HIDA SWITCH

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Version Control

Version	Date	Modifications
V0.1	2015/02	First release of Schematics

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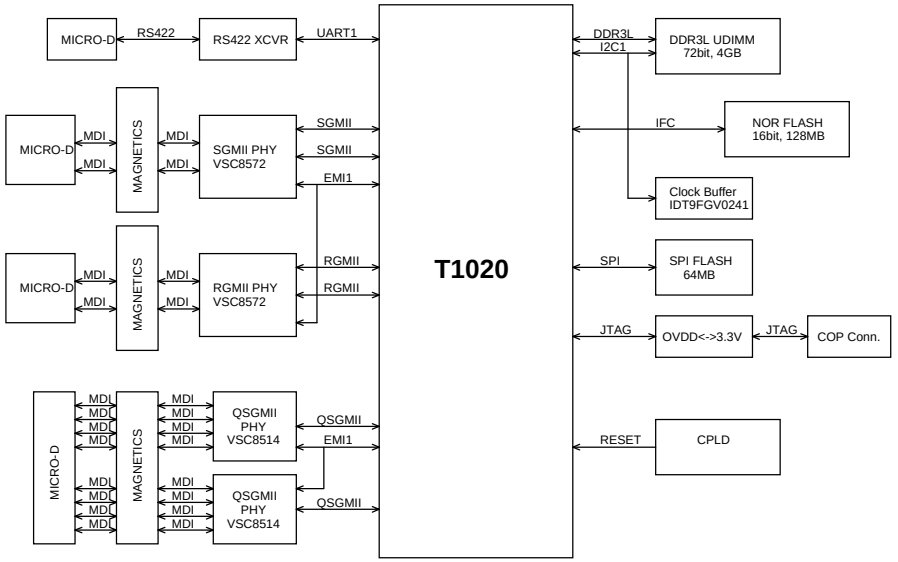
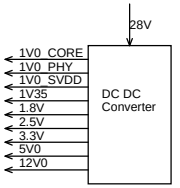
SYSTEM BLOCK DIAGRAM





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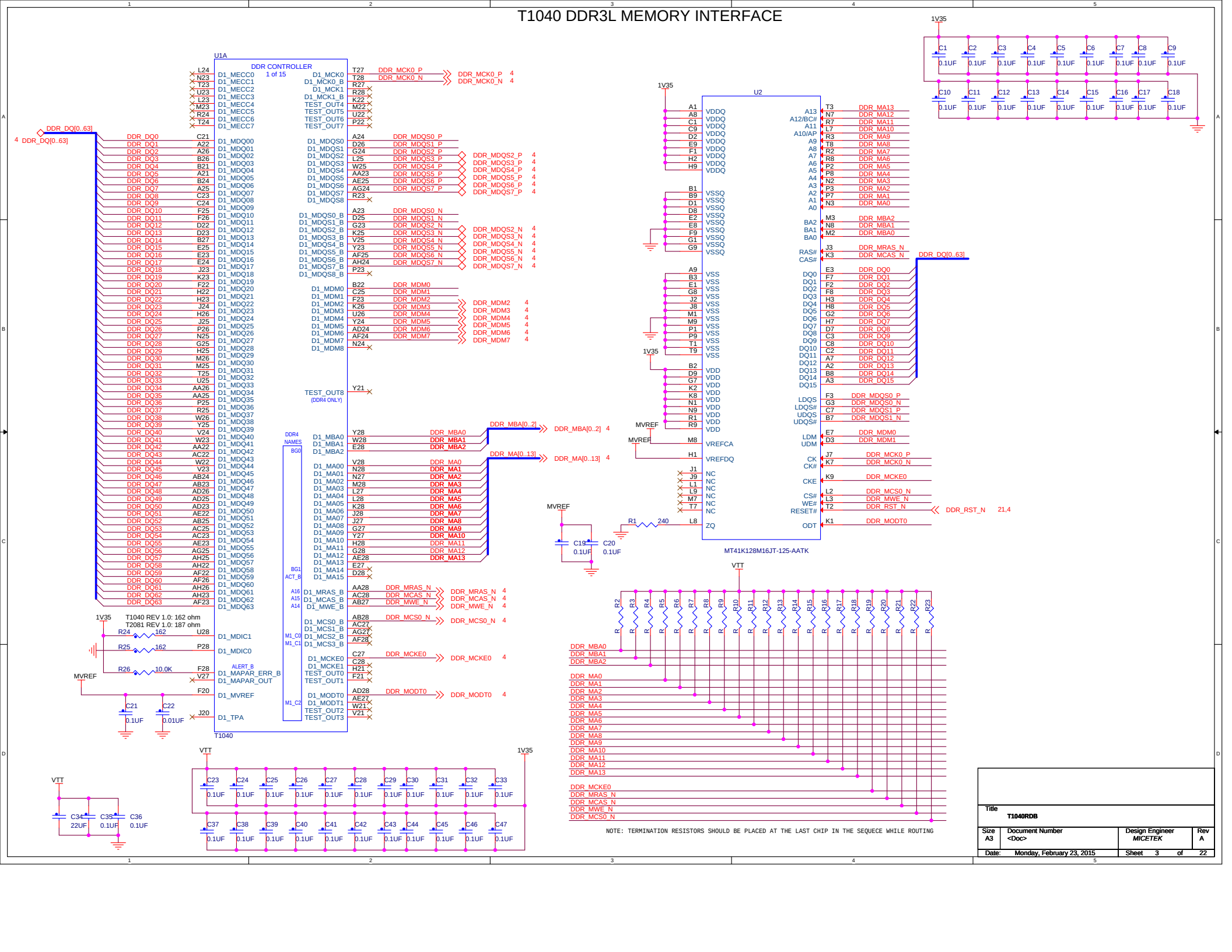
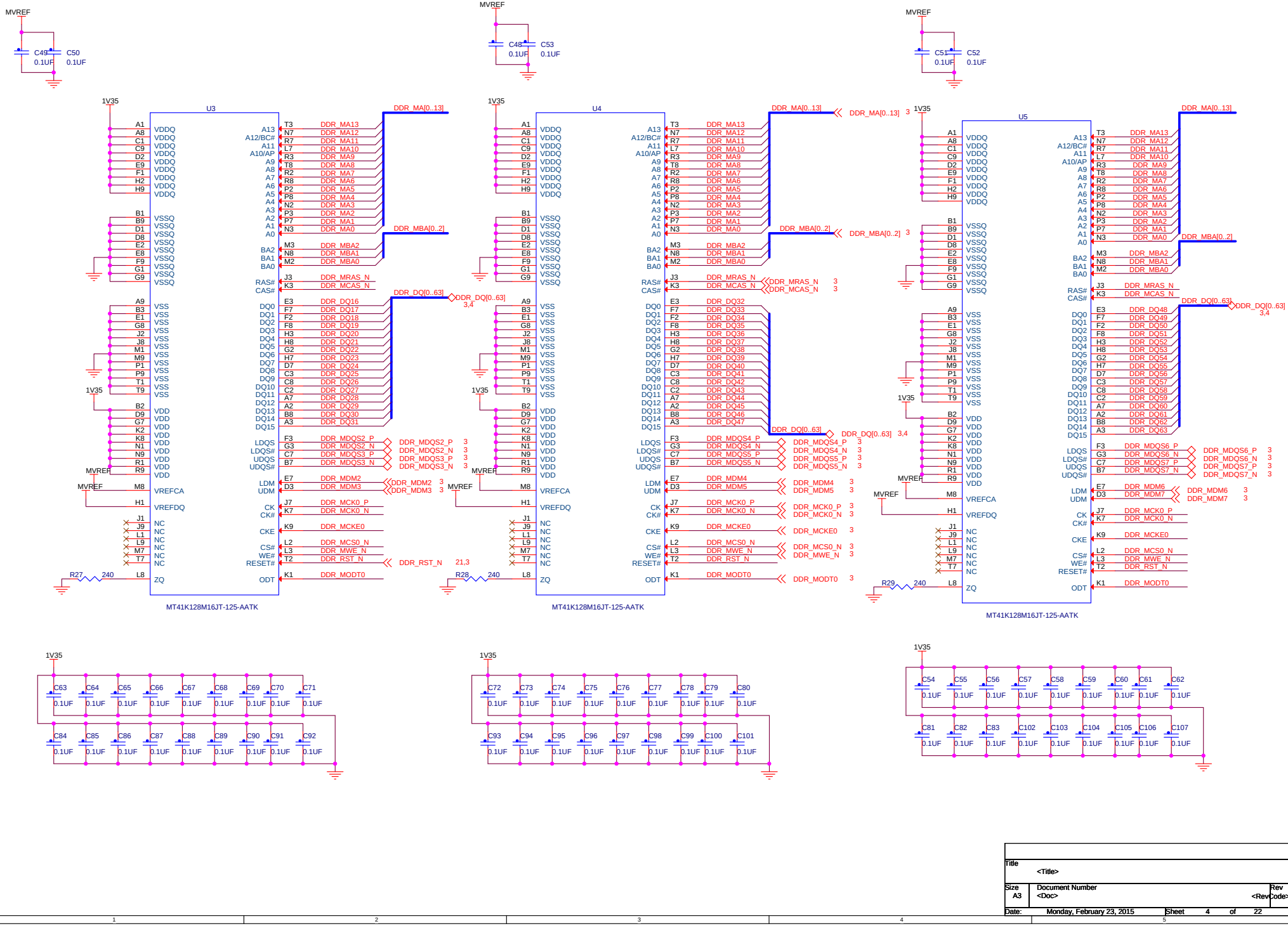
T1040 DDR3L MEMORY INTERFACE





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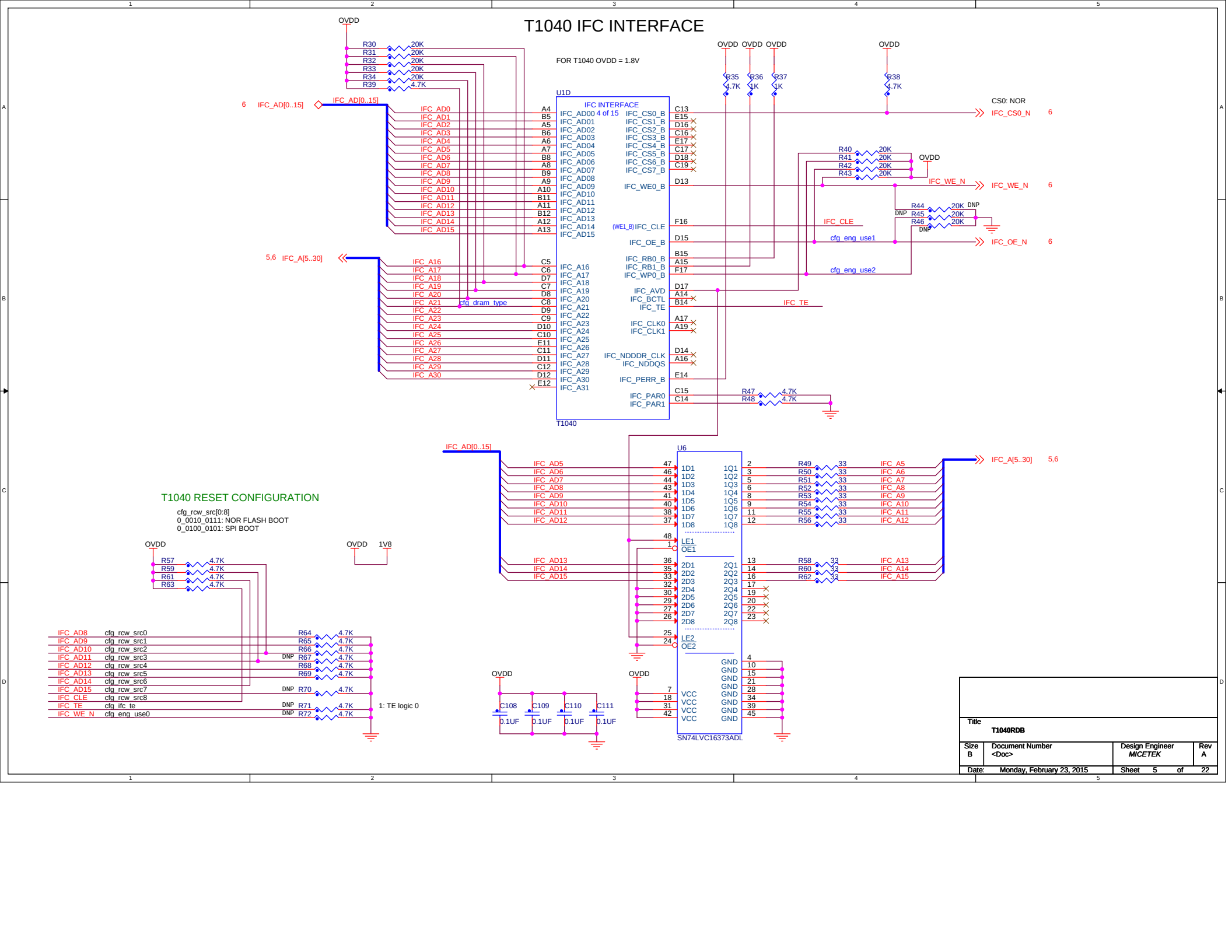
T1040 IFC INTERFACE



