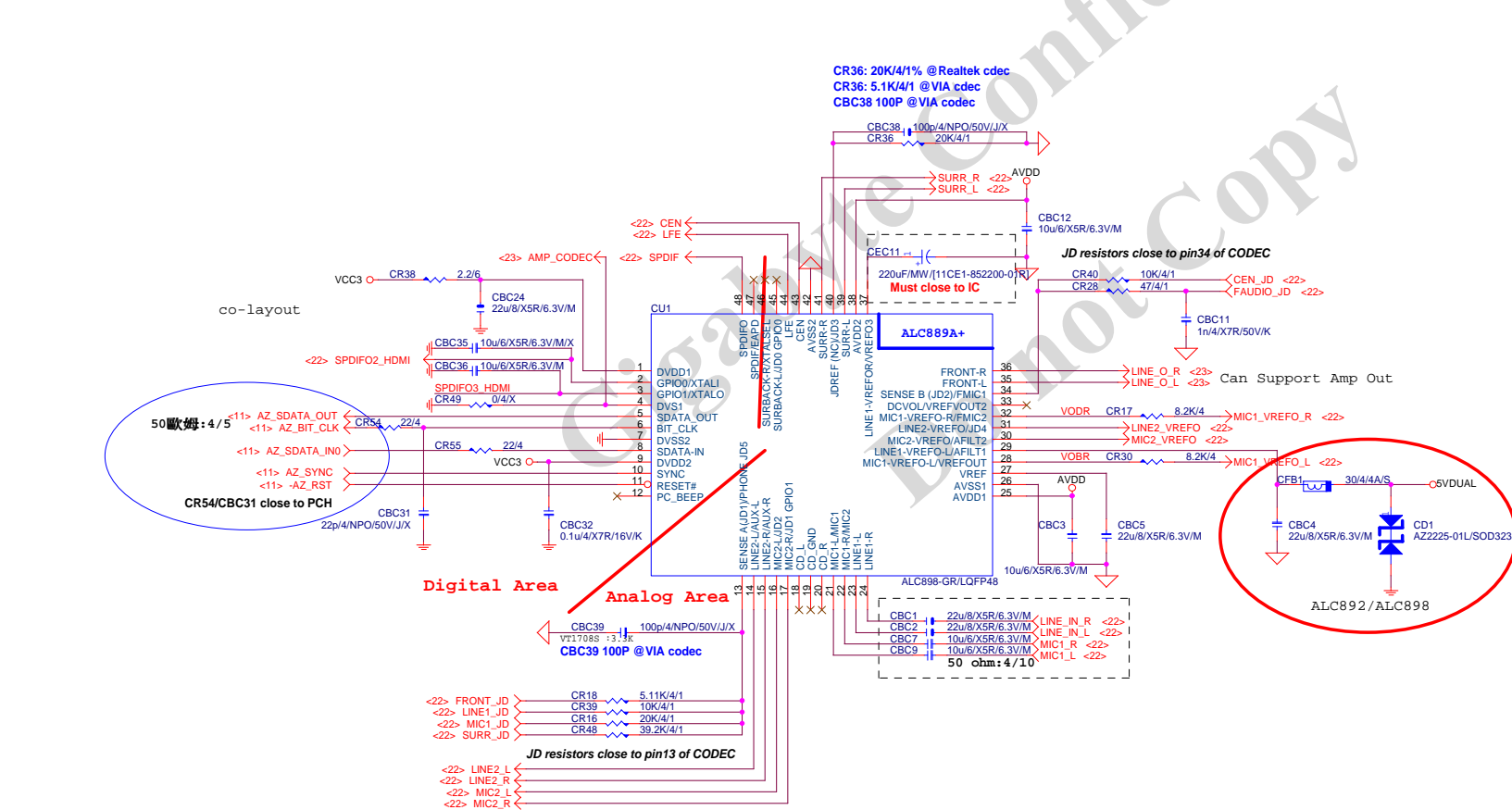
SYSTEM FAN2



SYSTEM FAN3

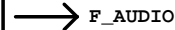


| | ALC662 | ALC887-VD2 | ALC889 | VT1708S-CD | VT1708S-CE | VT2021 | ALC898/ALC892 |
|---|-----------|------------|-----------|------------|------------|-----------|---------------|
| CR49 | X | X | O | O | X | O | X |
| CBC36 | O | O | X | X | O | X | O |
| CR28/CBC11 | 47ohm+1nF | 47ohm+1nF | 47ohm+1nF | 22ohm+100P | 22ohm+100P | 47ohm+1nF | 47ohm+1nF |
| CR52 | X | O | O | O | O | O | O |
| CR57 | O | X | X | X | X | X | X |
| CBC1/CBC2 | 10uF/X5R | 10uF/X5R | 22uF/X5R | 10uF/X5R | 10uF/X5R | 10uF/X5R | 22uF/X5R |
| CR36 | 20K/4/1 | 20K/4/1 | 20K/4/1 | 5.1K/4/1 | 20K/4/1 | 5.1K/4/1 | 20K/4/1 |
| CR17/CR30/ CR25/CR15/CR12/CR3/ | 8.2K/4 | 8.2K/4 | 8.2K/4 | 3.3K/4/1 | 3.3K/4/1 | 3.3K/4/1 | 8.2K/4 |
| CBC38/CBC39 | X | X | X | 100P/4 | 100P/4 | X | X |
| CR10/CR8/CR20/CR45/ CR42/CR51/CR27/CR26 | 22K/4 | 22K/4 | 22K/4 | 10K/4/1 | 10K/4/1 | 10K/4/1 | 22K/4 |
| CR7/CR9/CR5/CR13/ CR29/CR32/CR46/CR19/ CR50/CR41/CR2/CR11/ CR14/CR24 | 62 ohm | 62 ohm | 62 ohm | 75 ohm | 75 ohm | 75 ohm | 62 ohm |
| CFB1/CD1/CBC4/CBC8 | O | O | X | X | O | X | O |
| CD2/CD3/CQ3/CQ4 | X | X | O | O | X | O | X |
| CEC11 | X | X | X | X | X | X | O |
| CESD6 | X | X | X | O | O | O | X |

