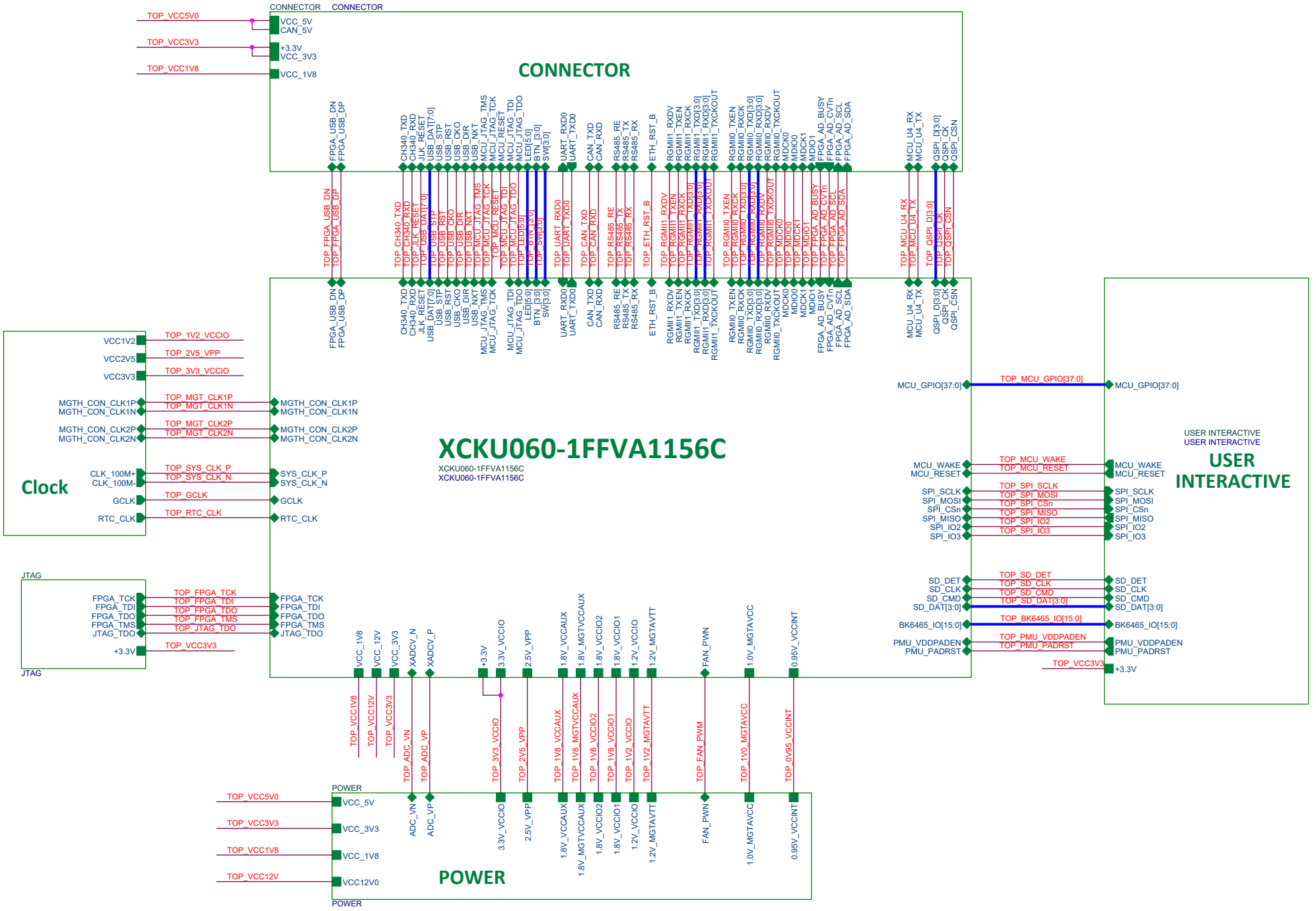
CONNECTOR
XCKU060-1FFVA1156C
XCKU060-1FFVA1156C
Clock
JTAG
JTAG
USER INTERACTIVE
USER INTERACTIVE
POWER
POWER
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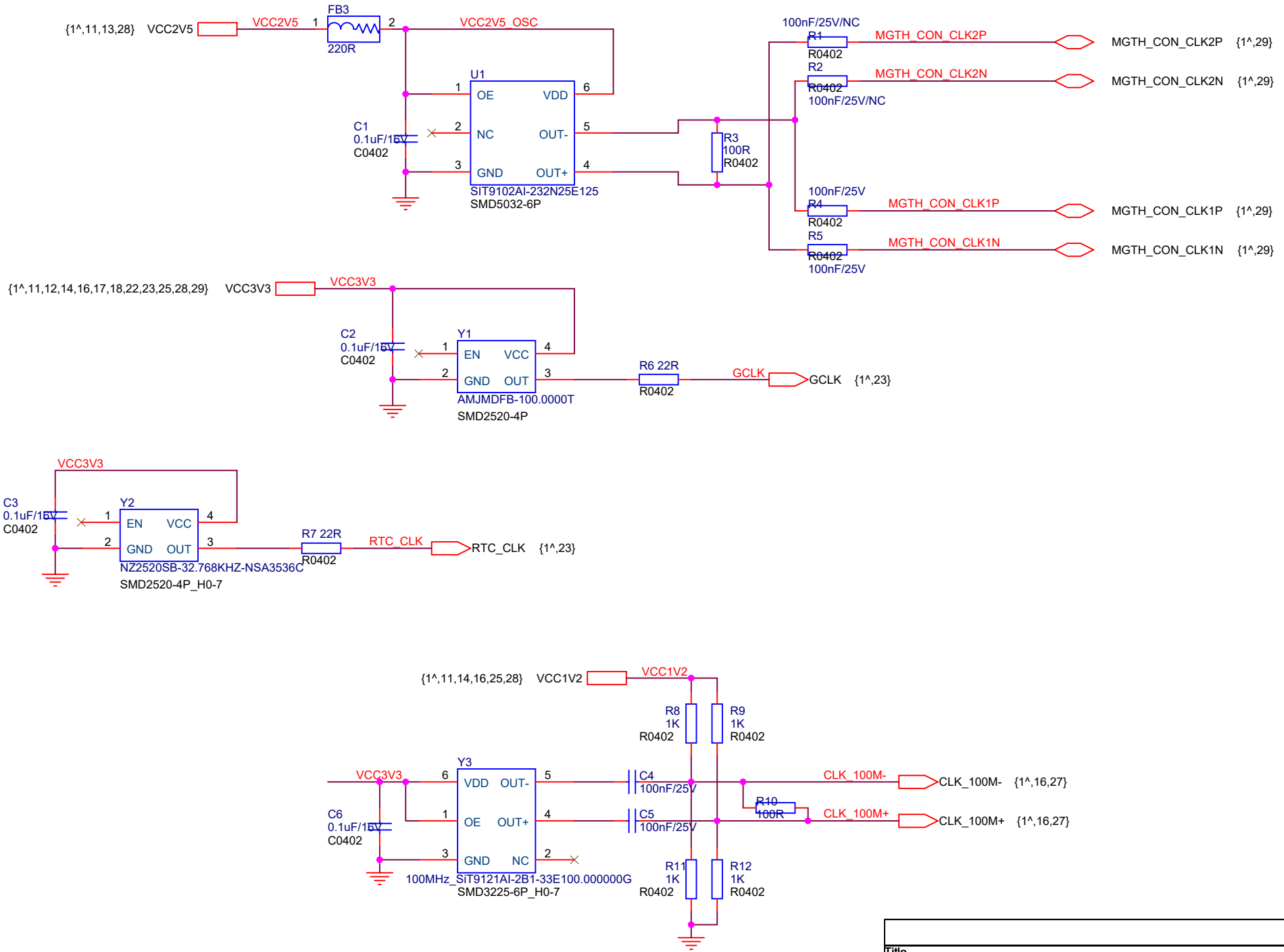

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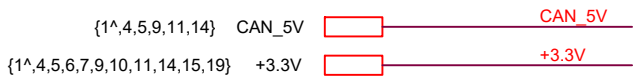