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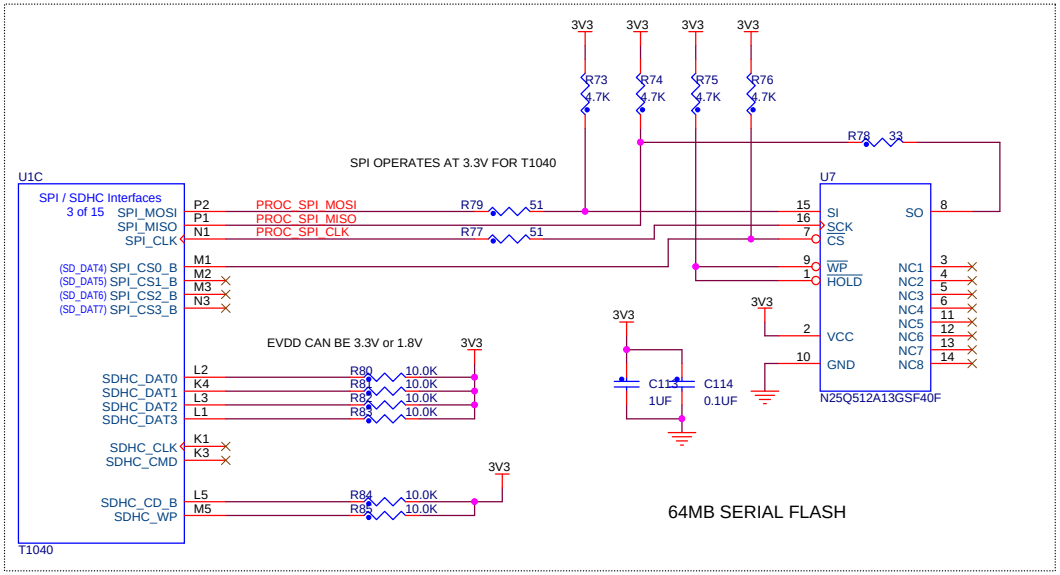
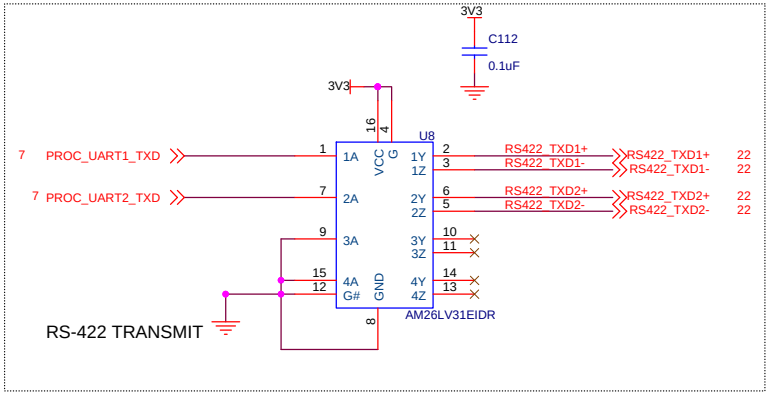
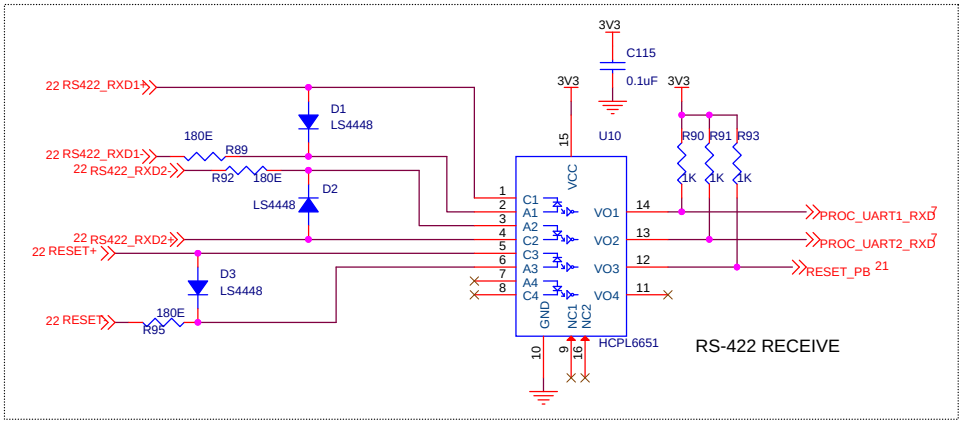
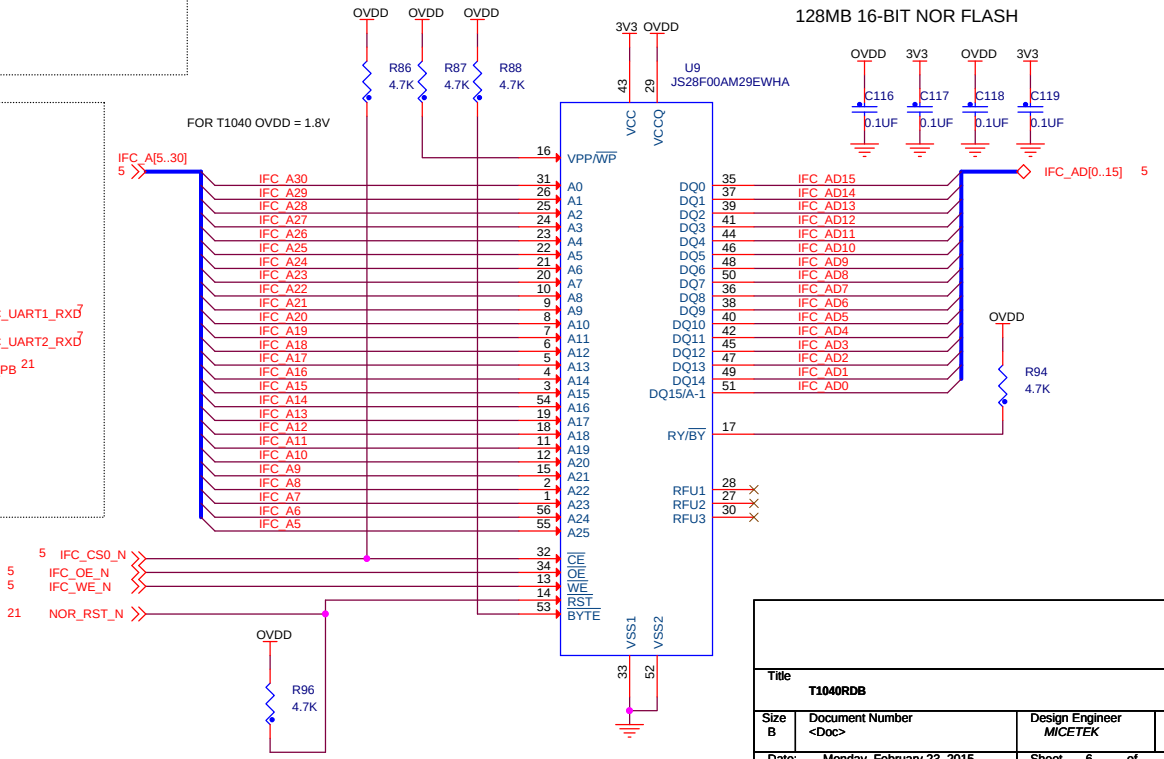
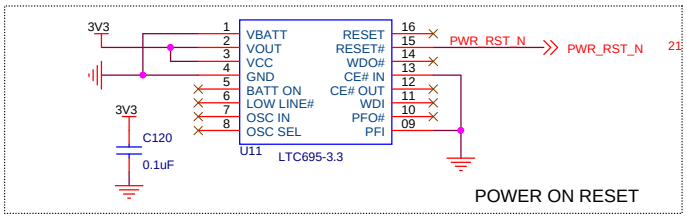
T1040 FLASH RESET RS-422