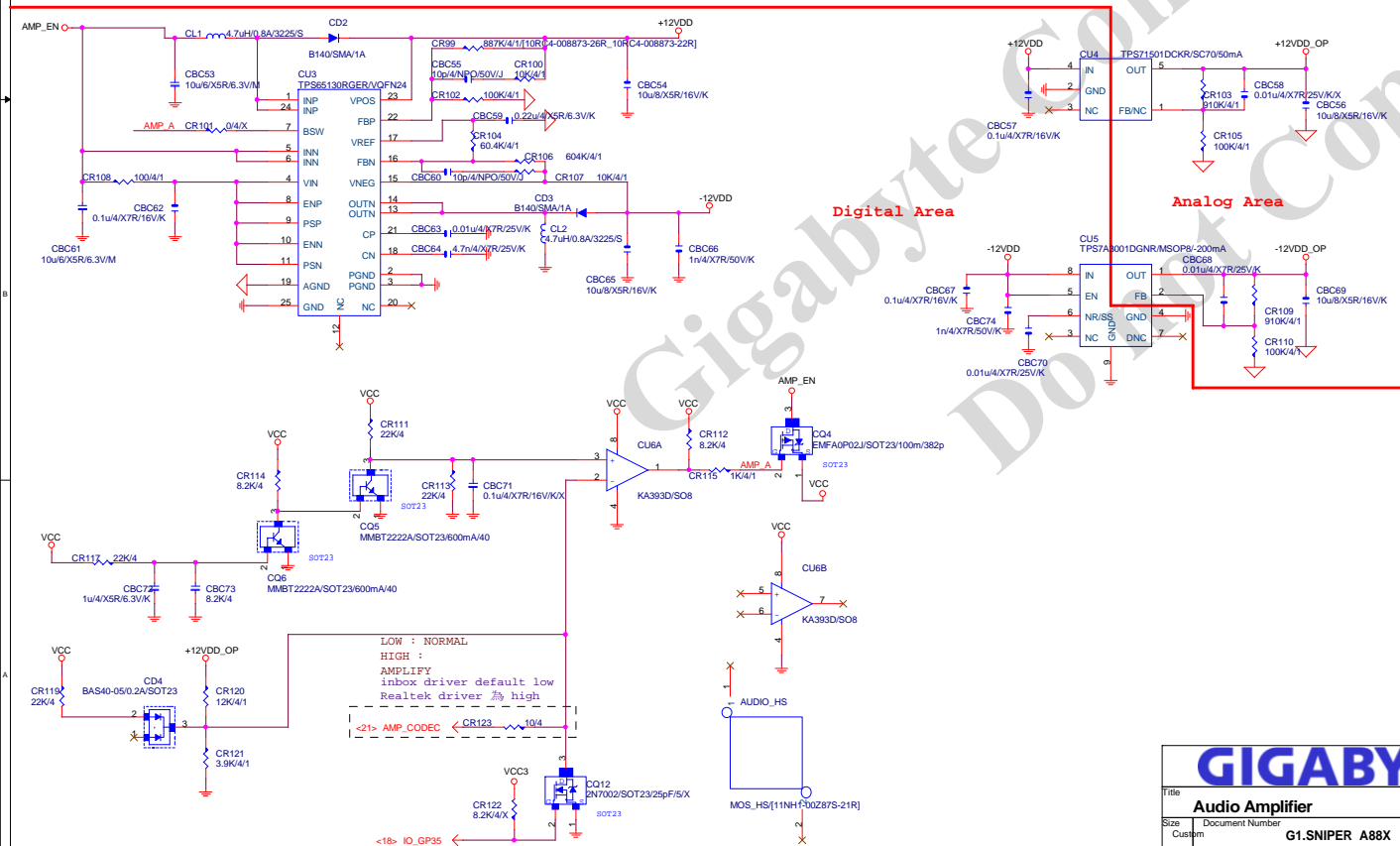
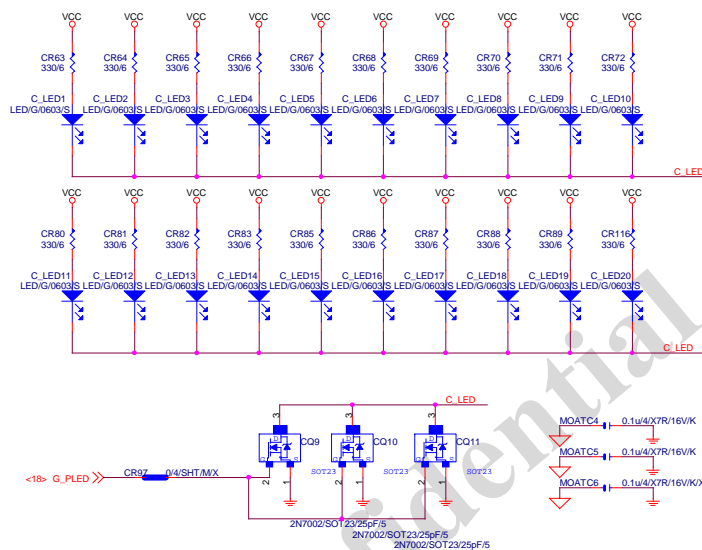