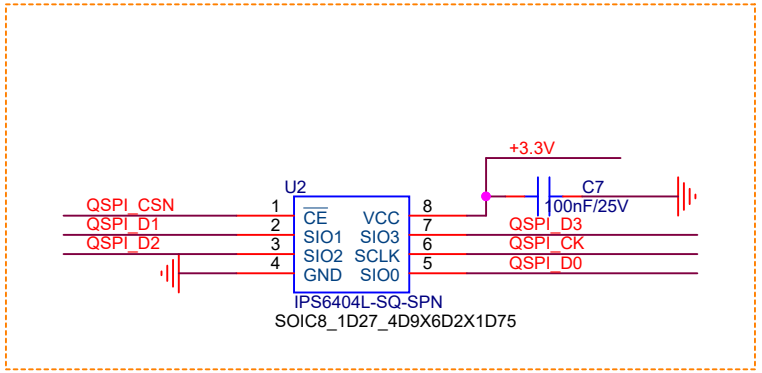

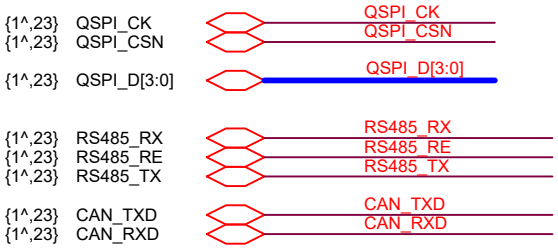

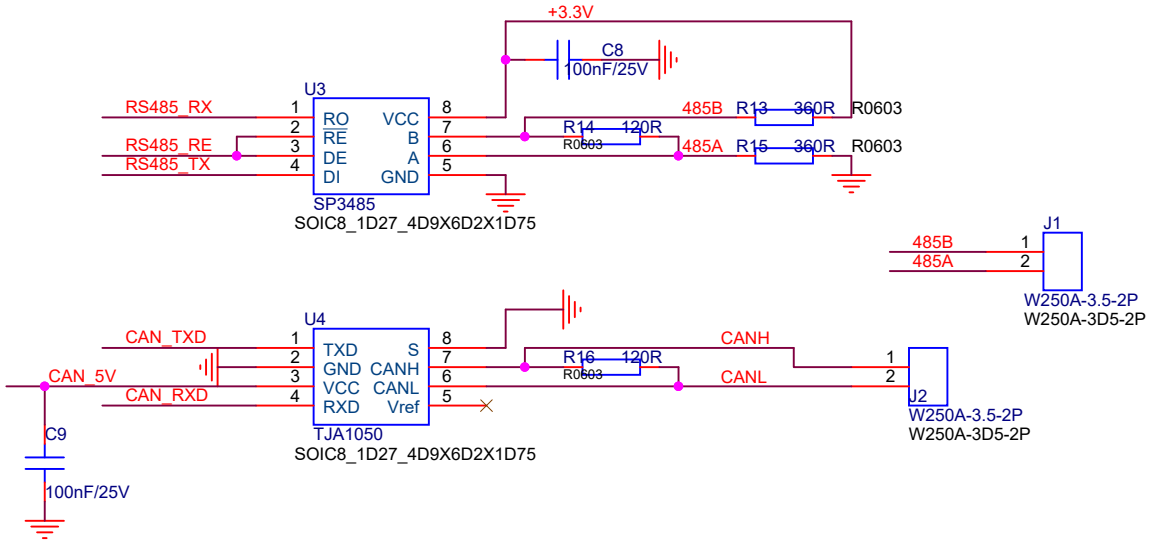

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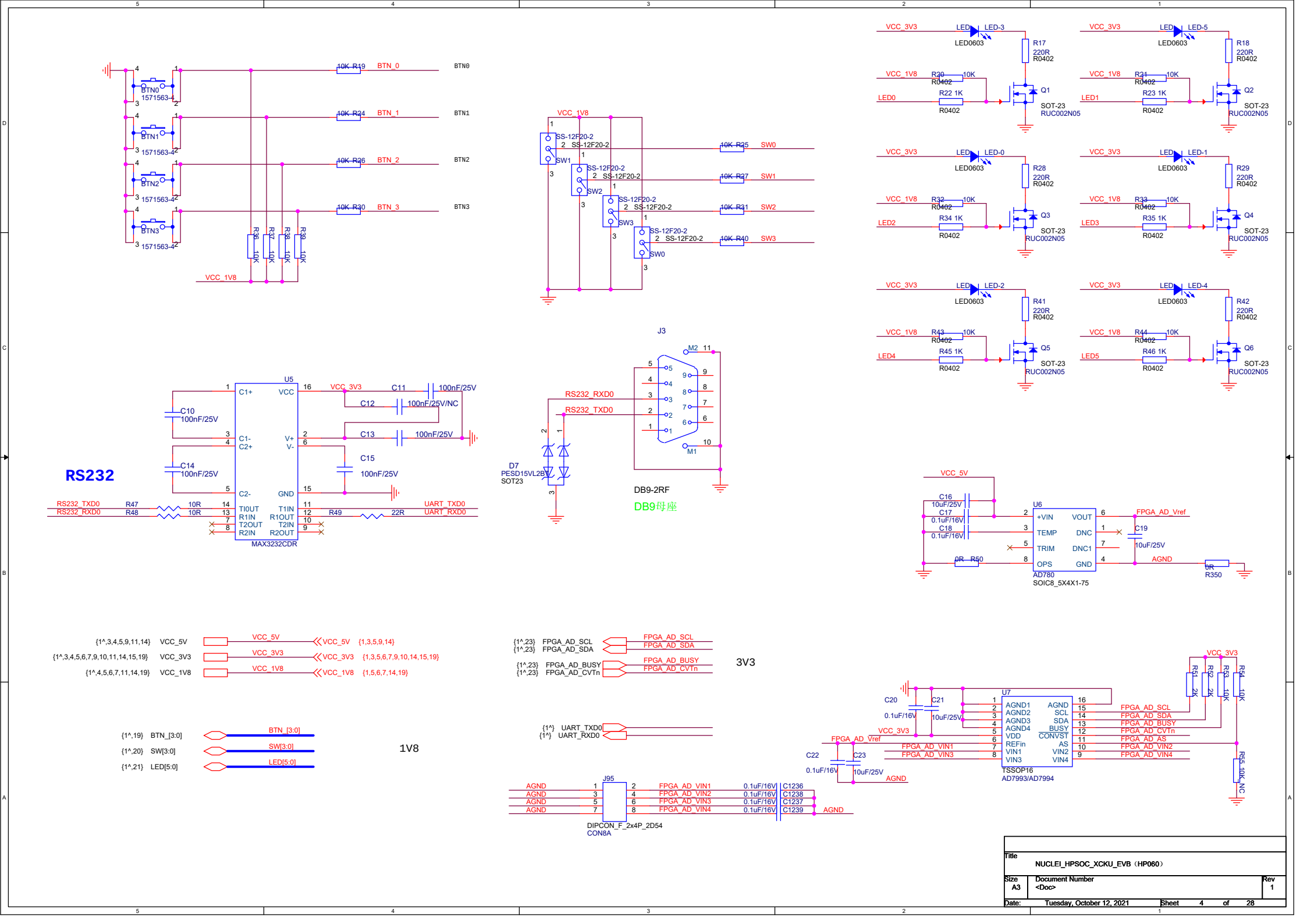

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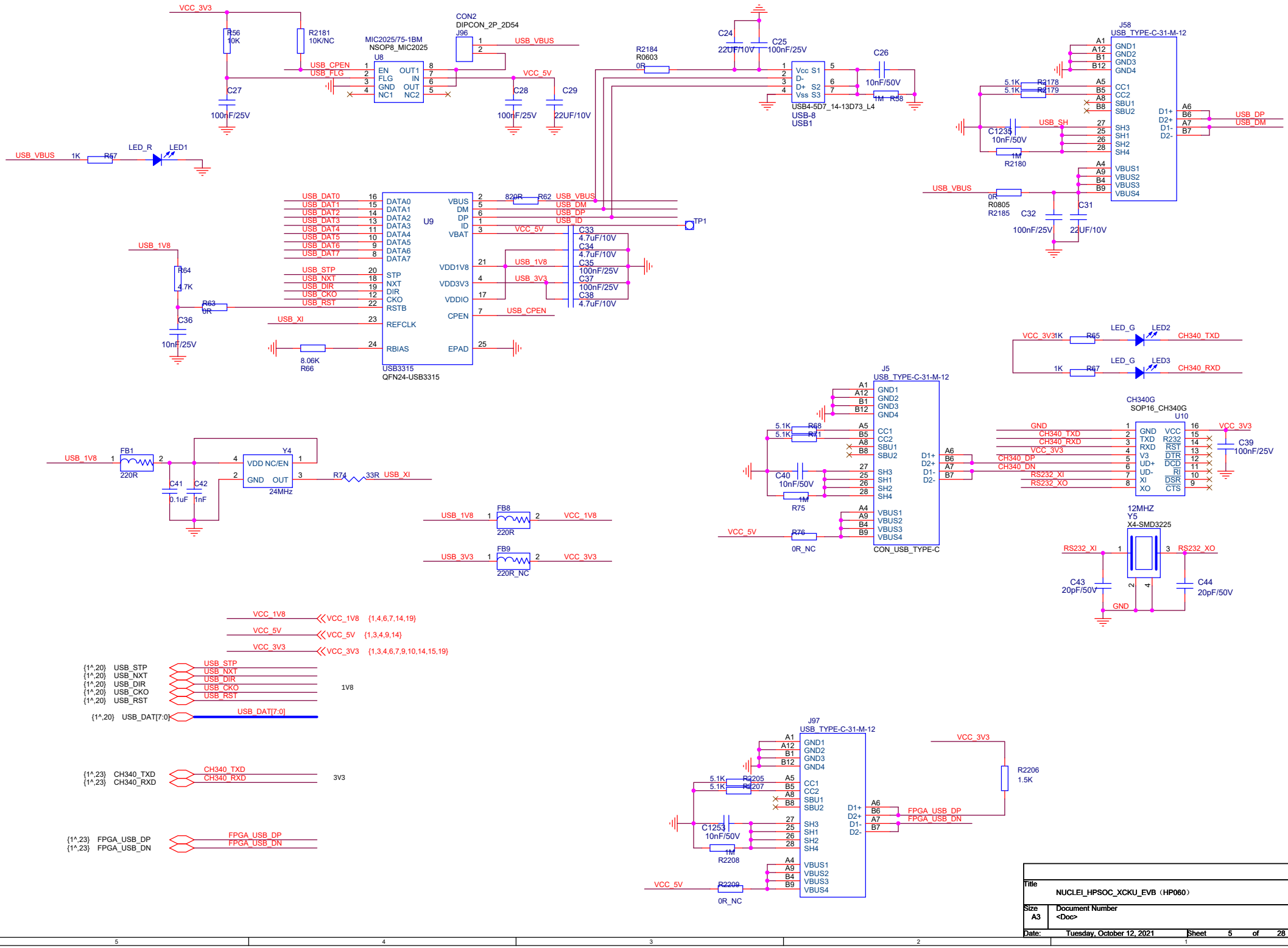

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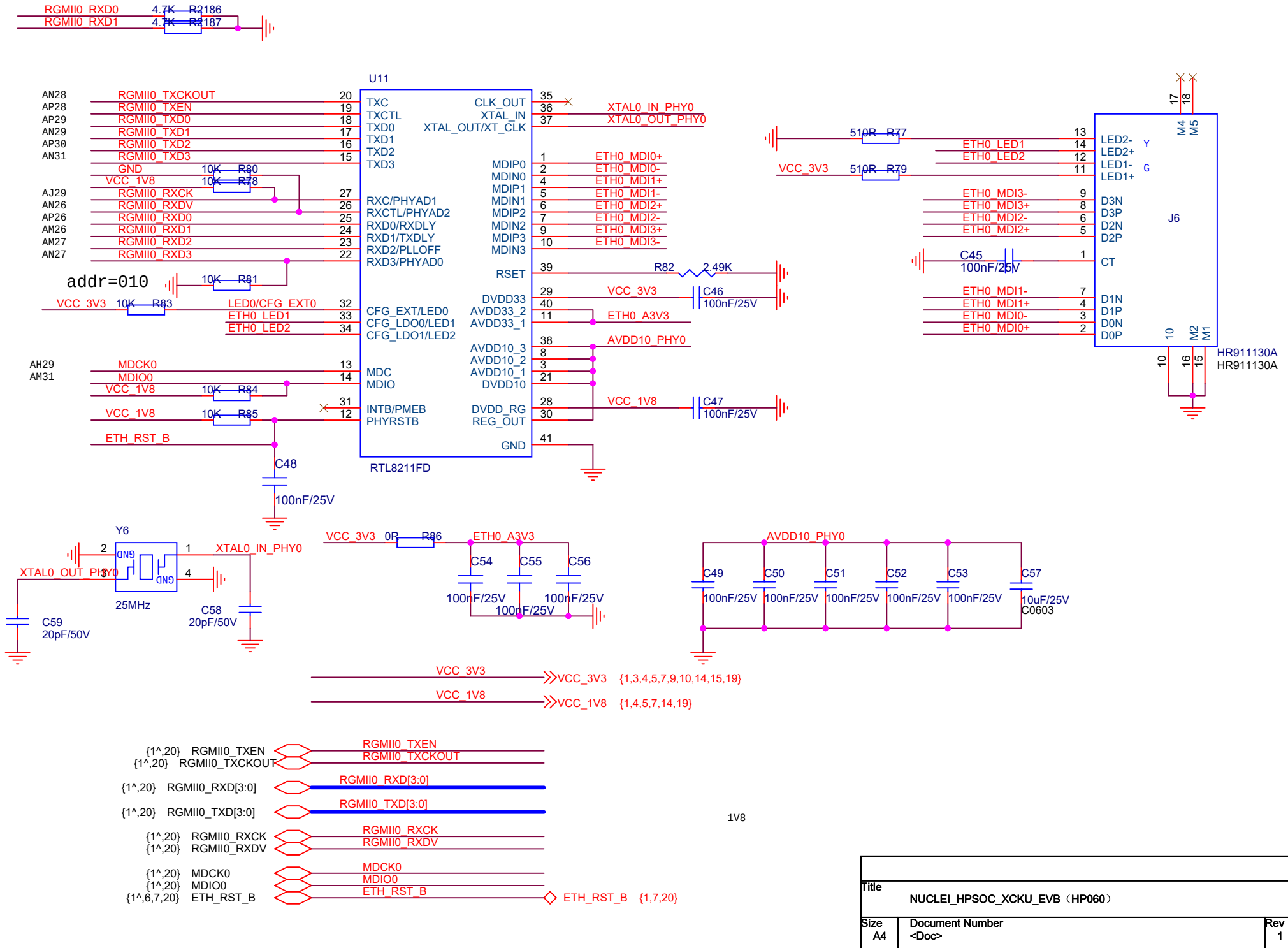