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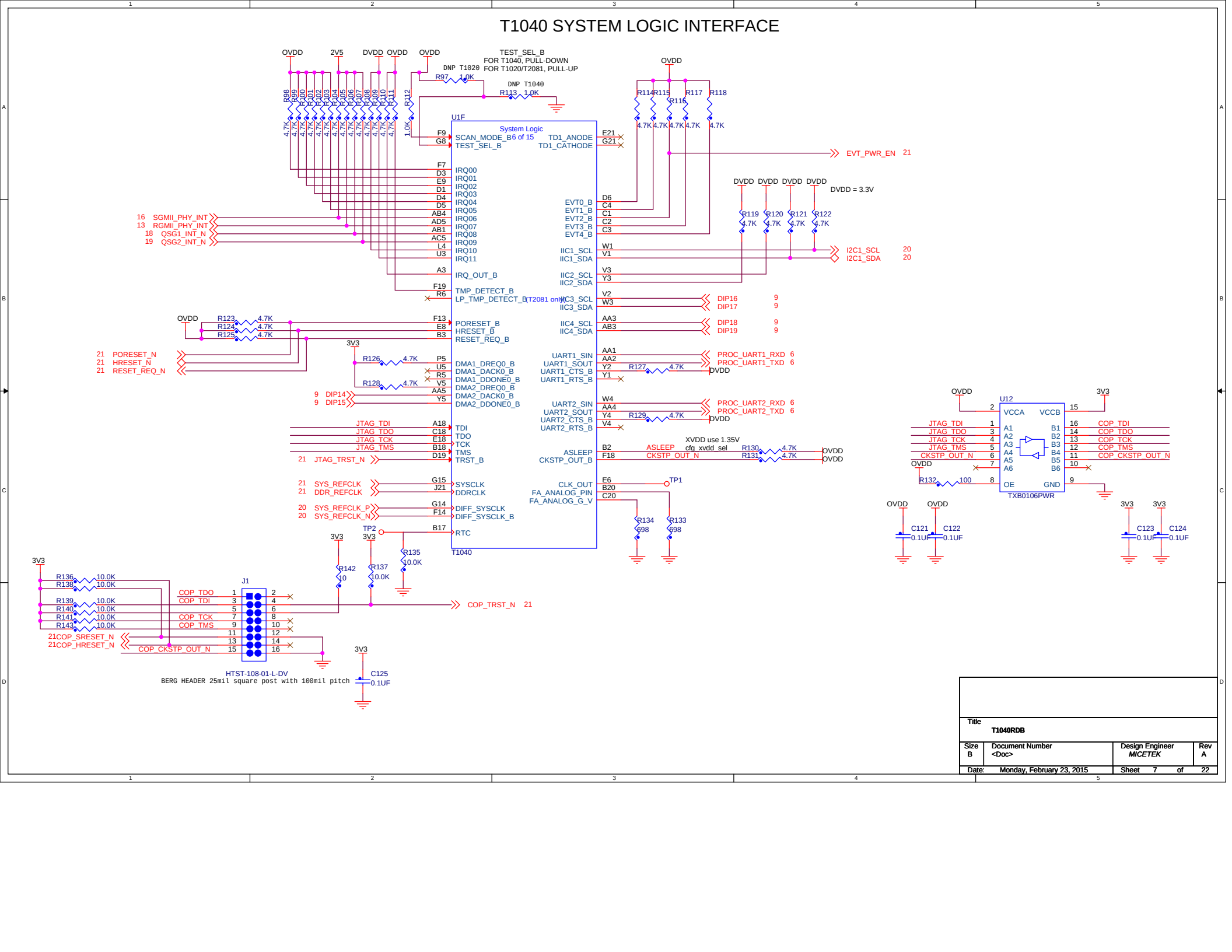
T1040 SYSTEM LOGIC INTERFACE



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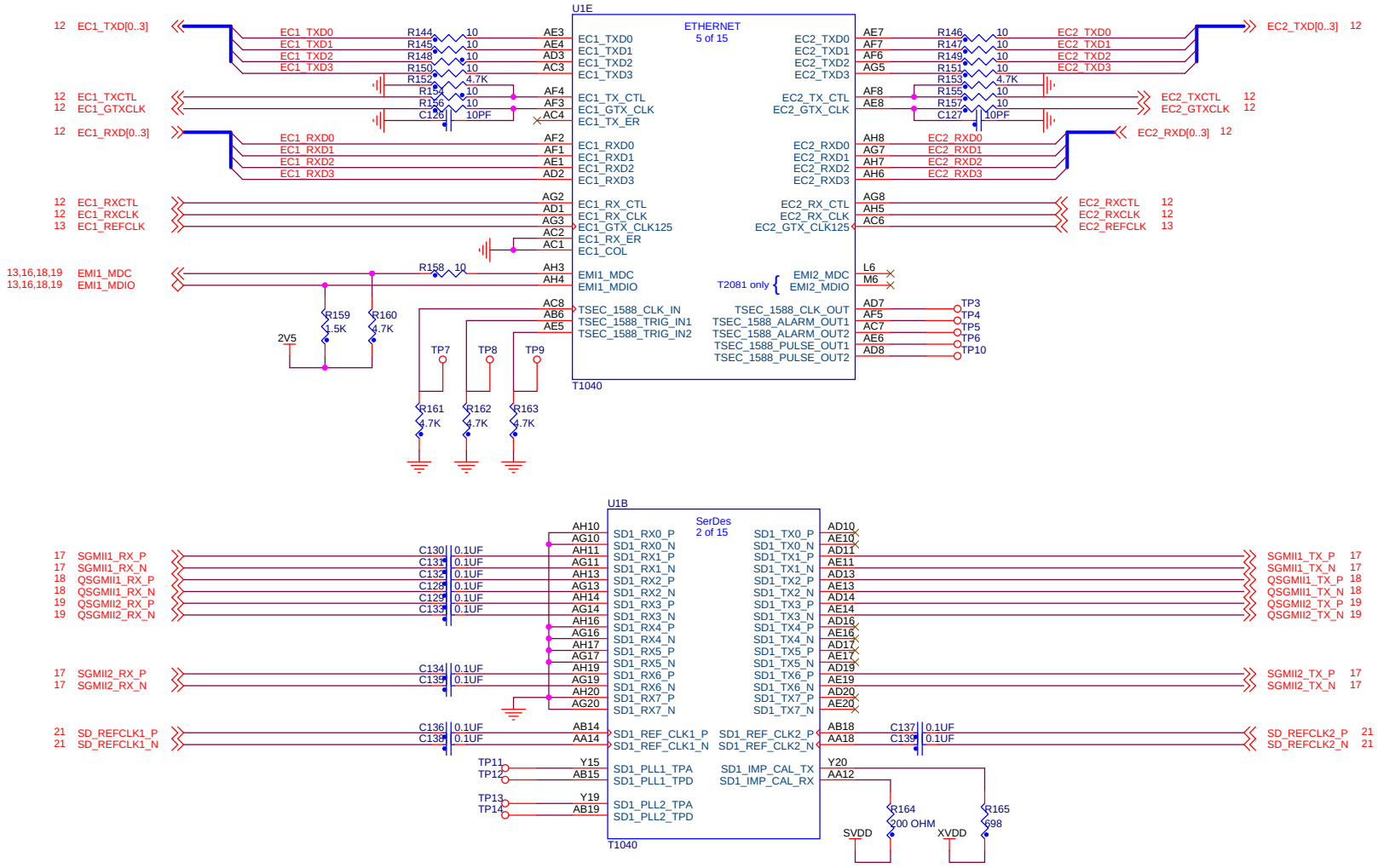
T1040 ETHERNET and SERDES INTERFACE



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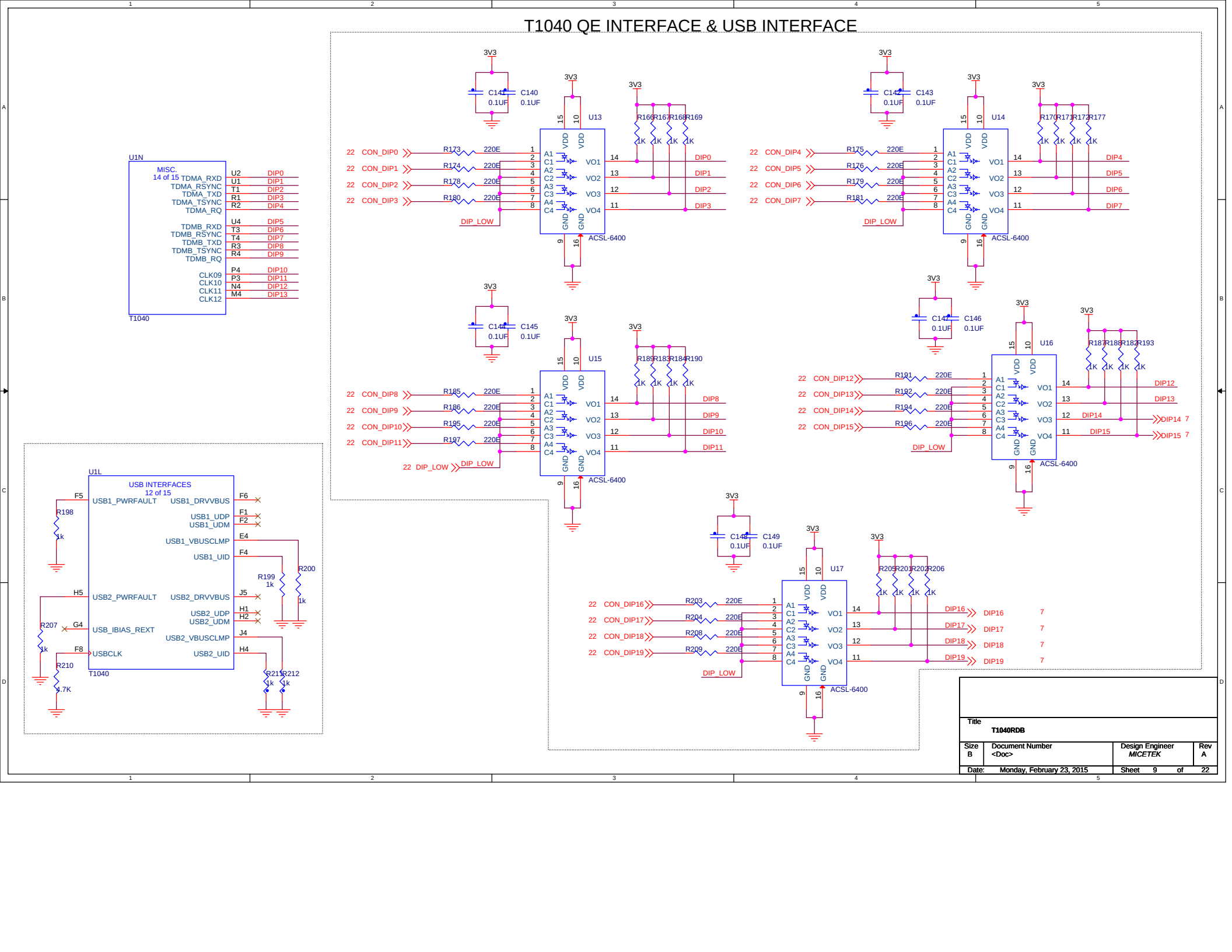
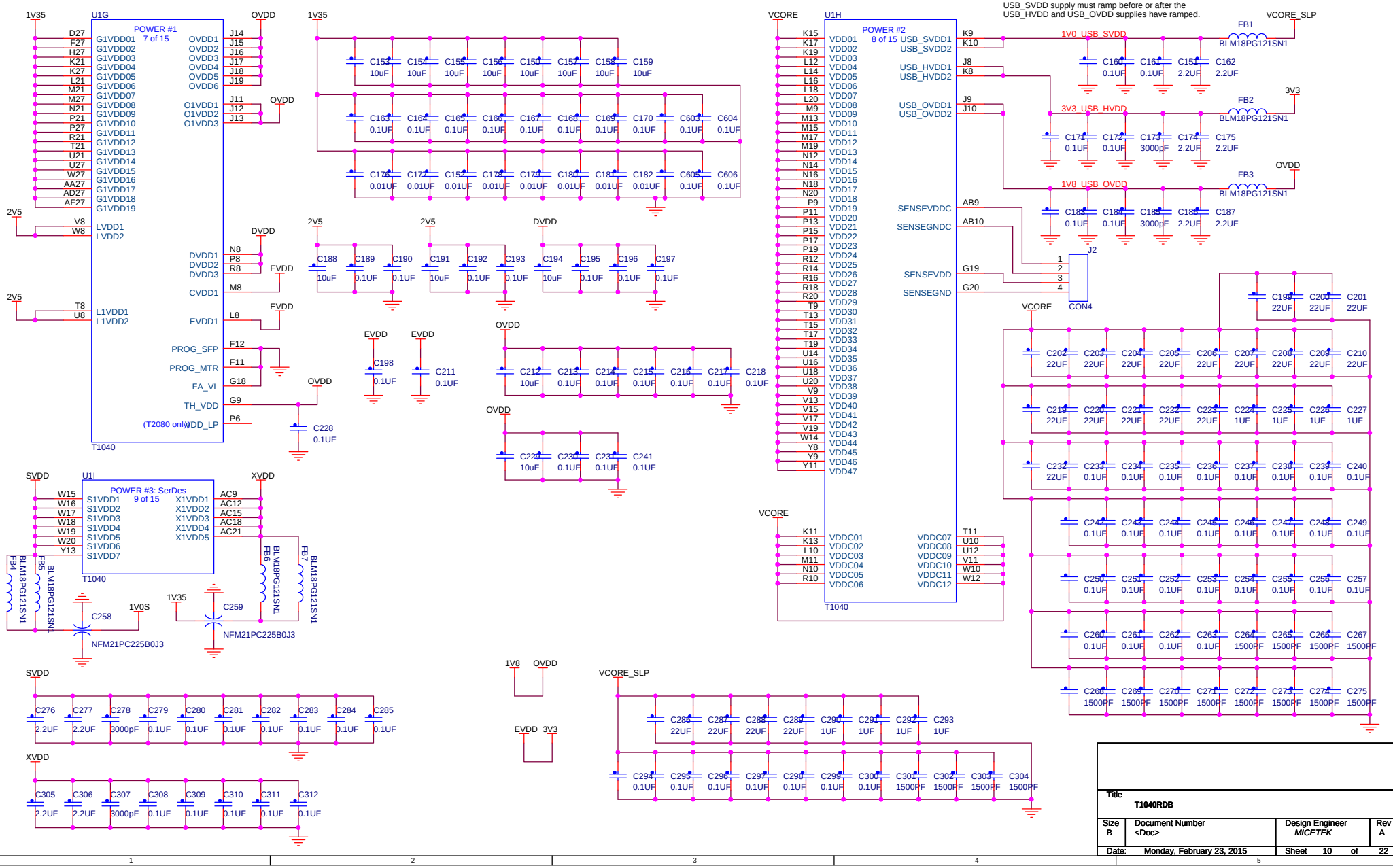
T1040 QE INTERFACE & USB INTERFACE