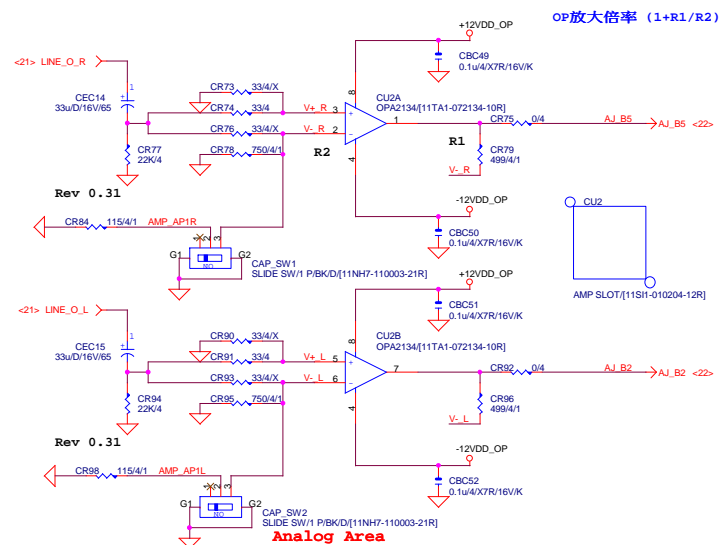