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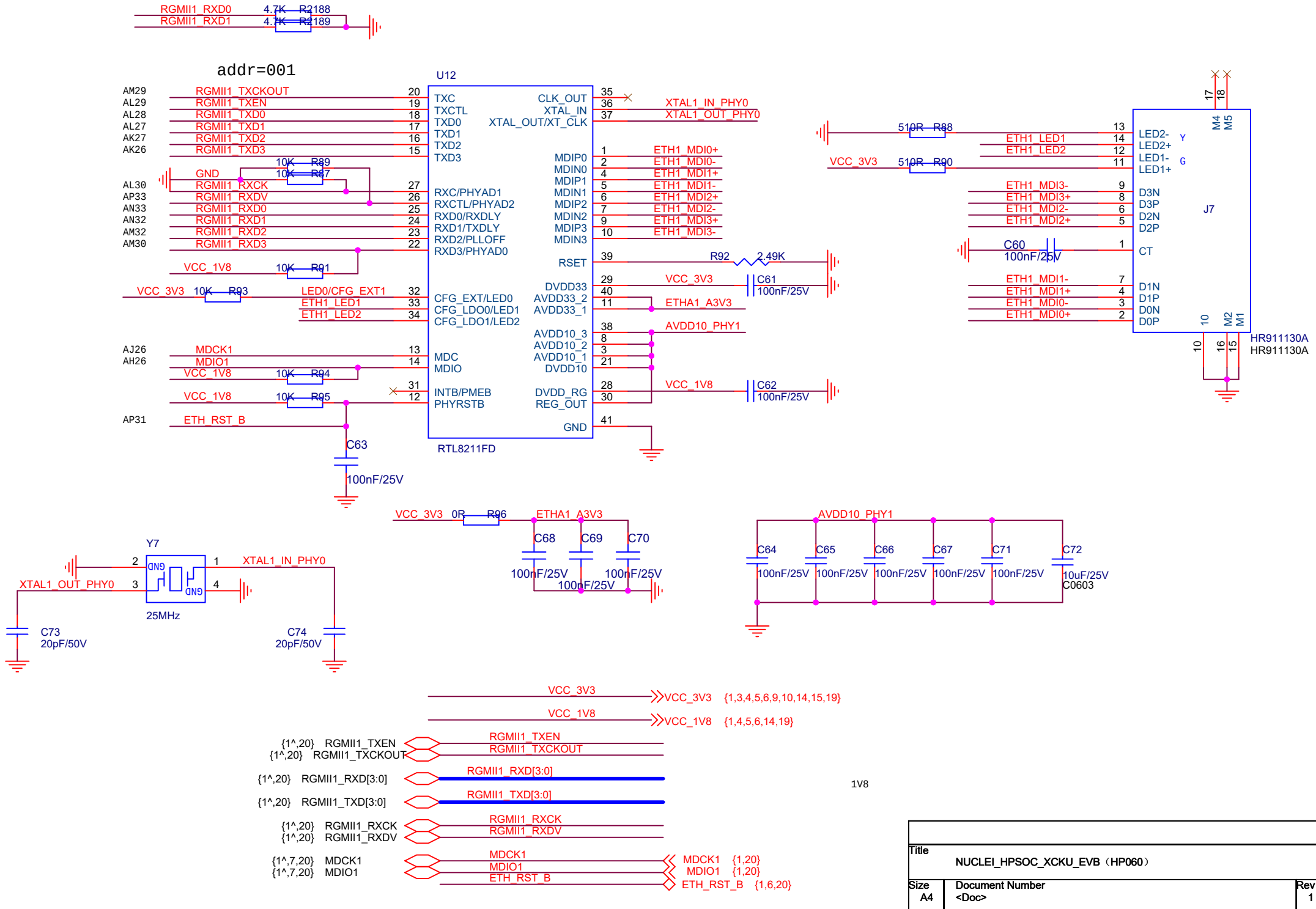

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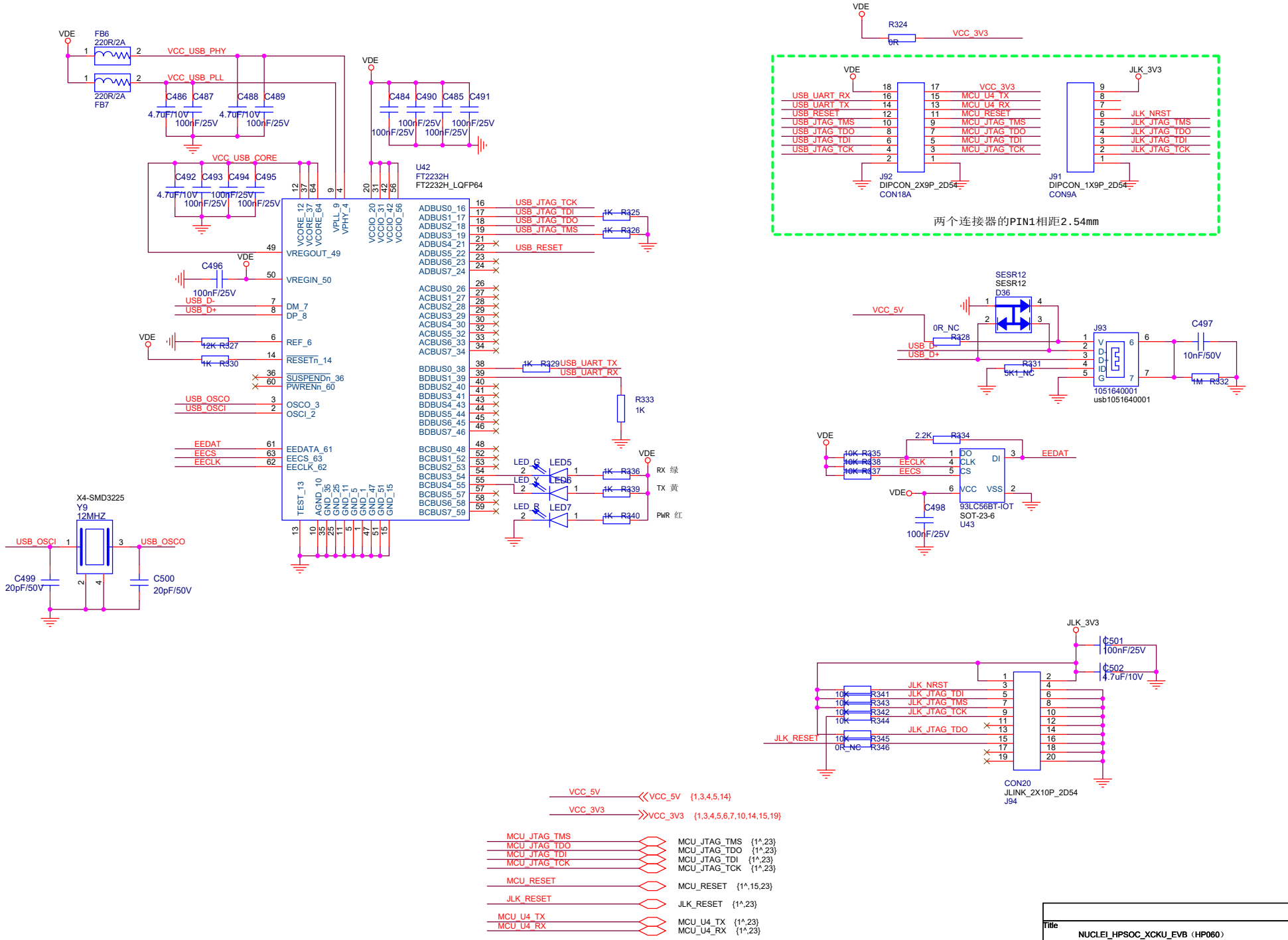

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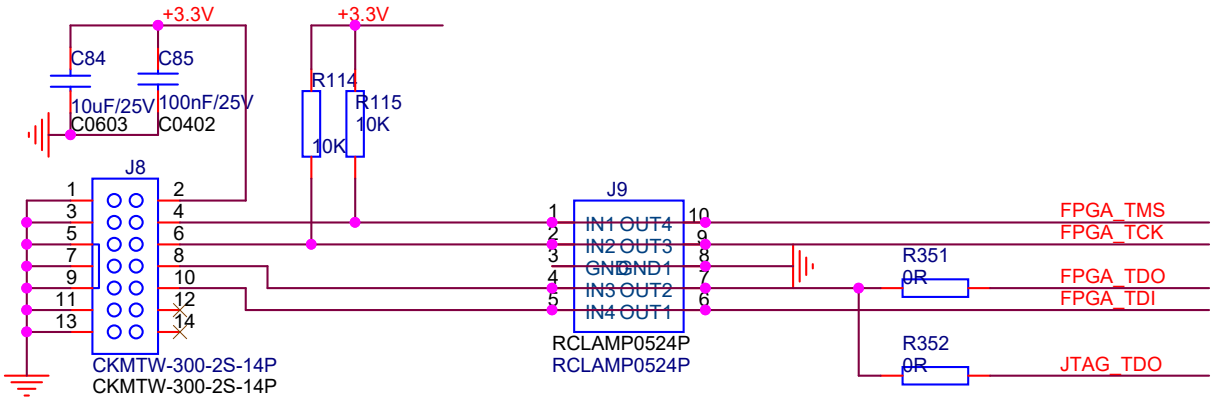

{1^,3,4,5,6,7,9,11,14,15,19} +3.3V +3.3V

FPGA_TCK FPGA_TCK {1^,16,18,19}
FPGA_TDI FPGA_TDI {1^,16,18,19}
FPGA_TDO FPGA_TDO {1^,16,18,19}
FPGA_TMS FPGA_TMS {1^,16,18,19}
1V8