T1040 POWER SUPPLY



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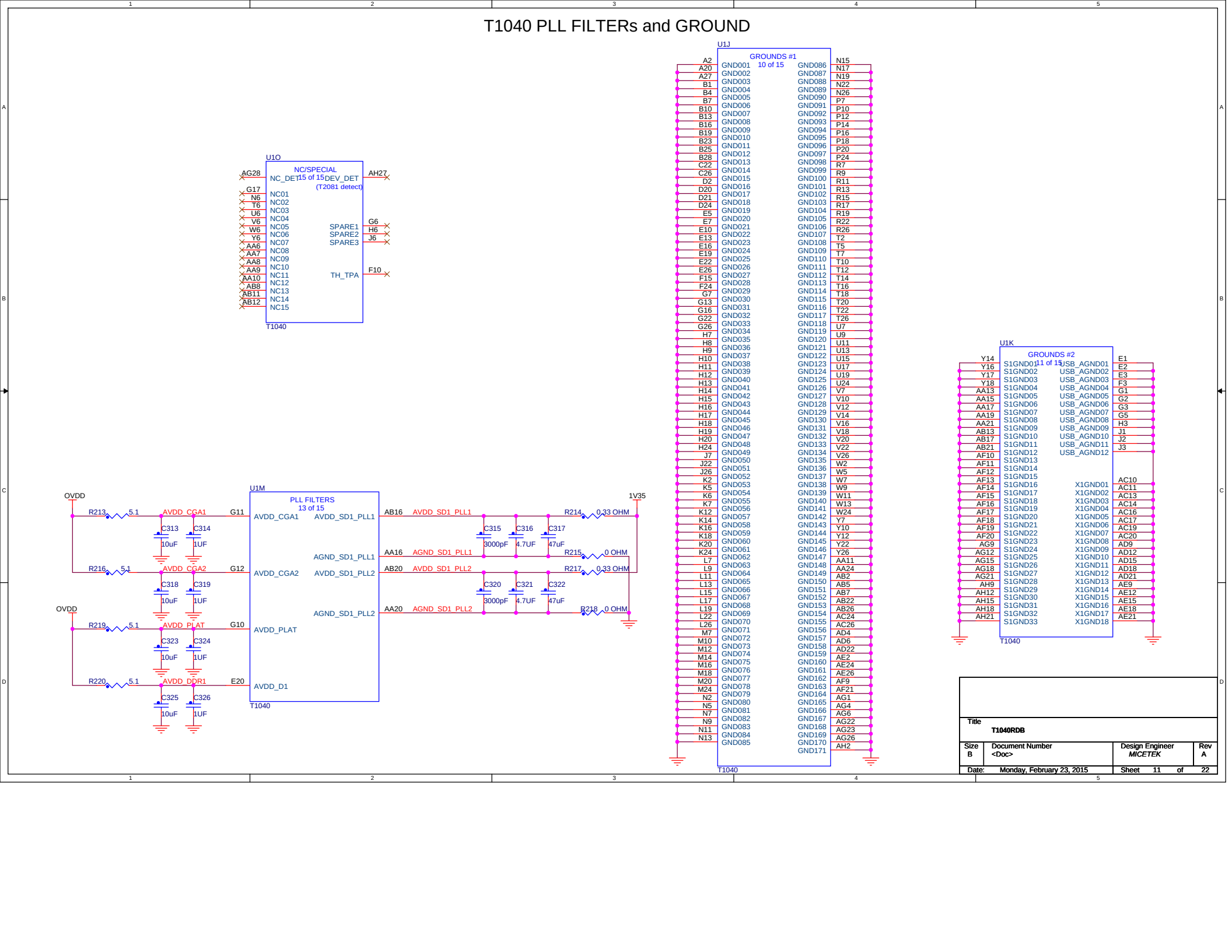
T1040 PLL FILTERs and GROUND



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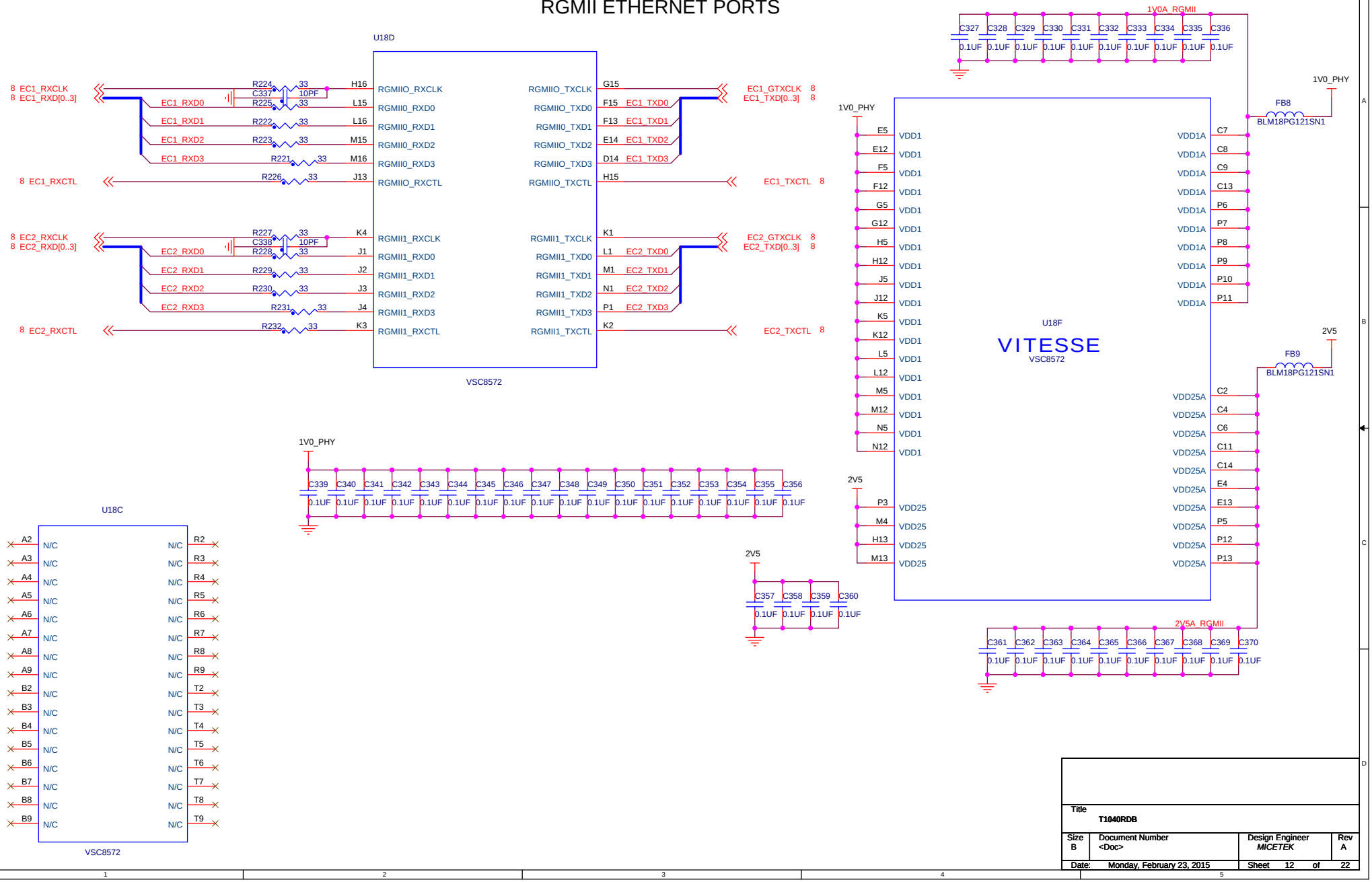
RGMII ETHERNET PORTS



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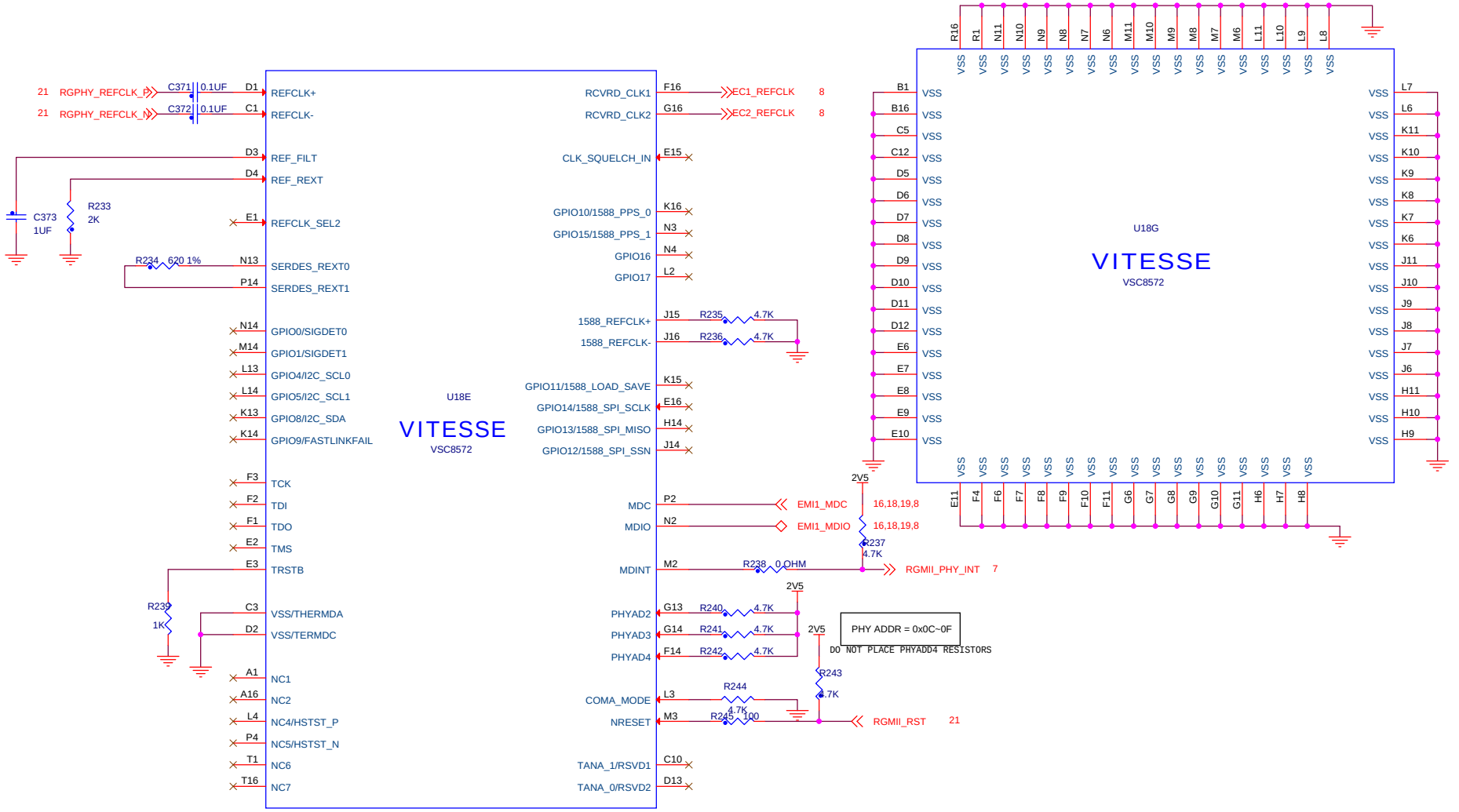
RGMII ETHERNET PORT 2