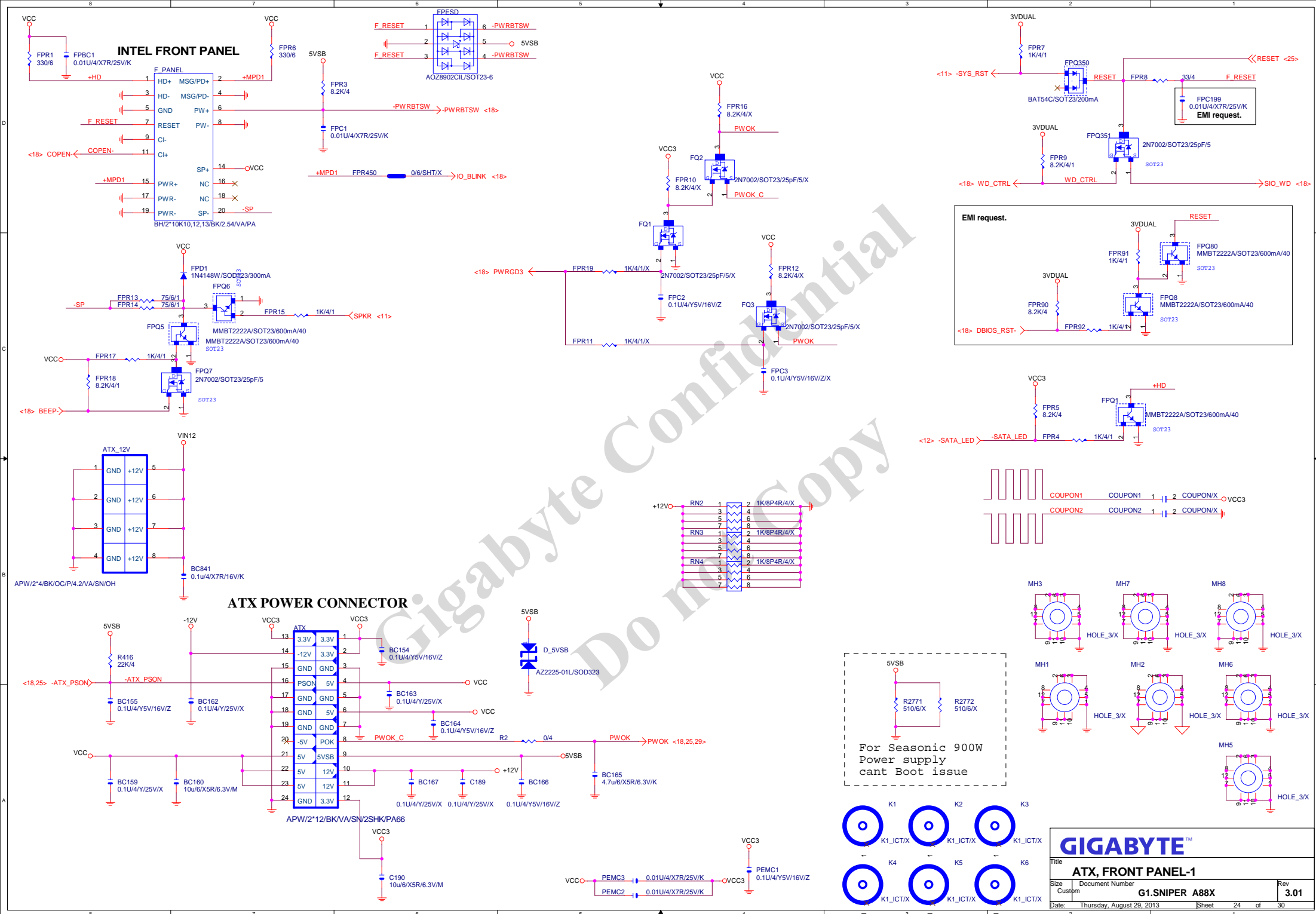
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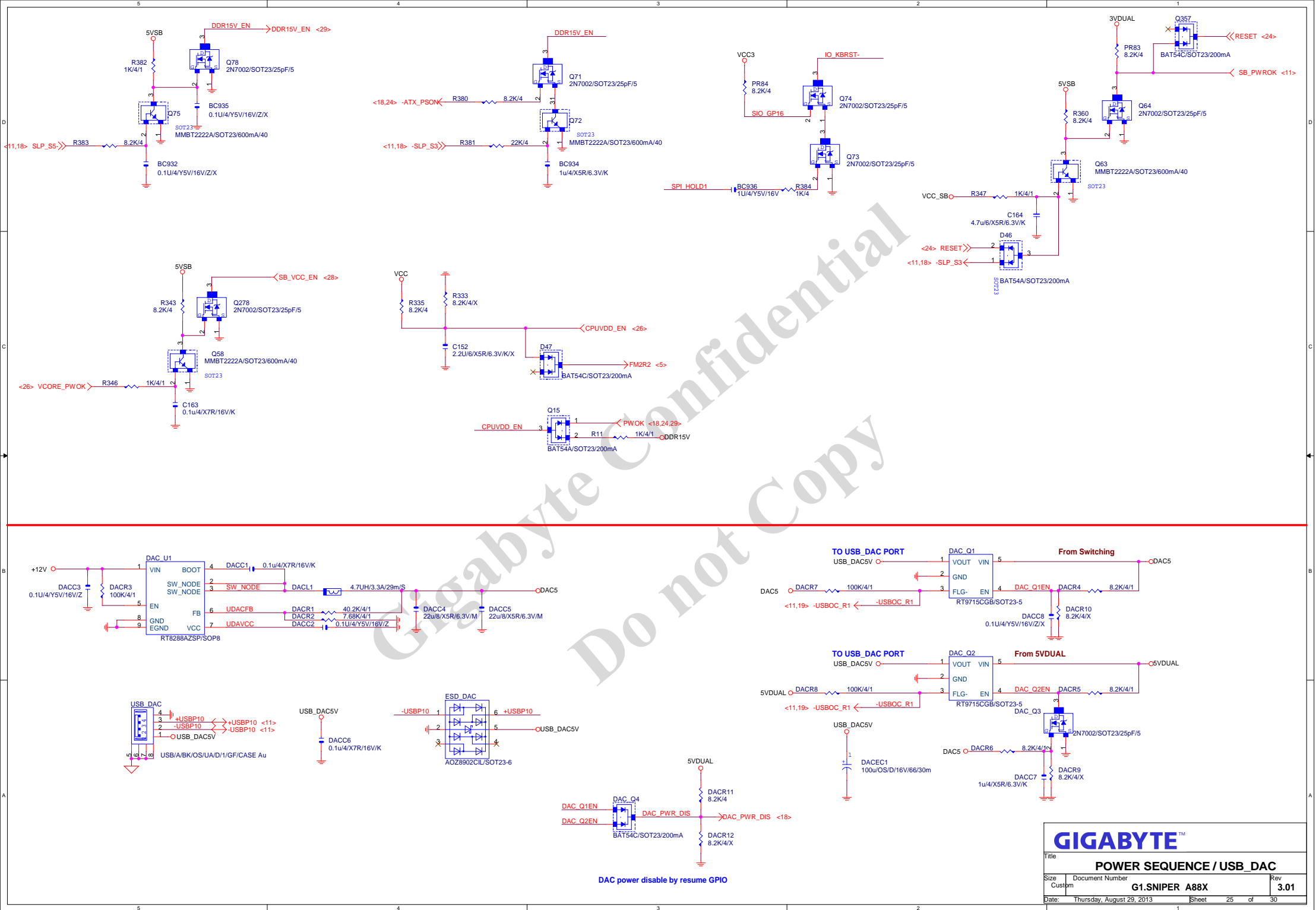
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| Size | Document Number | G1.SNIPER A88X | Rev 3.01 |
| Date: | Thursday, August 29, 2013 | Sheet 21 | of 30 |