JTAG_TDO JTAG_TDO {1^,19}

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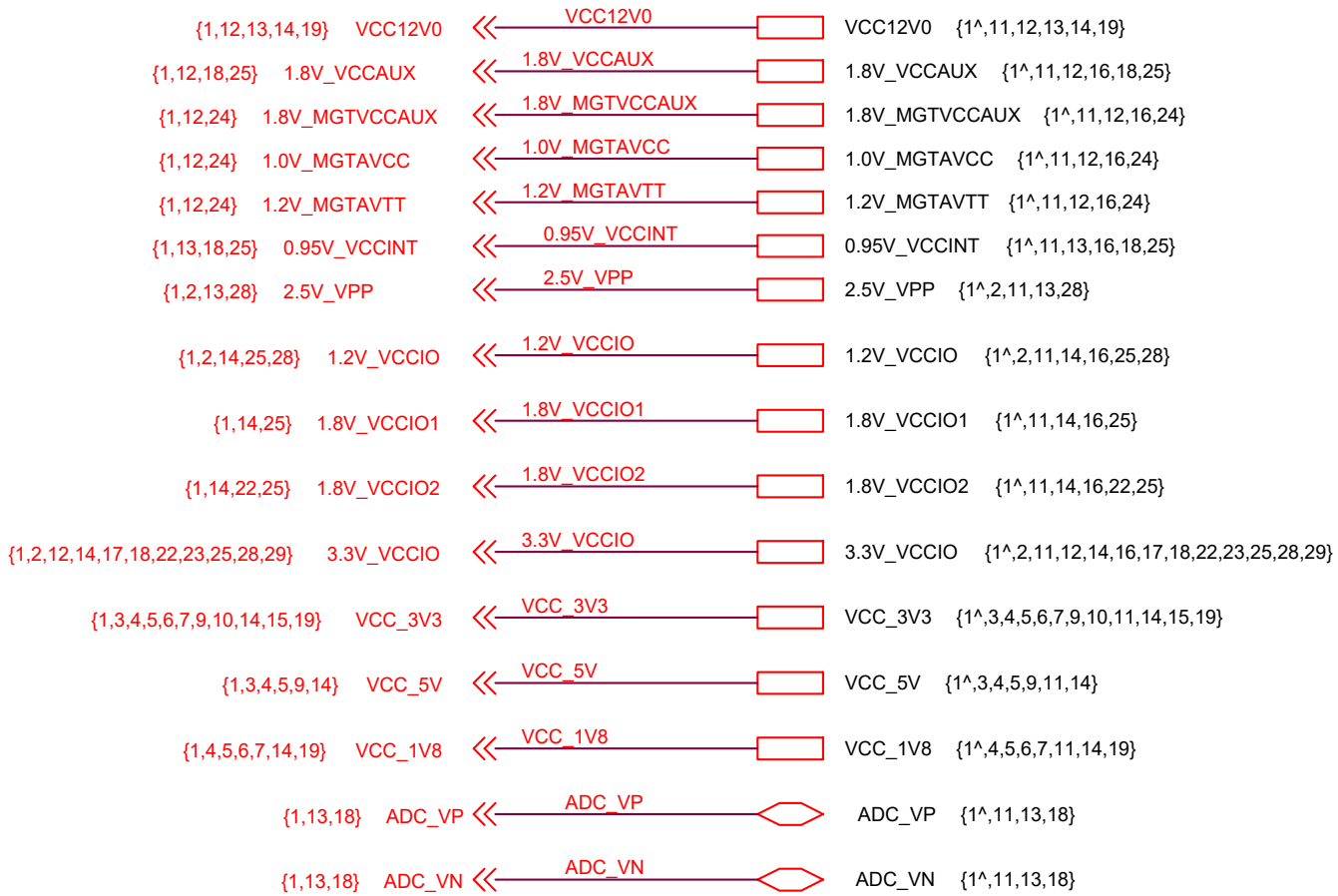

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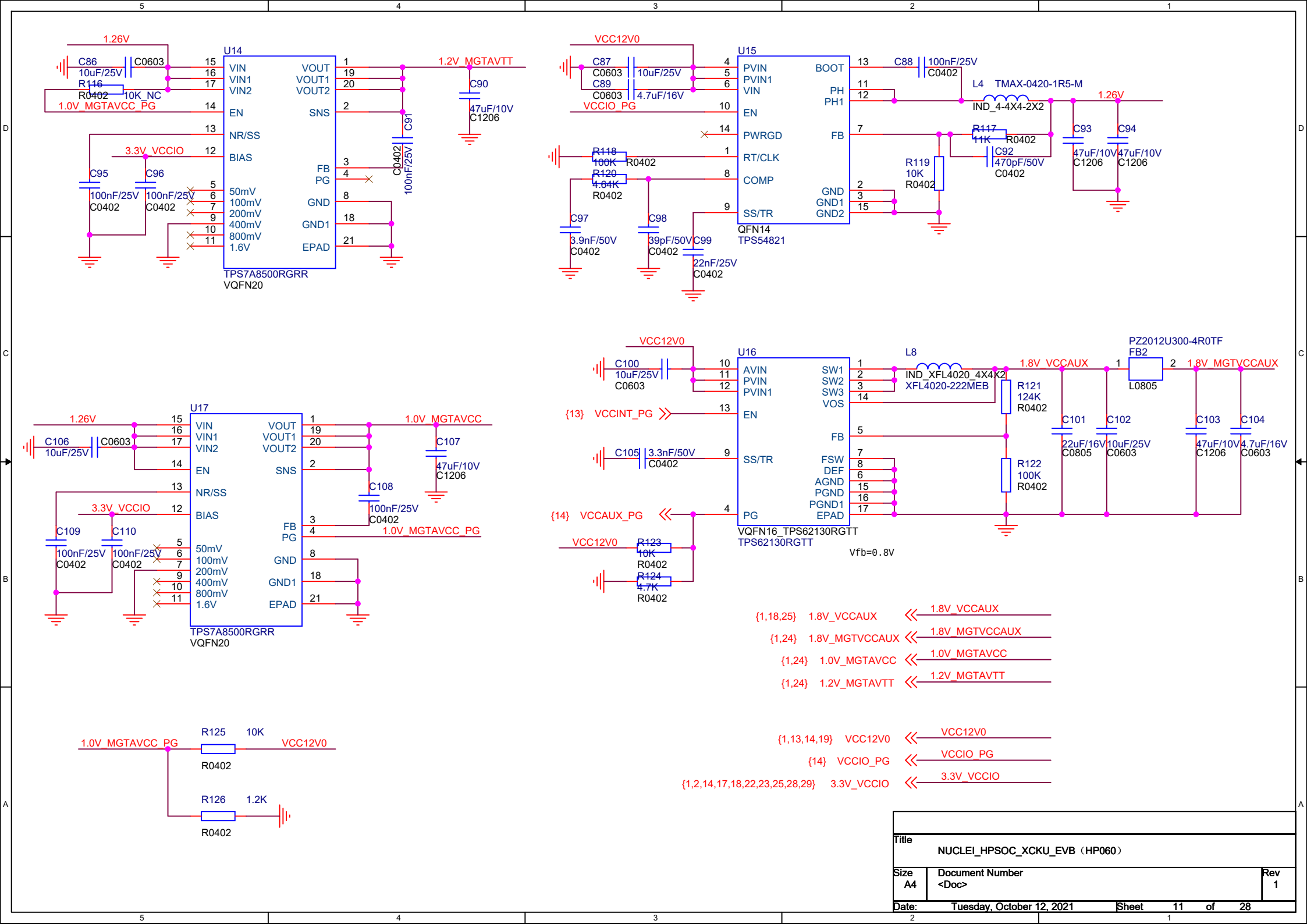
1.26V
U14
C86 10uF/25V
C0603
R116 R0402 10K_NC
1.0V_MGTAVCC_PG
3.3V_VCCIO
C95 100nF/25V C0402
C96 100nF/25V C0402
VIN
VIN1
VIN2
EN
NR/SS
BIAS
50mV
100mV
200mV
400mV
800mV
1.6V
VOUT
VOUT1
VOUT2
SNS
FB
PG
GND
GND1
EPAD
1.2V_MGTAVTT
C90 47uF/10V C1206
C91 100nF/25V C0402
TPS7A8500RGRR
VQFN20
VCC12V0
U15
C87 C0603 10uF/25V
C89 C0603 4.7uF/16V
VCCIO_PG
R118 100K R0402
R120 4.64K R0402
C97 3.9nF/50V C0402
C98 39pF/50V C0402
C99 22nF/25V C0402
PVIN
PVIN1
VIN
EN
PWRGD
RT/CLK
COMP
SS/TR
BOOT
PH
PH1
FB
GND
GND1
GND2
C88 100nF/25V C0402
L4 TMAX-0420-1R5-M
IND_4-4X4-2X2
1.26V
R117 11K R0402
C92 470pF/50V C0402
R119 10K R0402
C93 47uF/10V C1206
C94 47uF/10V C1206
QFN14
TPS54821
U17
1.26V
C106 10uF/25V
C0603
3.3V_VCCIO
C109 100nF/25V C0402
C110 100nF/25V C0402
1.0V_MGTAVCC
C107 47uF/10V C1206
C108 100nF/25V C0402
1.0V_MGTAVCC_PG
TPS7A8500RGRR
VQFN20
VCC12V0
U16
C100 10uF/25V C0603
{13} VCCINT_PG
C105 3.3nF/50V C0402
{14} VCCAUX_PG
VCC12V0
R123 10K R0402
R124 4.7K R0402
AVIN
PVIN
PVIN1
EN
SS/TR
PG
SW1
SW2
SW3
VOS
FB
FSW
DEF
AGND
PGND
PGND1
EPAD
L8
IND_XFL4020_4X4X2
XFL4020-222MEB
PZ2012U300-4R0TF
FB2
L0805
1.8V_VCCAUX
1.8V_MGTVCCAUX
R121 124K R0402
R122 100K R0402
C101 22uF/16V C0805
C102 10uF/25V C0603
C103 47uF/10V C1206
C104 4.7uF/16V C0603
VQFN16_TPS62130RGTT
TPS62130RGTT
Vfb=0.8V
{1,18,25} 1.8V_VCCAUX
{1,24} 1.8V_MGTVCCAUX
{1,24} 1.0V_MGTAVCC
{1,24} 1.2V_MGTAVTT
R125 10K
1.0V_MGTAVCC_PG
VCC12V0
R0402
R126 1.2K
R0402
{1,13,14,19} VCC12V0
{14} VCCIO_PG
{1,2,14,17,18,22,23,25,28,29} 3.3V_VCCIO
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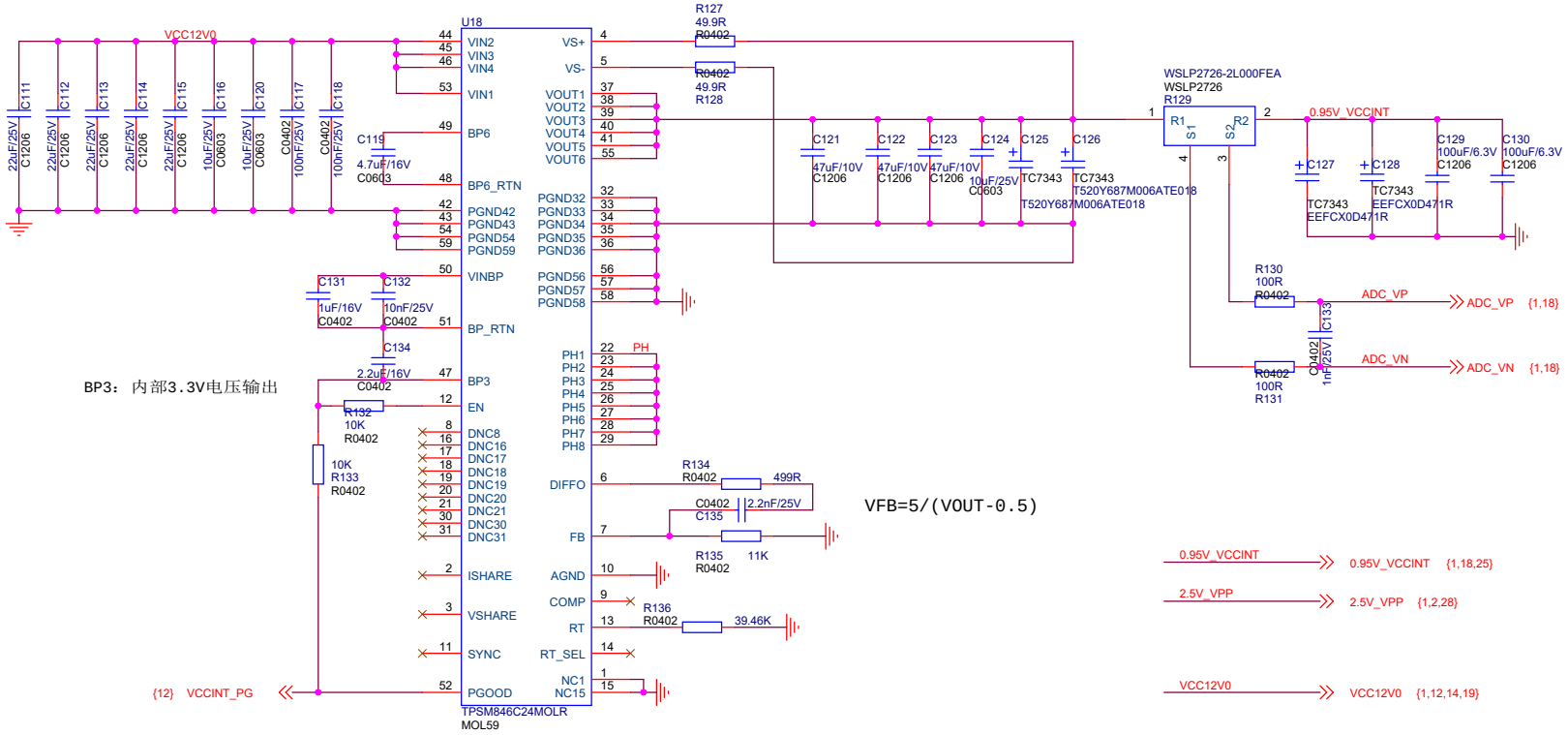