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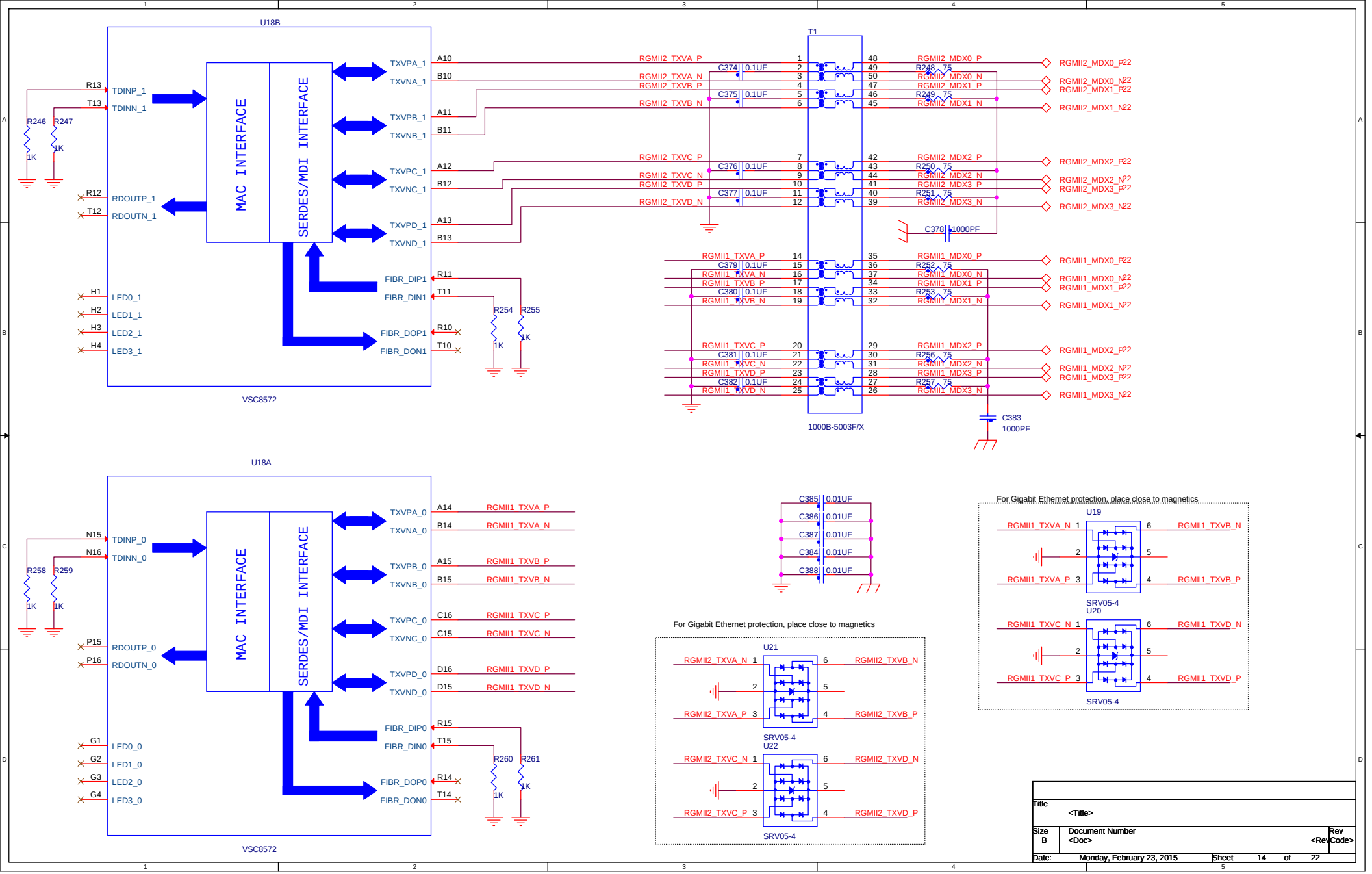
U18B
MAC INTERFACE
SERDES/MDI INTERFACE
TDINP_1
TDINN_1
RDOUTP_1
RDOUTN_1
TXVPA_1
TXVNA_1
TXVPB_1
TXVNB_1
TXVPC_1
TXVNC_1
TXVPD_1
TXVND_1
FIBR_DIP1
FIBR_DIN1
FIBR_DOP1
FIBR_DON1
LED0_1
LED1_1
LED2_1
LED3_1
VSC8572
T1
1000B-5003F/X
RGMII2_TXVA_P
RGMII2_TXVA_N
RGMII2_TXVB_P
RGMII2_TXVB_N
RGMII2_TXVC_P
RGMII2_TXVC_N
RGMII2_TXVD_P
RGMII2_TXVD_N
RGMII2_MDX0_P
RGMII2_MDX0_N
RGMII2_MDX1_P
RGMII2_MDX1_N
RGMII2_MDX2_P
RGMII2_MDX2_N
RGMII2_MDX3_P
RGMII2_MDX3_N
RGMII1_TXVA_P
RGMII1_TXVA_N
RGMII1_TXVB_P
RGMII1_TXVB_N
RGMII1_TXVC_P
RGMII1_TXVC_N
RGMII1_TXVD_P
RGMII1_TXVD_N
RGMII1_MDX0_P
RGMII1_MDX0_N
RGMII1_MDX1_P
RGMII1_MDX1_N
RGMII1_MDX2_P
RGMII1_MDX2_N
RGMII1_MDX3_P
RGMII1_MDX3_N
C374 0.1UF
C375 0.1UF
C376 0.1UF
C377 0.1UF
C378 1000PF
C379 0.1UF
C380 0.1UF
C381 0.1UF
C382 0.1UF
C383 1000PF
R246 1K
R247 1K
R248 75
R249 75
R250 75
R251 75
R252 75
R253 75
R254 1K
R255 1K
R256 75
R257 75
U18A
MAC INTERFACE
SERDES/MDI INTERFACE
TDINP_0
TDINN_0
RDOUTP_0
RDOUTN_0
TXVPA_0
TXVNA_0
TXVPB_0
TXVNB_0
TXVPC_0
TXVNC_0
TXVPD_0
TXVND_0
FIBR_DIP0
FIBR_DIN0
FIBR_DOP0
FIBR_DON0
LED0_0
LED1_0
LED2_0
LED3_0
VSC8572
C385 0.01UF
C386 0.01UF
C387 0.01UF
C384 0.01UF
C388 0.01UF
R258 1K
R259 1K
R260 1K
R261 1K
For Gigabit Ethernet protection, place close to magnetics
U21
U22
SRV05-4
For Gigabit Ethernet protection, place close to magnetics
U19
U20
SRV05-4
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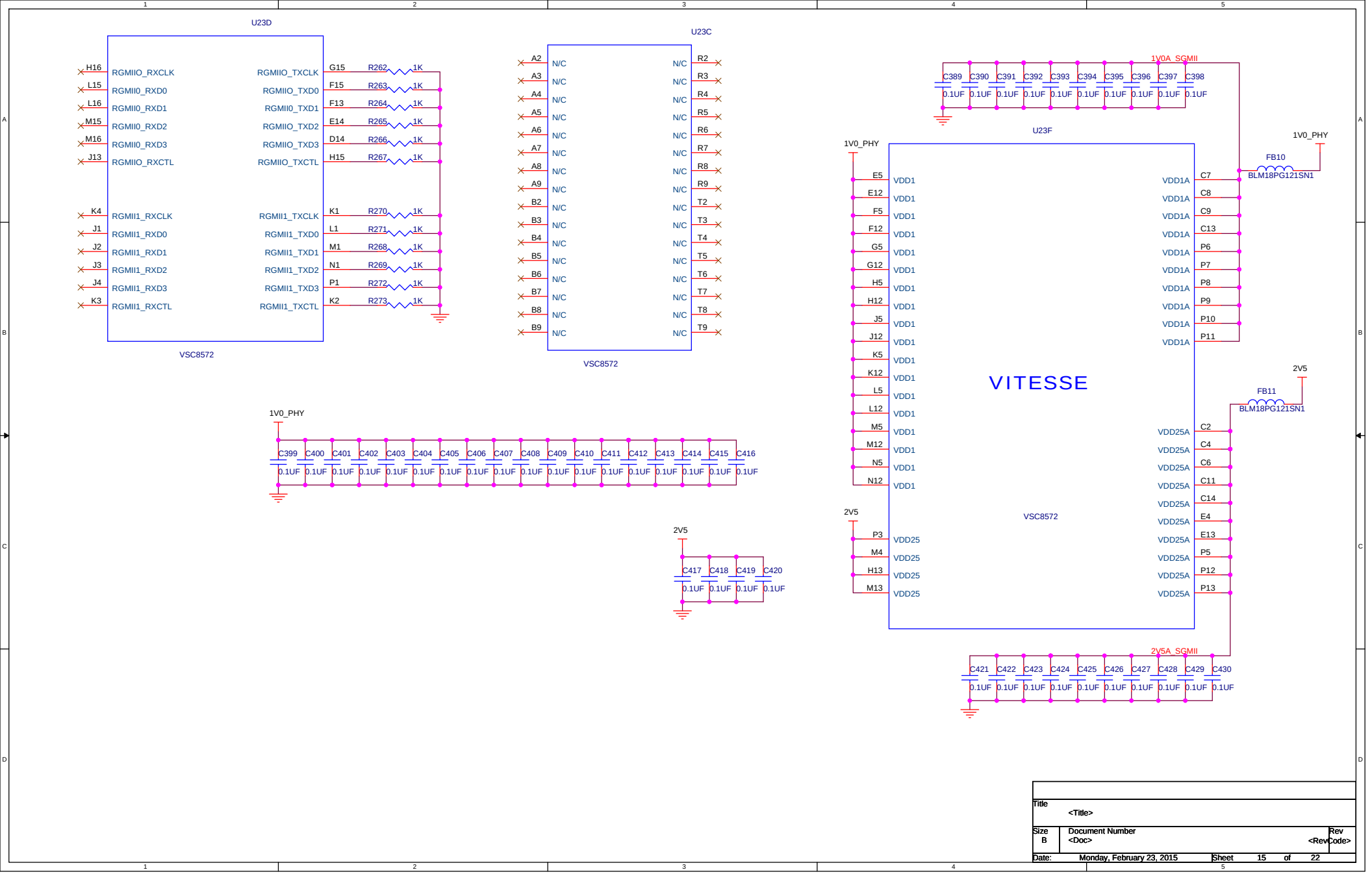