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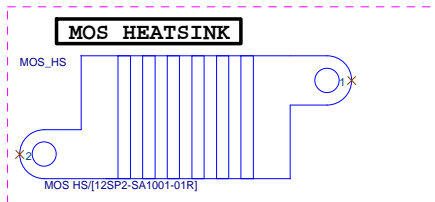


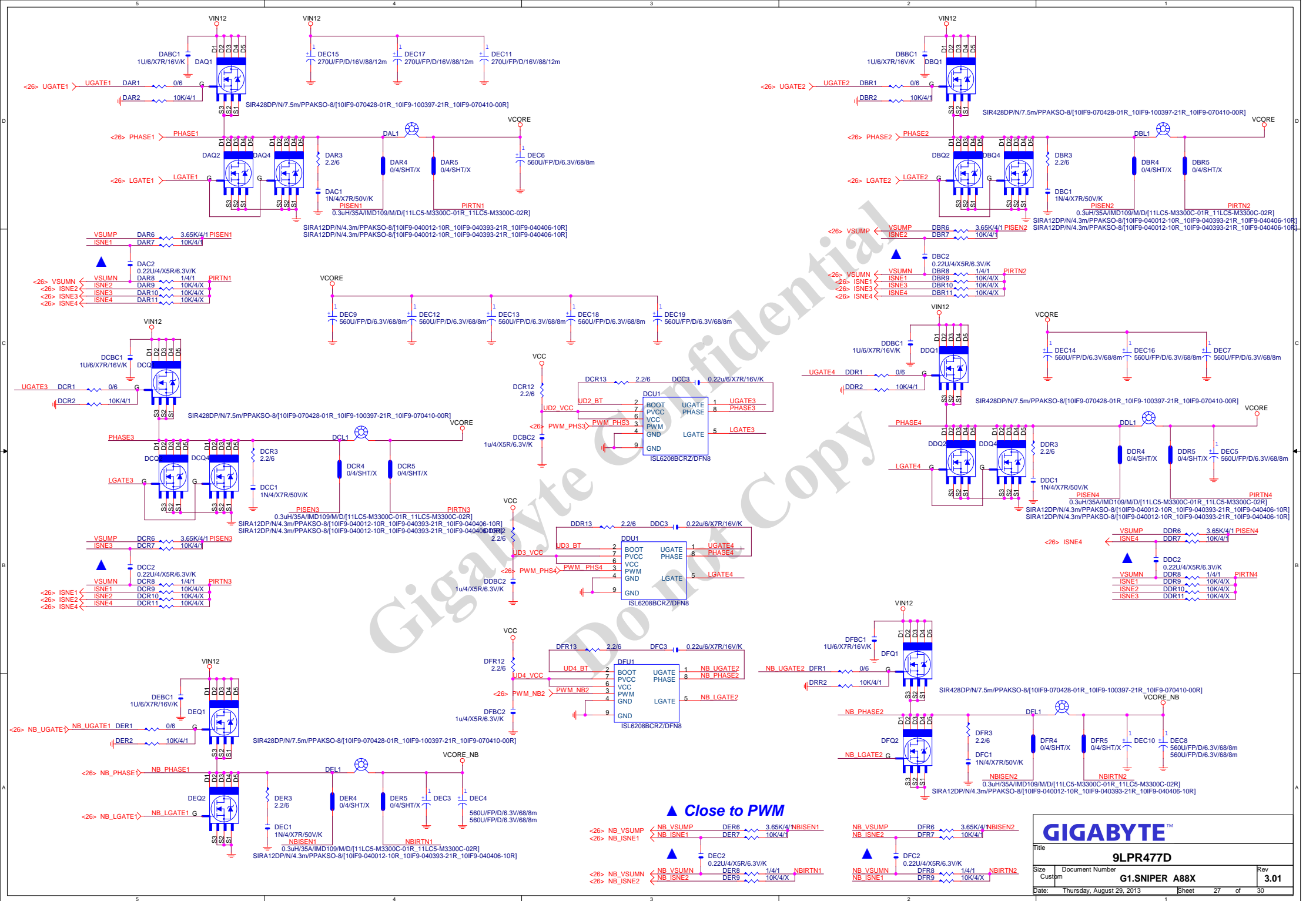




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| POWER SEQUENCE / USB_DAC | | |
|--------------------------|---------------------------|----------------|
| Title | Document Number | Rev |
| | G1.SNIPER A88X | 3.01 |
| Date: | Thursday, August 29, 2013 | Sheet 25 of 30 |