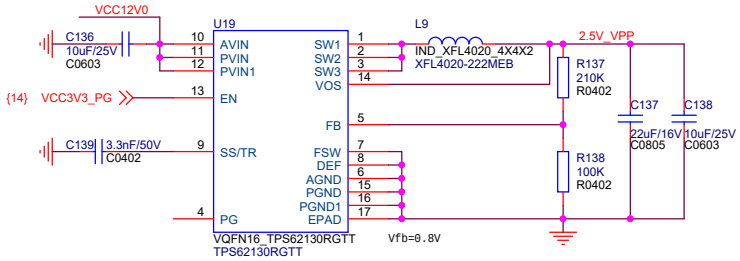

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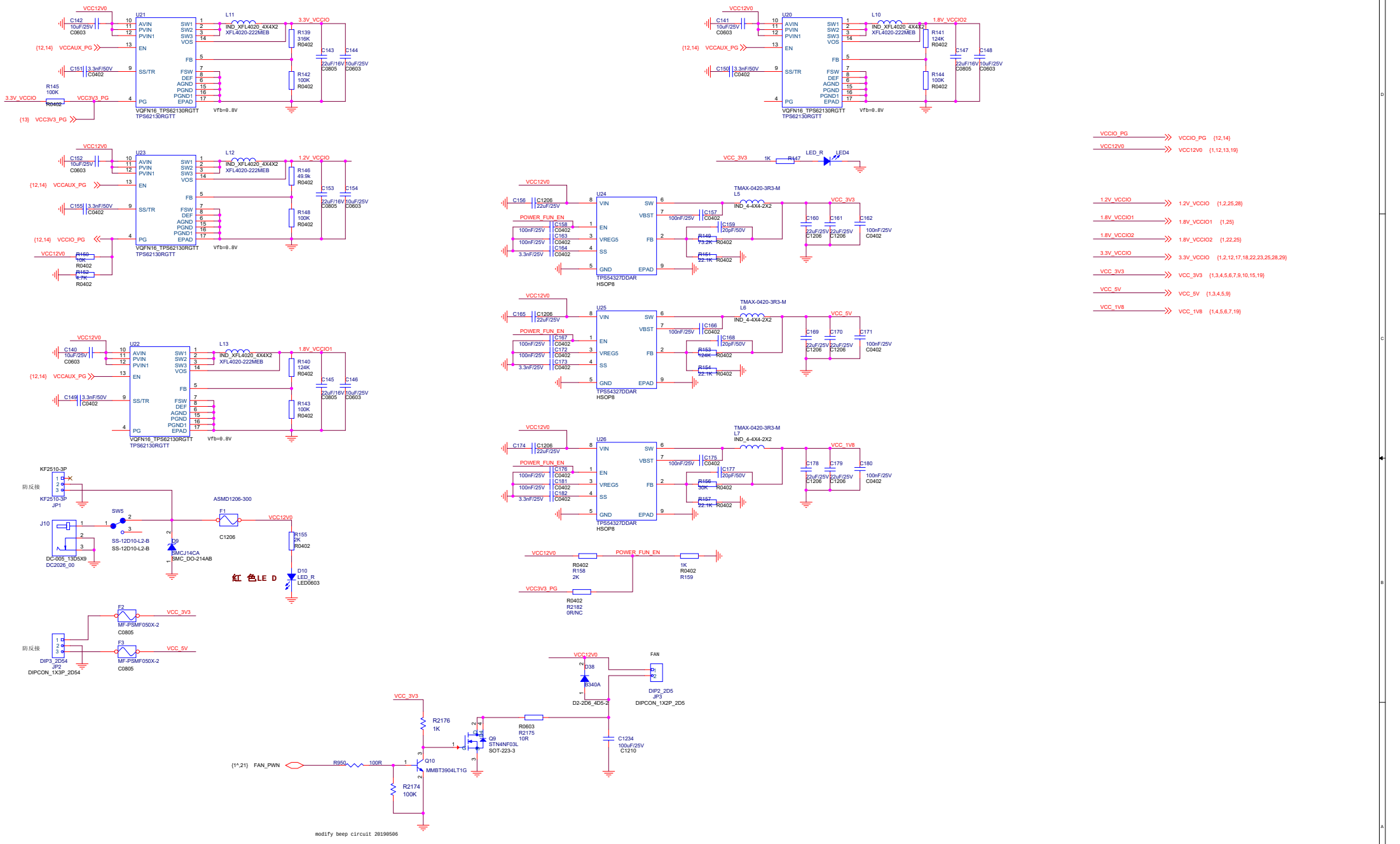

VCCIO_PG	VCCIO_PG {12,14}
VCC12V0	VCC12V0 {1,12,13,19}
1.2V_VCCIO	1.2V_VCCIO {1,2,25,28}
1.8V_VCCIO1	1.8V_VCCIO1 {1,25}
1.8V_VCCIO2	1.8V_VCCIO2 {1,22,25}
3.3V_VCCIO	3.3V_VCCIO {1,2,12,17,18,22,23,25,28,29}
VCC_3V3	VCC_3V3 {1,3,4,5,6,7,9,10,15,19}
VCC_5V	VCC_5V {1,3,4,5,9}
VCC_1V8	VCC_1V8 {1,4,5,6,7,19}