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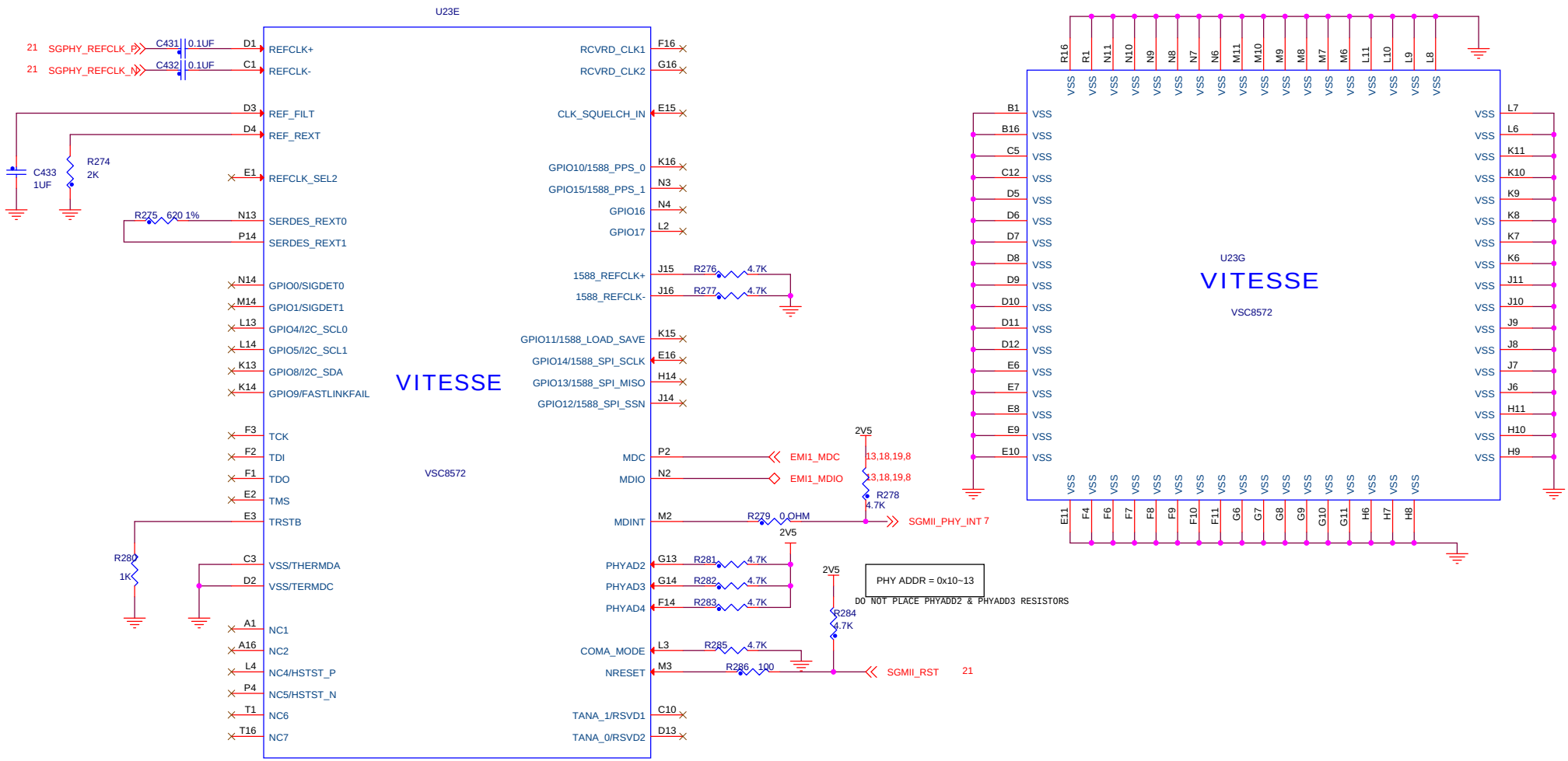

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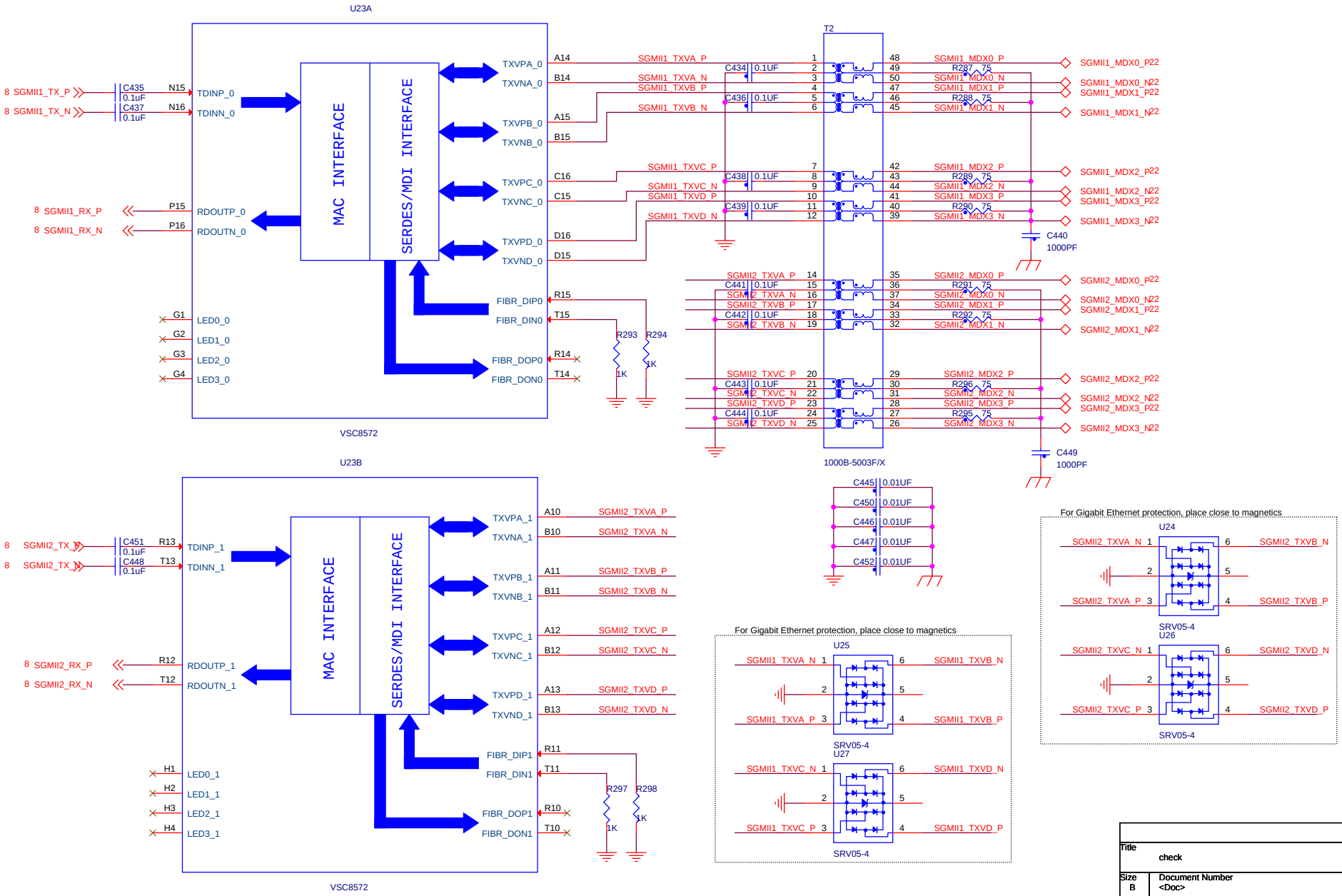

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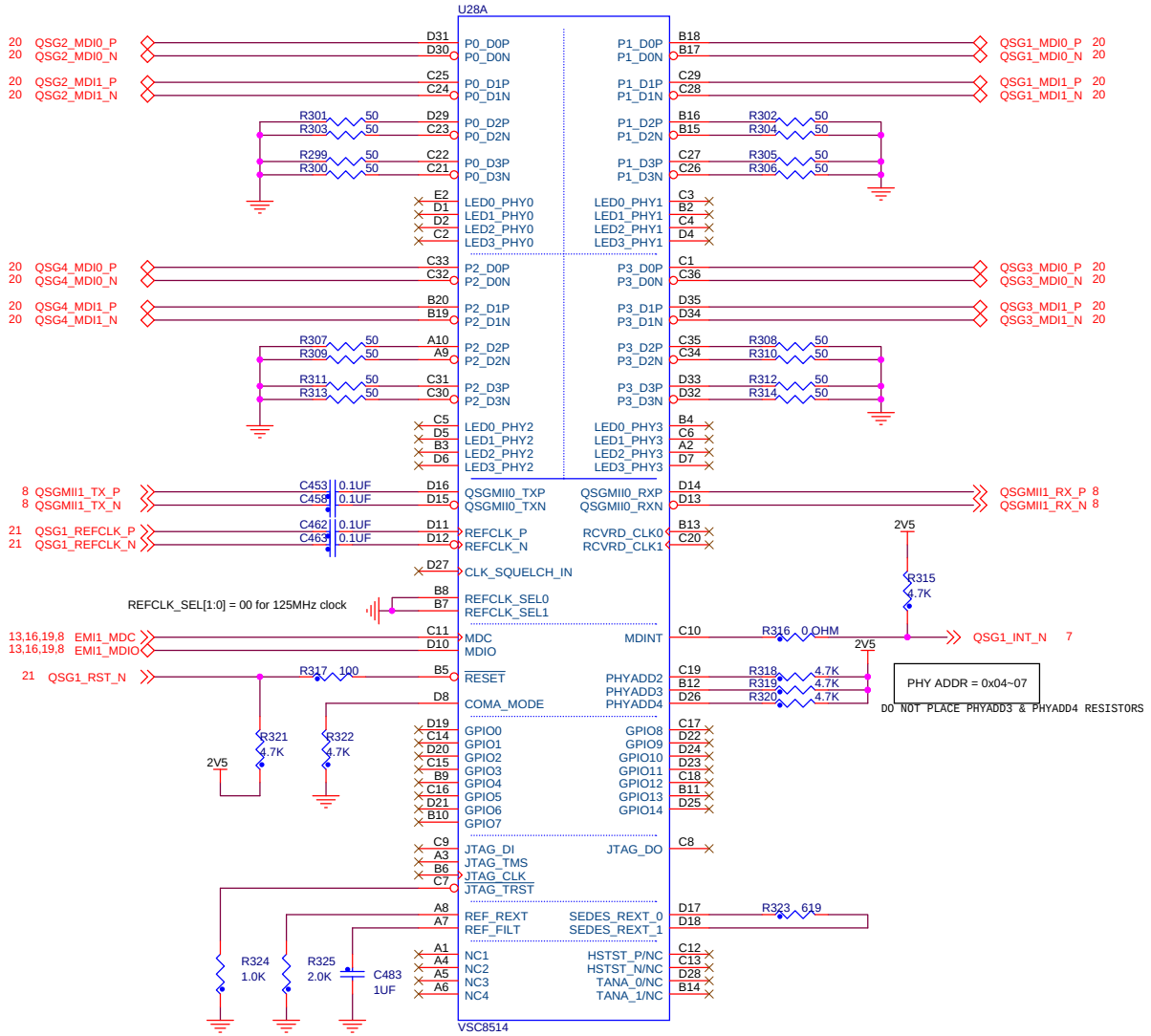
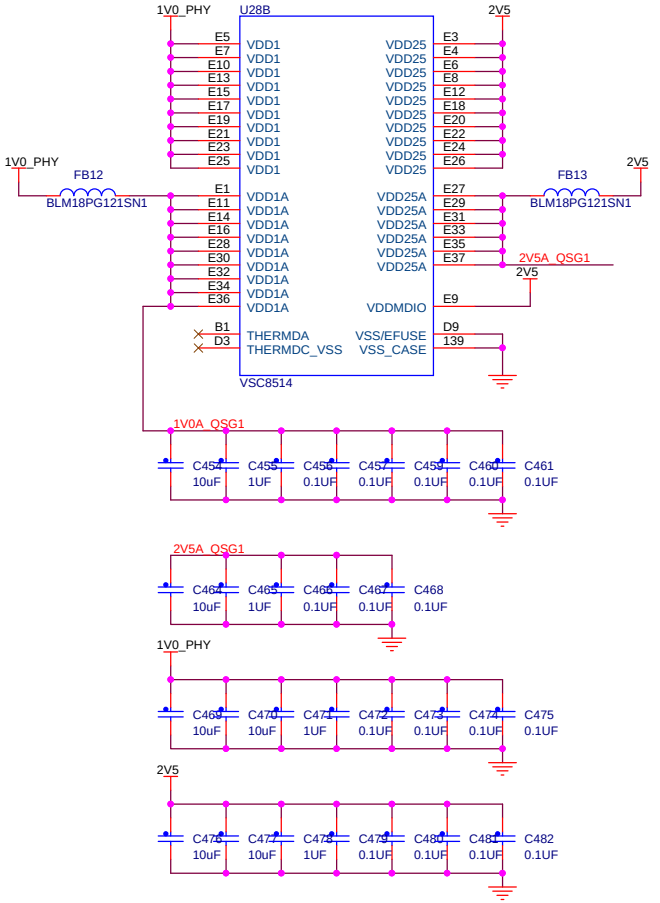
QSGMII PHY 1