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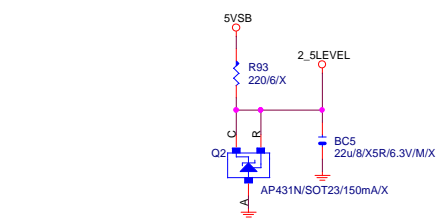
G1.SNIPER A88X

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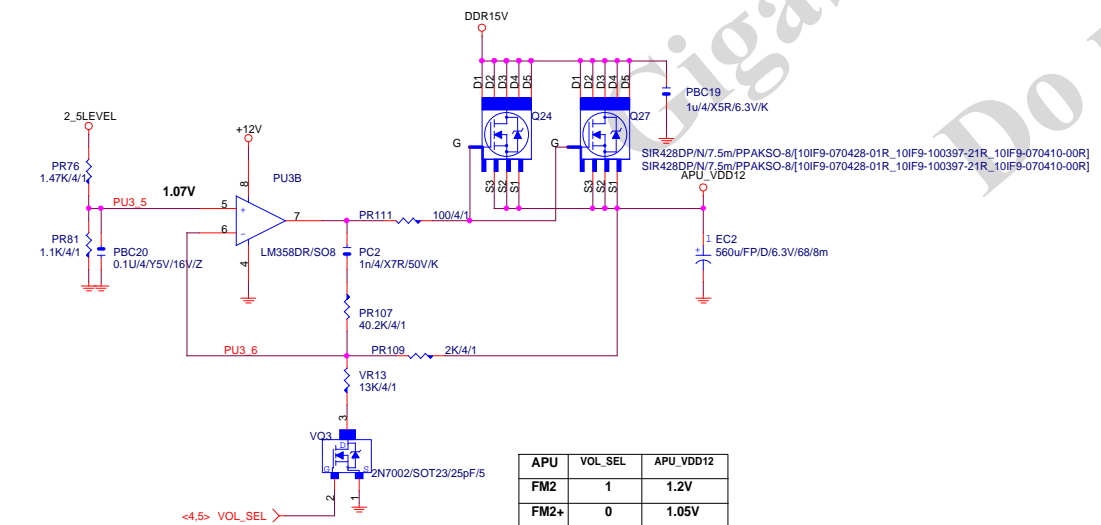
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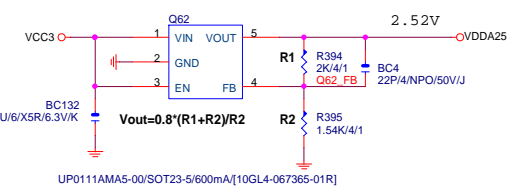
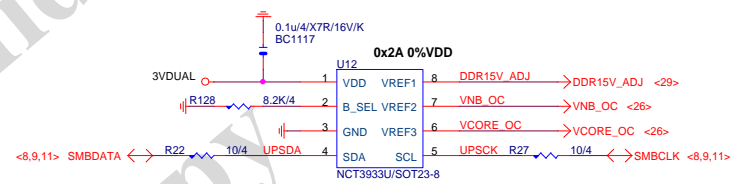
【技術通報R&D技術通報156】
RT9018 (RICHTEK) 與 NCT3730 (NUVOTON),
EM5103GE (EMC) 做共用, 針對 P1N7 (FB) 分壓阻值部份
(R1/R2) 須做修改為 100K 以上電阻值



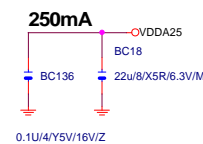
APU_VDD



| APU | VOL_SEL | APU_VDD12 |
|------|---------|-----------|
| FM2 | 1 | 1.2V |
| FM2+ | 0 | 1.05V |



| APU | VOL_SEL | VDDA25 |
|------|---------|--------|
| FM2 | 1 | 2.5V |
| FM2+ | 0 | 1.8V |



GIGABYTETM

Title

SB PWR,VDDA25,VCC11DUAL

Size

Custom

Document Number

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Date

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