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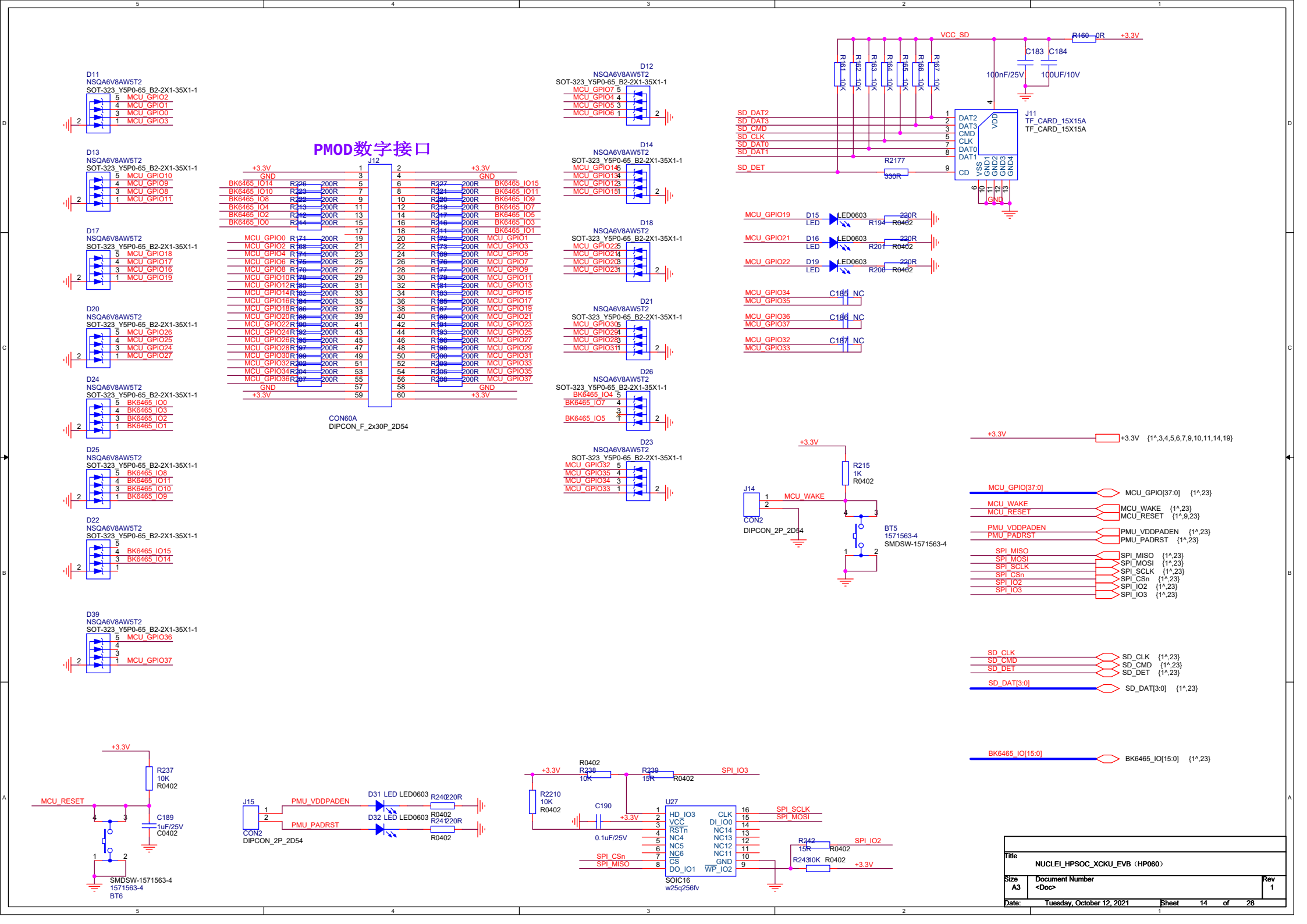
PMOD数字接口
D11
NSQA6V8AW5T2
SOT-323_Y5P0-65_B2-2X1-35X1-1
MCU_GPIO2
MCU_GPIO1
MCU_GPIO0
MCU_GPIO3
D13
MCU_GPIO10
MCU_GPIO9
MCU_GPIO8
MCU_GPIO11
D17
MCU_GPIO18
MCU_GPIO17
MCU_GPIO16
MCU_GPIO19
D20
MCU_GPIO26
MCU_GPIO25
MCU_GPIO24
MCU_GPIO27
D24
BK6465_IO0
BK6465_IO3
BK6465_IO2
BK6465_IO1
D25
BK6465_IO8
BK6465_IO11
BK6465_IO10
BK6465_IO9
D22
BK6465_IO15
BK6465_IO14
D39
MCU_GPIO36
MCU_GPIO37
J12
CON60A
DIPCON_F_2x30P_2D54
D12
MCU_GPIO7
MCU_GPIO4
MCU_GPIO5
MCU_GPIO6
D14
MCU_GPIO14
MCU_GPIO13
MCU_GPIO12
MCU_GPIO15
D18
MCU_GPIO22
MCU_GPIO21
MCU_GPIO20
MCU_GPIO23
D21
MCU_GPIO30
MCU_GPIO29
MCU_GPIO28
MCU_GPIO31
D26
BK6465_IO4
BK6465_IO7
BK6465_IO5
D23
MCU_GPIO32
MCU_GPIO35
MCU_GPIO34
MCU_GPIO33
VCC_SD
R160 0R
+3.3V
C183
C184
100nF/25V
100UF/10V
R161 10K
R162 10K
R163 10K
R164 10K
R165 10K
R166 10K
R167 10K
SD_DAT2
SD_DAT3
SD_CMD
SD_CLK
SD_DAT0
SD_DAT1
SD_DET
R2177
330R
J11
TF_CARD_15X15A
DAT2
DAT3
CMD
CLK
DAT0
DAT1
CD
VDD
VSS
GND1
GND2
GND3
GND4
MCU_GPIO19
MCU_GPIO21
MCU_GPIO22
D15
D16
D19
LED
LED0603
220R
R194 R0402
R201 R0402
R200 R0402
MCU_GPIO34
MCU_GPIO35
MCU_GPIO36
MCU_GPIO37
MCU_GPIO32
MCU_GPIO33
C185 NC
C186 NC
C187 NC
+3.3V
R215
1K
R0402
J14
CON2
DIPCON_2P_2D54
MCU_WAKE
BT5
1571563-4
SMDSW-1571563-4
+3.3V {1^,3,4,5,6,7,9,10,11,14,19}
MCU_GPIO[37:0]
MCU_WAKE
MCU_RESET
PMU_VDDPADEN
PMU_PADRST
SPI_MISO
SPI_MOSI
SPI_SCLK
SPI_CSn
SPI_IO2
SPI_IO3
SD_CLK
SD_CMD
SD_DET
SD_DAT[3:0]
BK6465_IO[15:0]
R237
10K
R0402
MCU_RESET
C189
1uF/25V
C0402
SMDSW-1571563-4
1571563-4
BT6
J15
CON2
DIPCON_2P_2D54
PMU_VDDPADEN
PMU_PADRST
D31 LED LED0603
D32 LED LED0603
R240 220R
R241 220R
R0402
R238
10K
R239
15R
SPI_IO3
R2210
10K
C190
0.1uF/25V
U27
HD_IO3
VCC
RSTn
NC4
NC5
NC6
CS
DO_IO1
CLK
DI_IO0
NC14
NC13
NC12
NC11
GND
WP_IO2
SOIC16
w25q256fv
SPI_SCLK
SPI_MOSI
SPI_CSn
SPI_MISO
R242
15R
SPI_IO2
R243
10K
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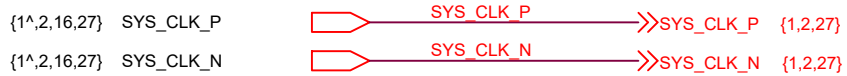

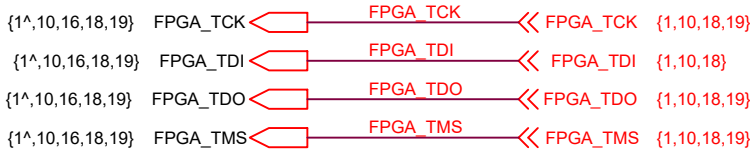

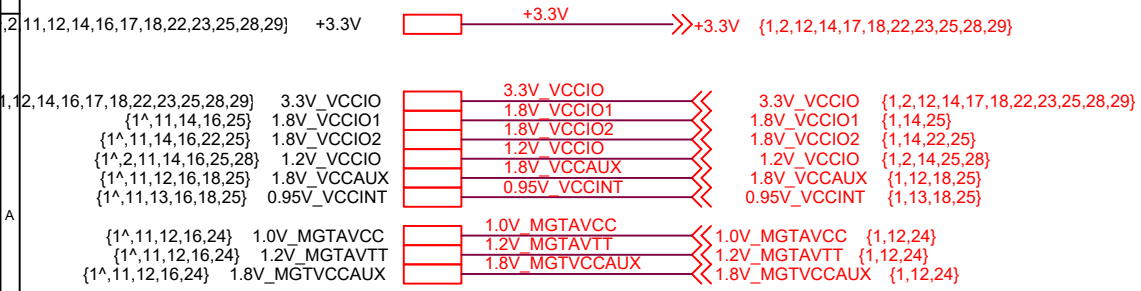

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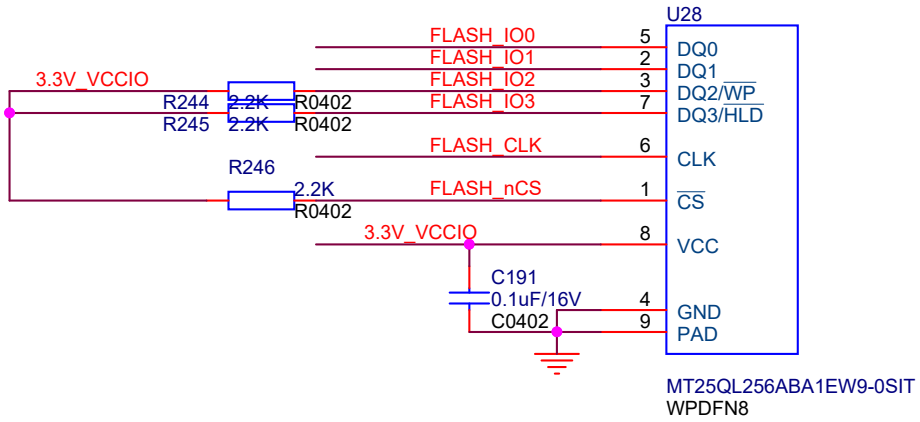

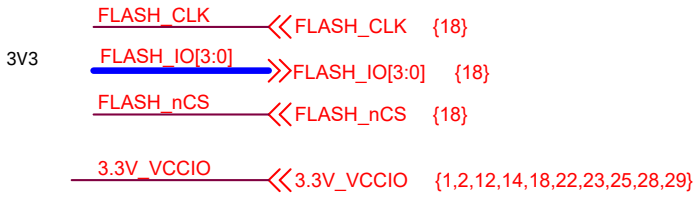

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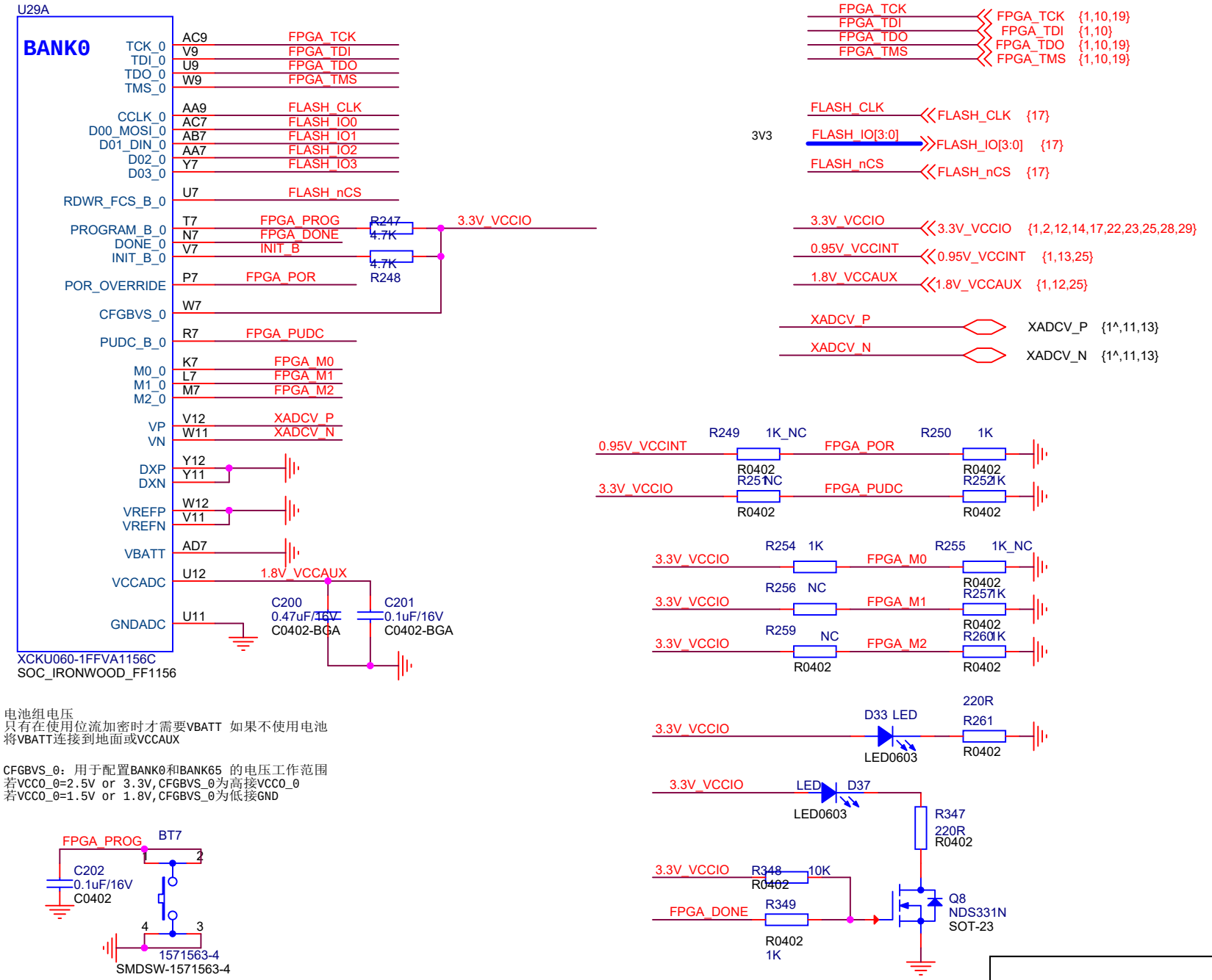