T1040 ONLY!





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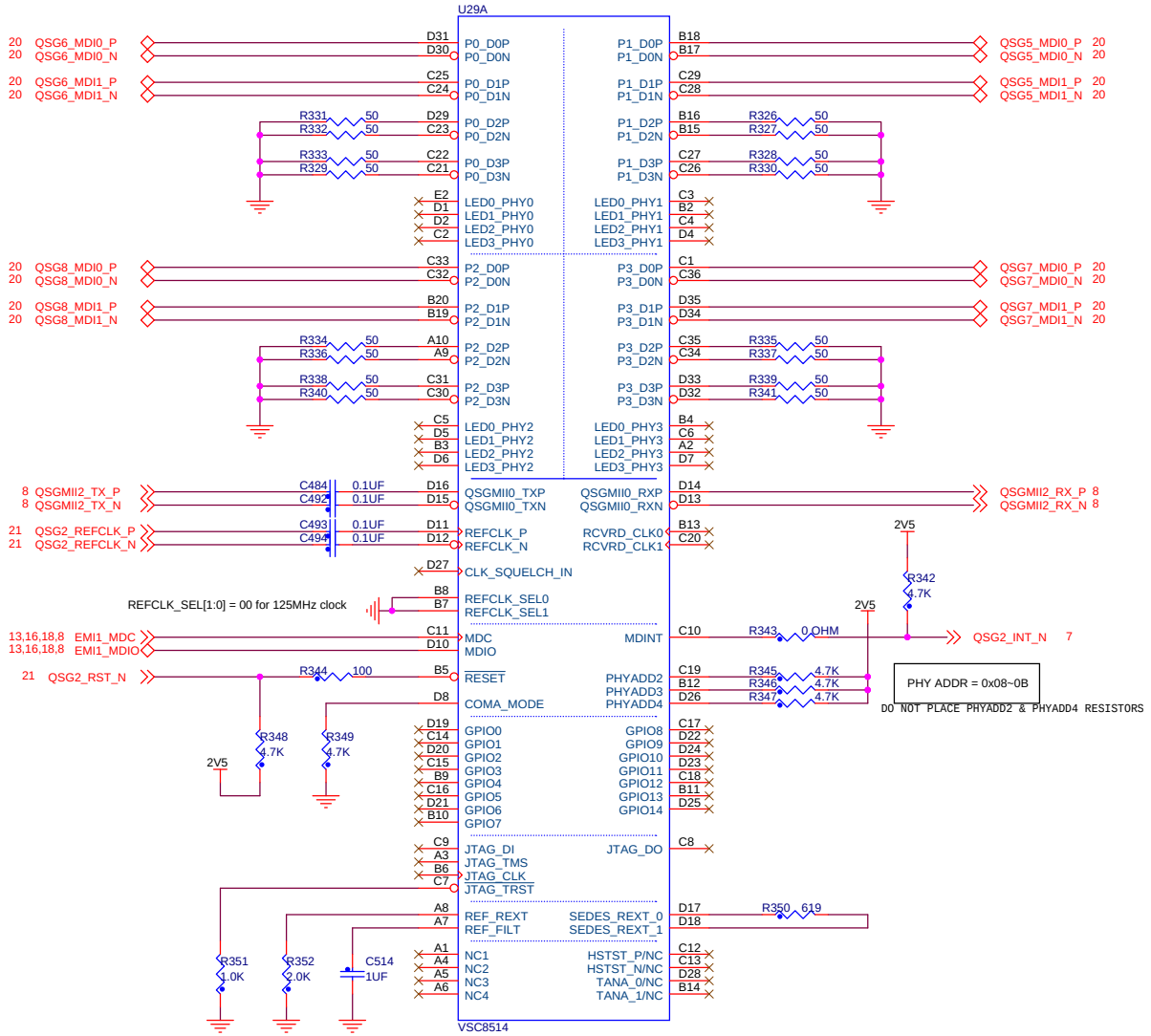
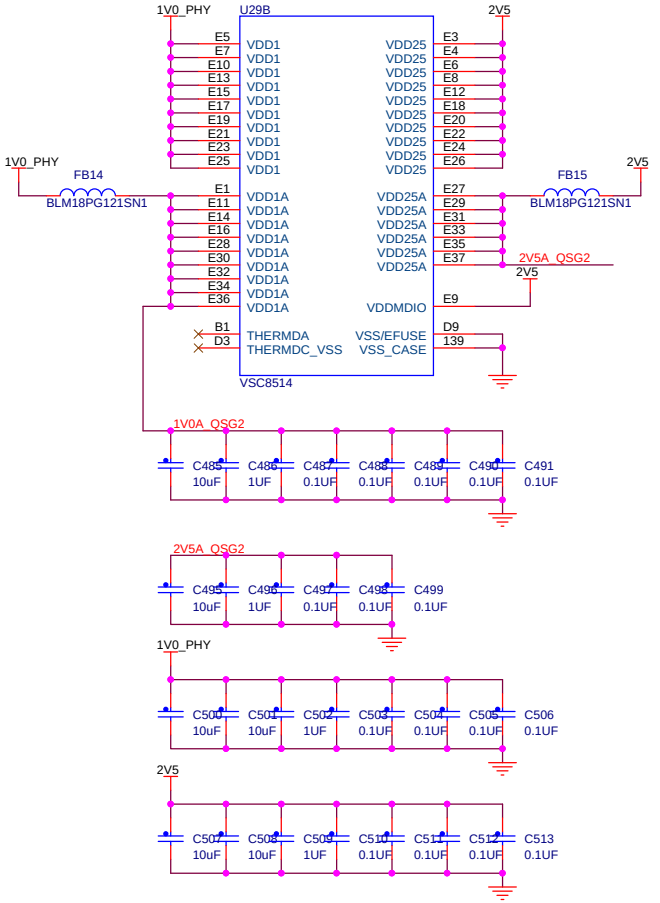
QSGMII PHY 2

T1040 ONLY!