电池组电压
只有在使用位流加密时才需要VBATT 如果不使用电池
将VBATT连接到地面或VCCAUX

CFGBVS_0：用于配置BANK0和BANK65 的电压工作范围
若VCCO_0=2.5V or 3.3V,CFGBVS_0为高接VCCO_0
若VCCO_0=1.5V or 1.8V,CFGBVS_0为低接GND

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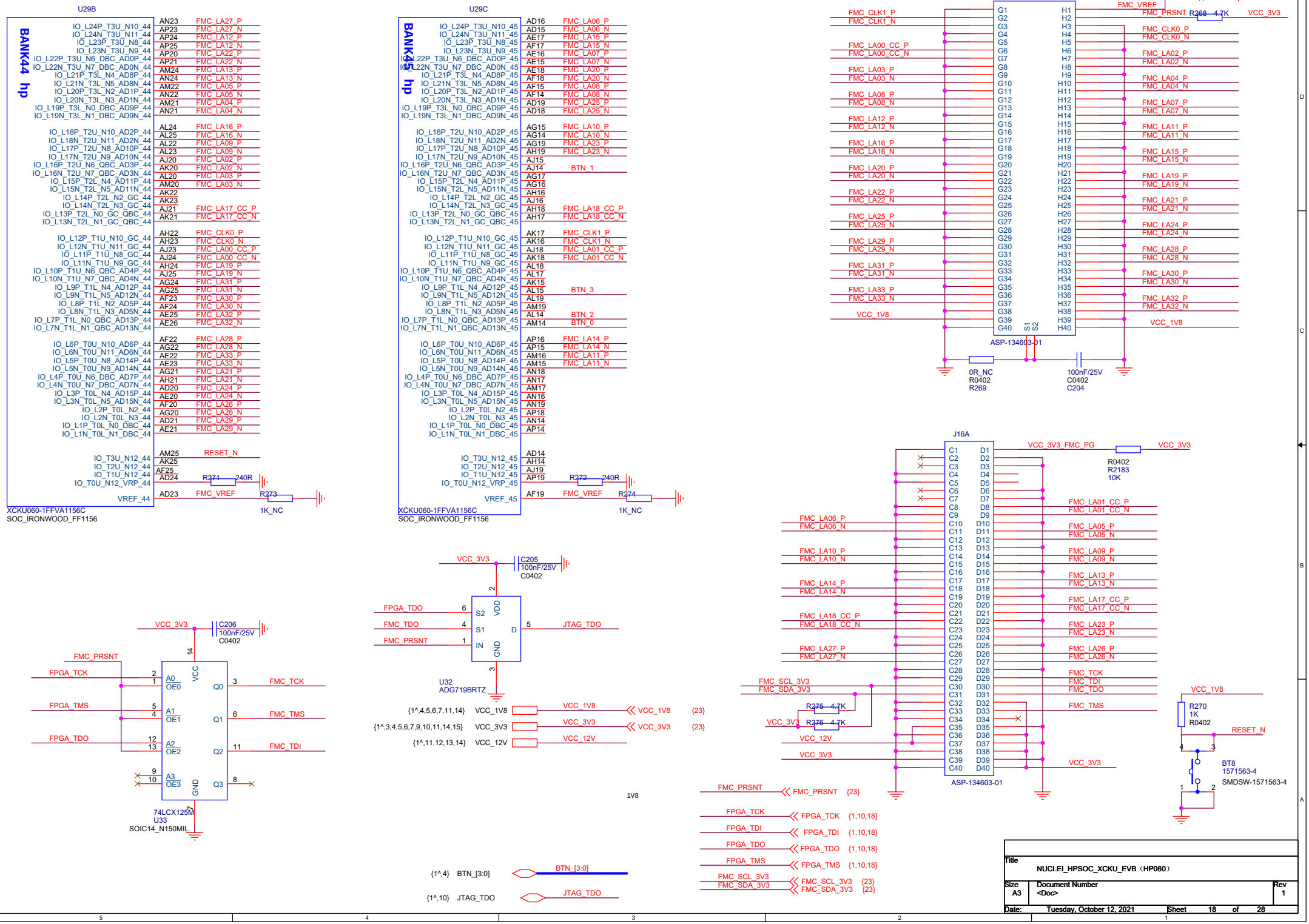
U29B
BANK44 hp
IO_L24P_T3U_N10_44
IO_L24N_T3U_N11_44
IO_L23P_T3U_N8_44
IO_L23N_T3U_N9_44
IO_L22P_T3U_N6_DBC_AD0P_44
IO_L22N_T3U_N7_DBC_AD0N_44
IO_L21P_T3L_N4_AD8P_44
IO_L21N_T3L_N5_AD8N_44
IO_L20P_T3L_N2_AD1P_44
IO_L20N_T3L_N3_AD1N_44
IO_L19P_T3L_N0_DBC_AD9P_44
IO_L19N_T3L_N1_DBC_AD9N_44
IO_L18P_T2U_N10_AD2P_44
IO_L18N_T2U_N11_AD2N_44
IO_L17P_T2U_N8_AD10P_44
IO_L17N_T2U_N9_AD10N_44
IO_L16P_T2U_N6_QBC_AD3P_44
IO_L16N_T2U_N7_QBC_AD3N_44
IO_L15P_T2L_N4_AD11P_44
IO_L15N_T2L_N5_AD11N_44
IO_L14P_T2L_N2_GC_44
IO_L14N_T2L_N3_GC_44
IO_L13P_T2L_N0_GC_QBC_44
IO_L13N_T2L_N1_GC_QBC_44
IO_L12P_T1U_N10_GC_44
IO_L12N_T1U_N11_GC_44
IO_L11P_T1U_N8_GC_44
IO_L11N_T1U_N9_GC_44
IO_L10P_T1U_N6_QBC_AD4P_44
IO_L10N_T1U_N7_QBC_AD4N_44
IO_L9P_T1L_N4_AD12P_44
IO_L9N_T1L_N5_AD12N_44
IO_L8P_T1L_N2_AD5P_44
IO_L8N_T1L_N3_AD5N_44
IO_L7P_T1L_N0_QBC_AD13P_44
IO_L7N_T1L_N1_QBC_AD13N_44
IO_L6P_T0U_N10_AD6P_44
IO_L6N_T0U_N11_AD6N_44
IO_L5P_T0U_N8_AD14P_44
IO_L5N_T0U_N9_AD14N_44
IO_L4P_T0U_N6_DBC_AD7P_44
IO_L4N_T0U_N7_DBC_AD7N_44
IO_L3P_T0L_N4_AD15P_44
IO_L3N_T0L_N5_AD15N_44
IO_L2P_T0L_N2_44
IO_L2N_T0L_N3_44
IO_L1P_T0L_N0_DBC_44
IO_L1N_T0L_N1_DBC_44
IO_T3U_N12_44
IO_T2U_N12_44
IO_T1U_N12_44
IO_T0U_N12_VRP_44
VREF_44
AN23 FMC_LA27_P
AP23 FMC_LA27_N
AP24 FMC_LA12_P
AP25 FMC_LA12_N
AP20 FMC_LA22_P
AP21 FMC_LA22_N
AM24 FMC_LA13_P
AN24 FMC_LA13_N
AM22 FMC_LA05_P
AN22 FMC_LA05_N
AM21 FMC_LA04_P
AN21 FMC_LA04_N
AL24 FMC_LA16_P
AL25 FMC_LA16_N
AL22 FMC_LA09_P
AL23 FMC_LA09_N
AJ20 FMC_LA02_P
AK20 FMC_LA02_N
AL20 FMC_LA03_P
AM20 FMC_LA03_N
AK22
AK23
AJ21 FMC_LA17_CC_P
AK21 FMC_LA17_CC_N
AH22 FMC_CLK0_P
AH23 FMC_CLK0_N
AJ23 FMC_LA00_CC_P
AJ24 FMC_LA00_CC_N
AH24 FMC_LA19_P
AJ25 FMC_LA19_N
AG24 FMC_LA31_P
AG25 FMC_LA31_N
AF23 FMC_LA30_P
AF24 FMC_LA30_N
AE25 FMC_LA32_P
AE26 FMC_LA32_N
AF22 FMC_LA28_P
AG22 FMC_LA28_N
AE22 FMC_LA33_P
AE23 FMC_LA33_N
AG21 FMC_LA21_P
AH21 FMC_LA21_N
AD20 FMC_LA24_P
AE20 FMC_LA24_N
AF20 FMC_LA26_P
AG20 FMC_LA26_N
AD21 FMC_LA29_P
AE21 FMC_LA29_N
AM25 RESET_N
AK25
AF25
AD24 R271 240R
AD23 FMC_VREF R273 1K_NC
XCKU060-1FFVA1156C
SOC_IRONWOOD_FF1156
U29C
BANK45 hp
IO_L24P_T3U_N10_45
IO_L24N_T3U_N11_45
IO_L23P_T3U_N8_45
IO_L23N_T3U_N9_45
IO_L22P_T3U_N6_DBC_AD0P_45
IO_L22N_T3U_N7_DBC_AD0N_45
IO_L21P_T3L_N4_AD8P_45
IO_L21N_T3L_N5_AD8N_45
IO_L20P_T3L_N2_AD1P_45
IO_L20N_T3L_N3_AD1N_45
IO_L19P_T3L_N0_DBC_AD9P_45
IO_L19N_T3L_N1_DBC_AD9N_45
IO_L18P_T2U_N10_AD2P_45
IO_L18N_T2U_N11_AD2N_45
IO_L17P_T2U_N8_AD10P_45
IO_L17N_T2U_N9_AD10N_45
IO_L16P_T2U_N6_QBC_AD3P_45
IO_L16N_T2U_N7_QBC_AD3N_45
IO_L15P_T2L_N4_AD11P_45
IO_L15N_T2L_N5_AD11N_45
IO_L14P_T2L_N2_GC_45
IO_L14N_T2L_N3_GC_45
IO_L13P_T2L_N0_GC_QBC_45
IO_L13N_T2L_N1_GC_QBC_45
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IO_L12N_T1U_N11_GC_45
IO_L11P_T1U_N8_GC_45
IO_L11N_T1U_N9_GC_45
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IO_L10N_T1U_N7_QBC_AD4N_45
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IO_L9N_T1L_N5_AD12N_45
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IO_L8N_T1L_N3_AD5N_45
IO_L7P_T1L_N0_QBC_AD13P_45
IO_L7N_T1L_N1_QBC_AD13N_45
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IO_L5P_T0U_N8_AD14P_45