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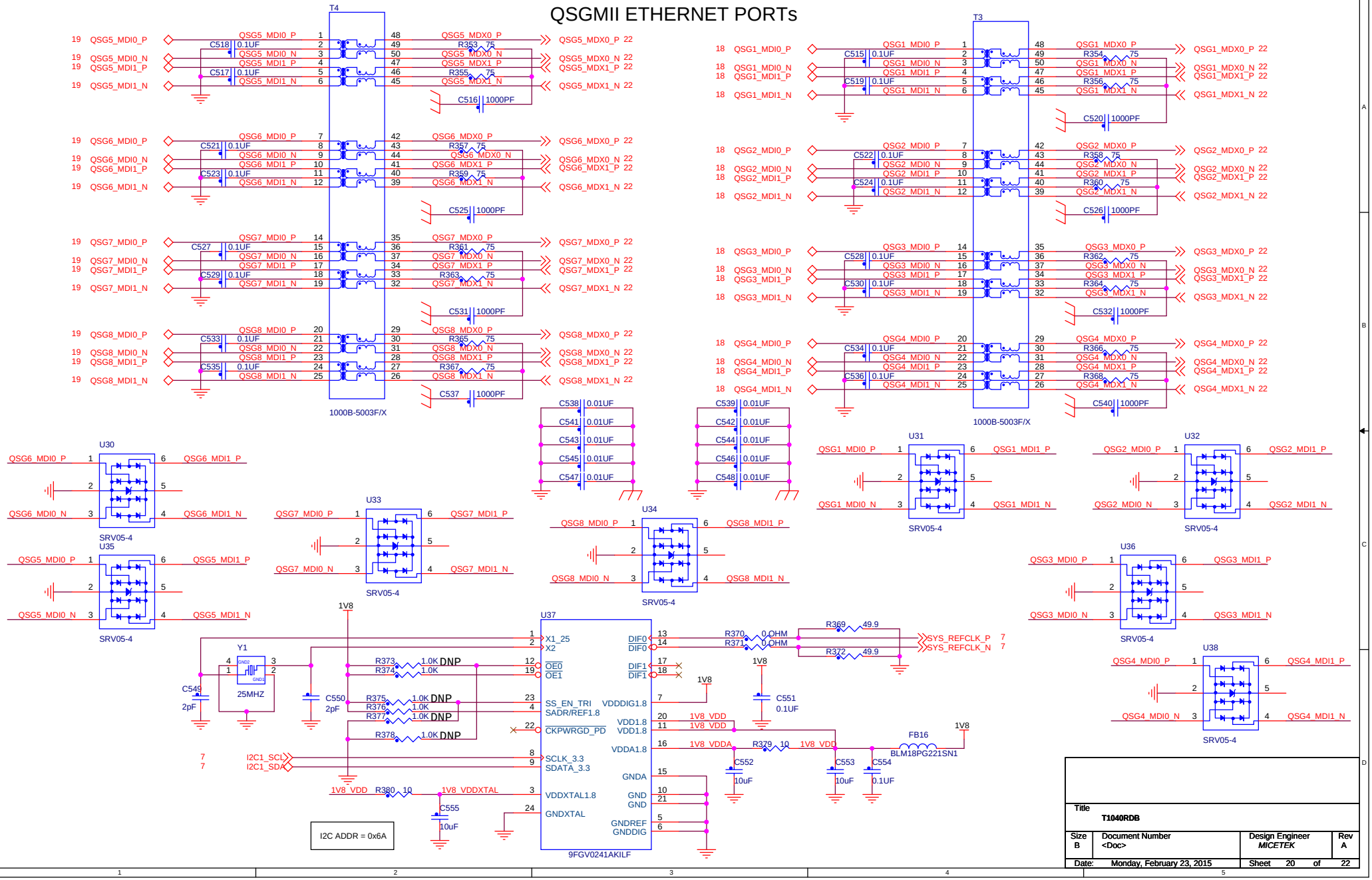
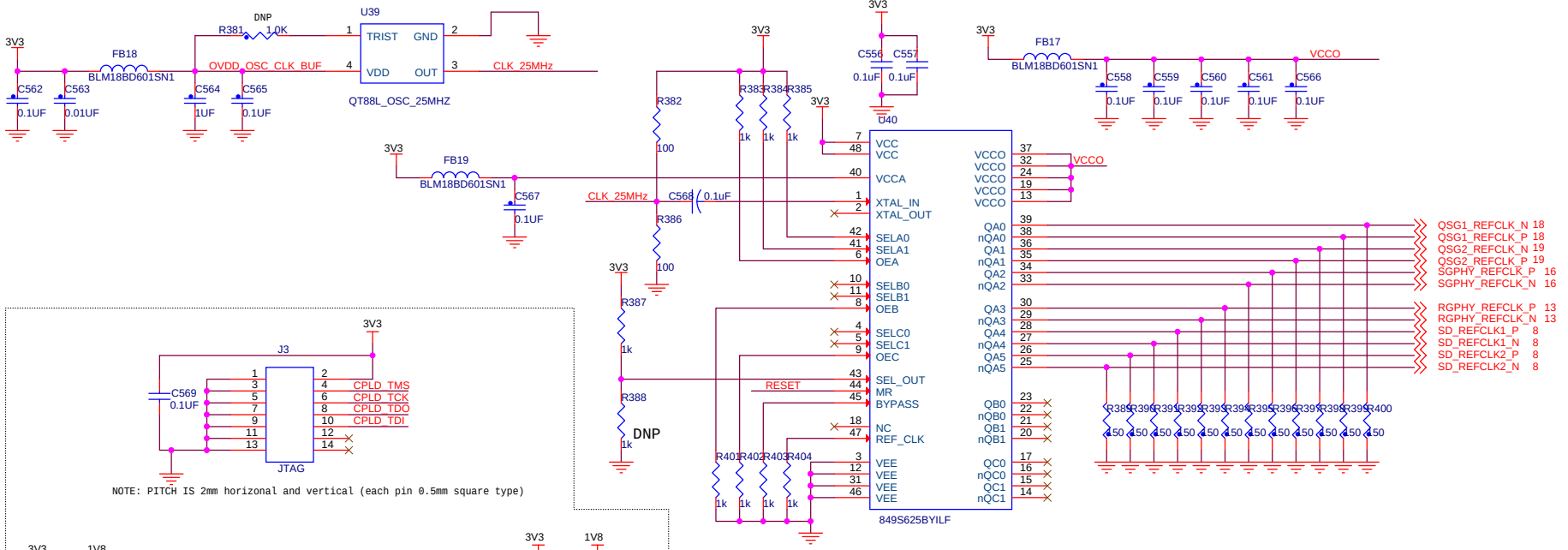
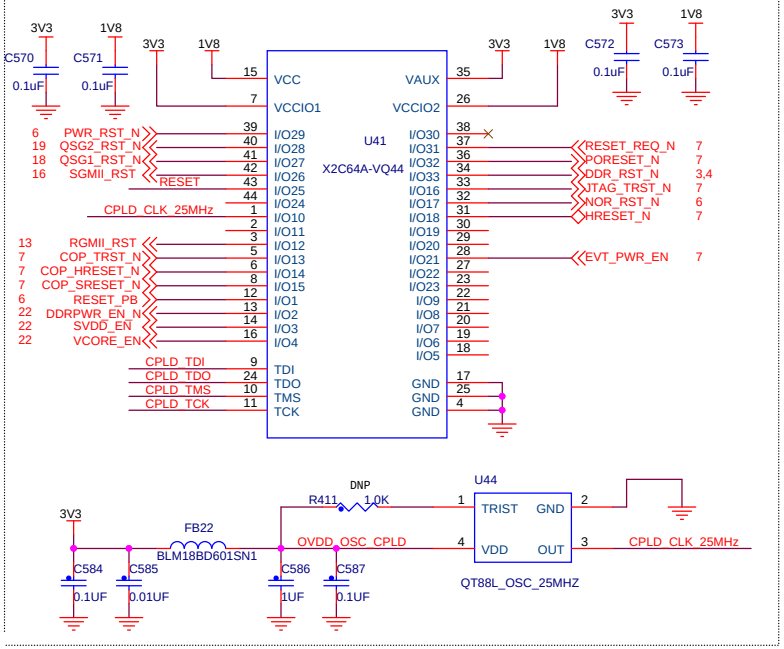
QSGMII ETHERNET PORTs

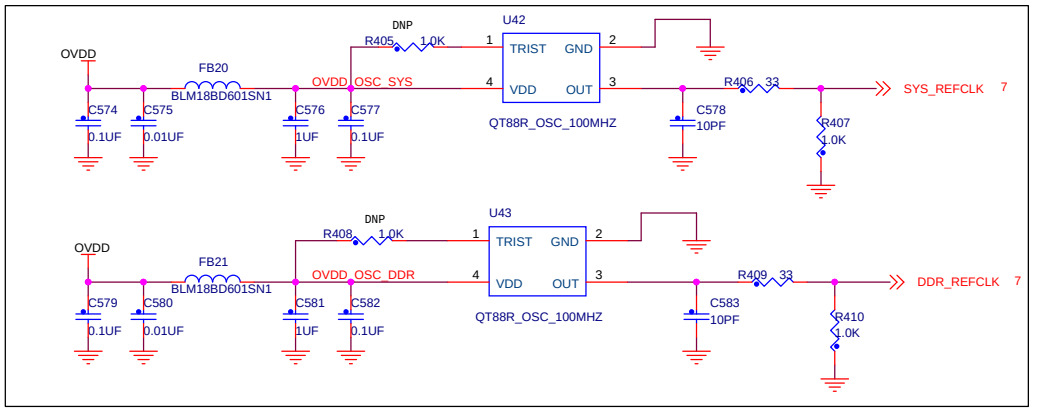


SYSTEM CLOCK GENERATORs



NOTE: PITCH IS 2mm horizonal and vertical (each pin 0.5mm square type)





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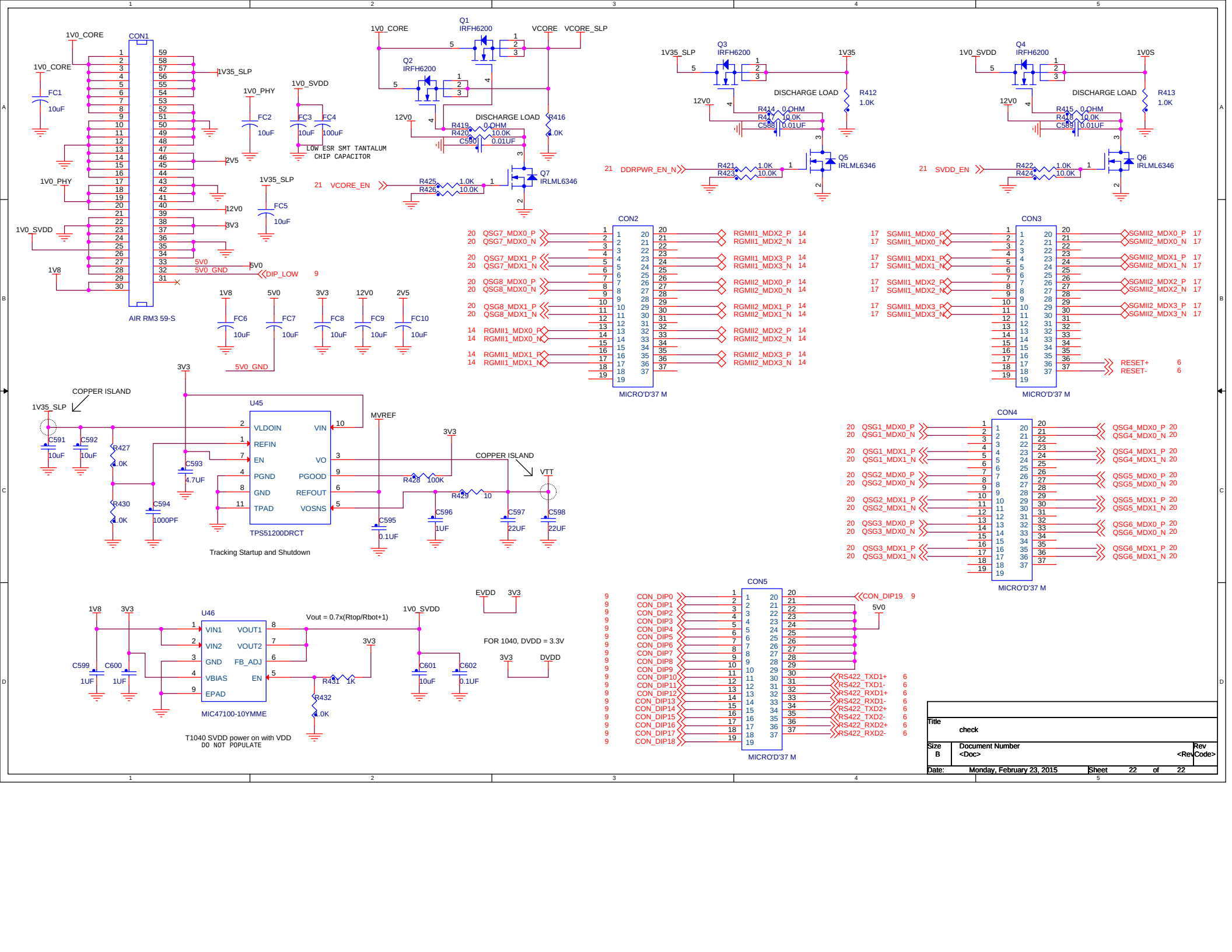
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AIR RM3 59-S
Q1 IRFH6200
Q2 IRFH6200
Q3 IRFH6200
Q4 IRFH6200
Q5 IRLML6346
Q6 IRLML6346
Q7 IRLML6346
DISCHARGE LOAD
LOW ESR SMT TANTALUM CHIP CAPACITOR
CON2
CON3
CON4
CON5
MICRO'D'37 M
U45
TPS51200DRCT
Tracking Startup and Shutdown
COPPER ISLAND
U46
MIC47100-10YMME
Vout = 0.7x(Rtop/Rbot+1)
FOR 1040, DVDD = 3.3V
T1040 SVDD power on with VDD
DO NOT POPULATE
Title
check
Size B
Document Number
<Doc>
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