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IO_L4N_T0U_N7_DBC_AD7N_45
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IO_L3N_T0L_N5_AD15N_45
IO_L2P_T0L_N2_45
IO_L2N_T0L_N3_45
IO_L1P_T0L_N0_DBC_45
IO_L1N_T0L_N1_DBC_45
IO_T3U_N12_45
IO_T2U_N12_45
IO_T1U_N12_45
IO_T0U_N12_VRP_45
VREF_45
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AD15 FMC_LA06_N
AE17 FMC_LA15_P
AF17 FMC_LA15_N
AE16 FMC_LA07_P
AE15 FMC_LA07_N
AE18 FMC_LA20_P
AF18 FMC_LA20_N
AF15 FMC_LA08_P
AF14 FMC_LA08_N
AD19 FMC_LA25_P
AD18 FMC_LA25_N
AG15 FMC_LA10_P
AG14 FMC_LA10_N
AG19 FMC_LA23_P
AH19 FMC_LA23_N
AJ15
AJ14 BTN_1
AG17
AG16
AH16
AJ16
AH18 FMC_LA18_CC_P
AH17 FMC_LA18_CC_N
AK17 FMC_CLK1_P
AK16 FMC_CLK1_N
AJ18 FMC_LA01_CC_P
AK18 FMC_LA01_CC_N
AL18
AL17
AK15
AL15 BTN_3
AL19
AM19
AL14 BTN_2
AM14 BTN_0
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AP15 FMC_LA14_N
AM16 FMC_LA11_P
AM15 FMC_LA11_N
AN18
AN17
AM17
AN16
AN19
AP18
AN14
AP14
AD14
AH14
AJ19
AP19 R272 240R
AF19 FMC_VREF R274 1K_NC
XCKU060-1FFVA1156C
SOC_IRONWOOD_FF1156
J16B
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FMC_CLK1_N
FMC_LA00_CC_P
FMC_LA00_CC_N
FMC_LA03_P
FMC_LA03_N
FMC_LA08_P
FMC_LA08_N
FMC_LA12_P
FMC_LA12_N
FMC_LA16_P
FMC_LA16_N
FMC_LA20_P
FMC_LA20_N
FMC_LA22_P
FMC_LA22_N
FMC_LA25_P
FMC_LA25_N
FMC_LA29_P
FMC_LA29_N
FMC_LA31_P
FMC_LA31_N
FMC_LA33_P
FMC_LA33_N
VCC_1V8
S1
S2
ASP-134603-01
C1240 10uF/25V
C0603
FMC_VREF
FMC_PRSNT R268 4.7K VCC_3V3
FMC_CLK0_P
FMC_CLK0_N
FMC_LA02_P
FMC_LA02_N
FMC_LA04_P
FMC_LA04_N
FMC_LA07_P
FMC_LA07_N
FMC_LA11_P
FMC_LA11_N
FMC_LA15_P
FMC_LA15_N
FMC_LA19_P
FMC_LA19_N
FMC_LA21_P
FMC_LA21_N
FMC_LA24_P
FMC_LA24_N
FMC_LA28_P
FMC_LA28_N
FMC_LA30_P
FMC_LA30_N
FMC_LA32_P
FMC_LA32_N
VCC_1V8
0R_NC R0402 R269
100nF/25V C0402 C204
J16A
VCC_3V3_FMC_PG
VCC_3V3
R0402 R2183 10K
FMC_LA01_CC_P
FMC_LA01_CC_N
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FMC_LA06_N
FMC_LA05_P
FMC_LA05_N
FMC_LA10_P
FMC_LA10_N
FMC_LA09_P
FMC_LA09_N
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FMC_LA13_P
FMC_LA13_N
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FMC_LA18_CC_N
FMC_LA17_CC_P
FMC_LA17_CC_N
FMC_LA27_P
FMC_LA27_N
FMC_LA23_P
FMC_LA23_N
FMC_LA26_P
FMC_LA26_N
FMC_SCL_3V3
FMC_SDA_3V3
FMC_TCK
FMC_TDI
FMC_TDO
FMC_TMS
R275 4.7K
R276 4.7K
VCC_3V3
VCC_12V
VCC_3V3
VCC_3V3
ASP-134603-01
VCC_1V8
R270 1K R0402
RESET_N
BT8 1571563-4 SMDSW-1571563-4
VCC_3V3
C205 100nF/25V C0402
FPGA_TDO
FMC_TDO
FMC_PRSNT
JTAG_TDO
U32 ADG719BRTZ
S2
S1
IN
VDD
D
GND
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{1^,3,4,5,6,7,9,10,11,14,15} VCC_3V3 VCC_3V3 {23}
{1^,11,12,13,14} VCC_12V VCC_12V
VCC_3V3
C206 100nF/25V C0402
FMC_PRSNT
FPGA_TCK
FPGA_TMS
FPGA_TDO
A0 OE0
A1 OE1
A2 OE2
A3 OE3
Q0 FMC_TCK
Q1 FMC_TMS
Q2 FMC_TDI
Q3
VCC
GND
74LCX125M
U33
SOIC14_N150MIL
1V8
FMC_PRSNT {23}
FPGA_TCK {1,10,18}
FPGA_TDI {1,10,18}
FPGA_TDO {1,10,18}
FPGA_TMS {1,10,18}
FMC_SCL_3V3 {23}
FMC_SDA_3V3 {23}
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BTN_[3:0]
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JTAG_TDO
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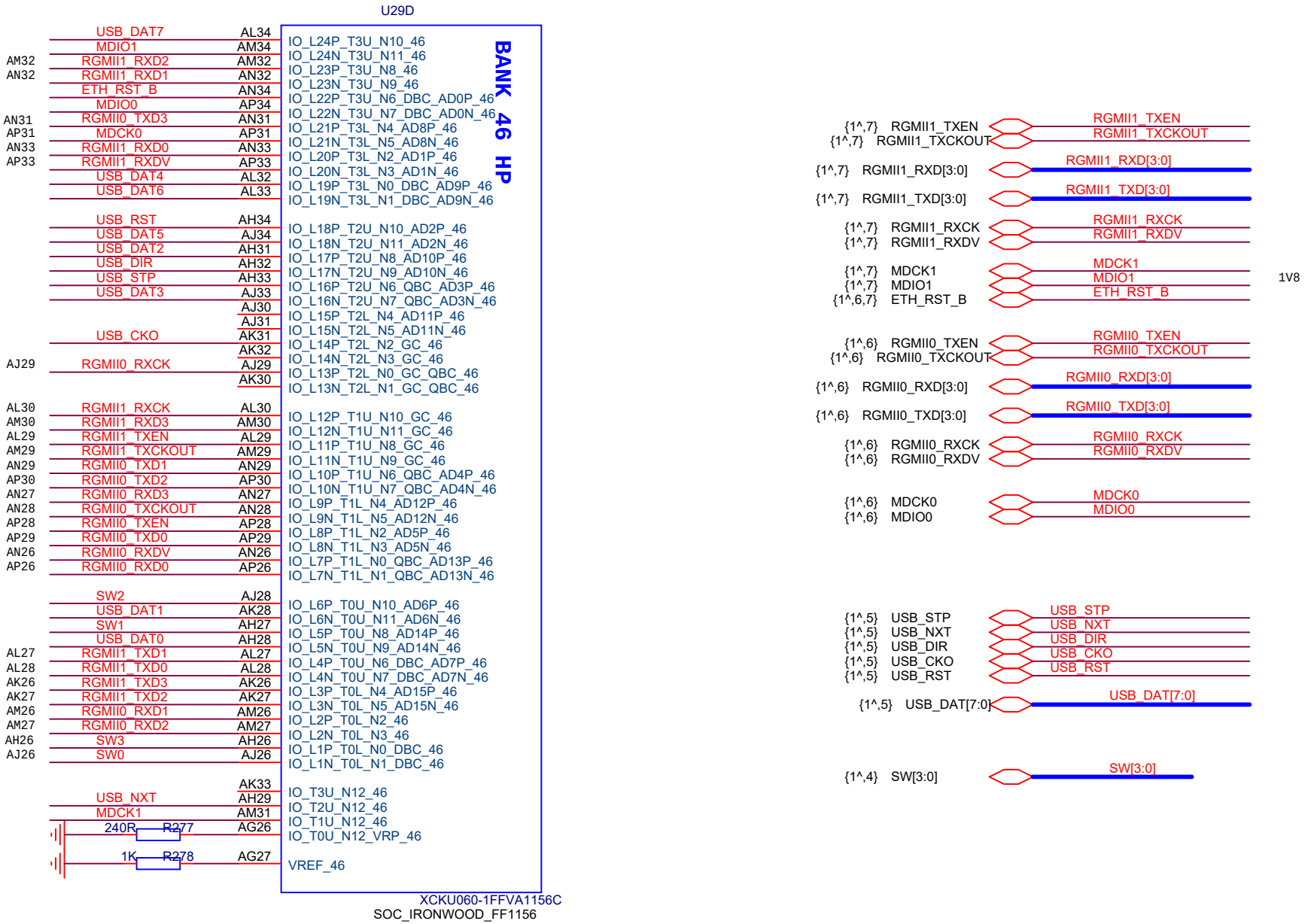
NUCLEI_HPSOC_XCKU_EVB（HP060）
Size A3
Document Number <Doc>
Rev 1
Date: Tuesday, October 12, 2021
Sheet 18 of 28



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Size A4	Document Number <Doc>	Rev 1
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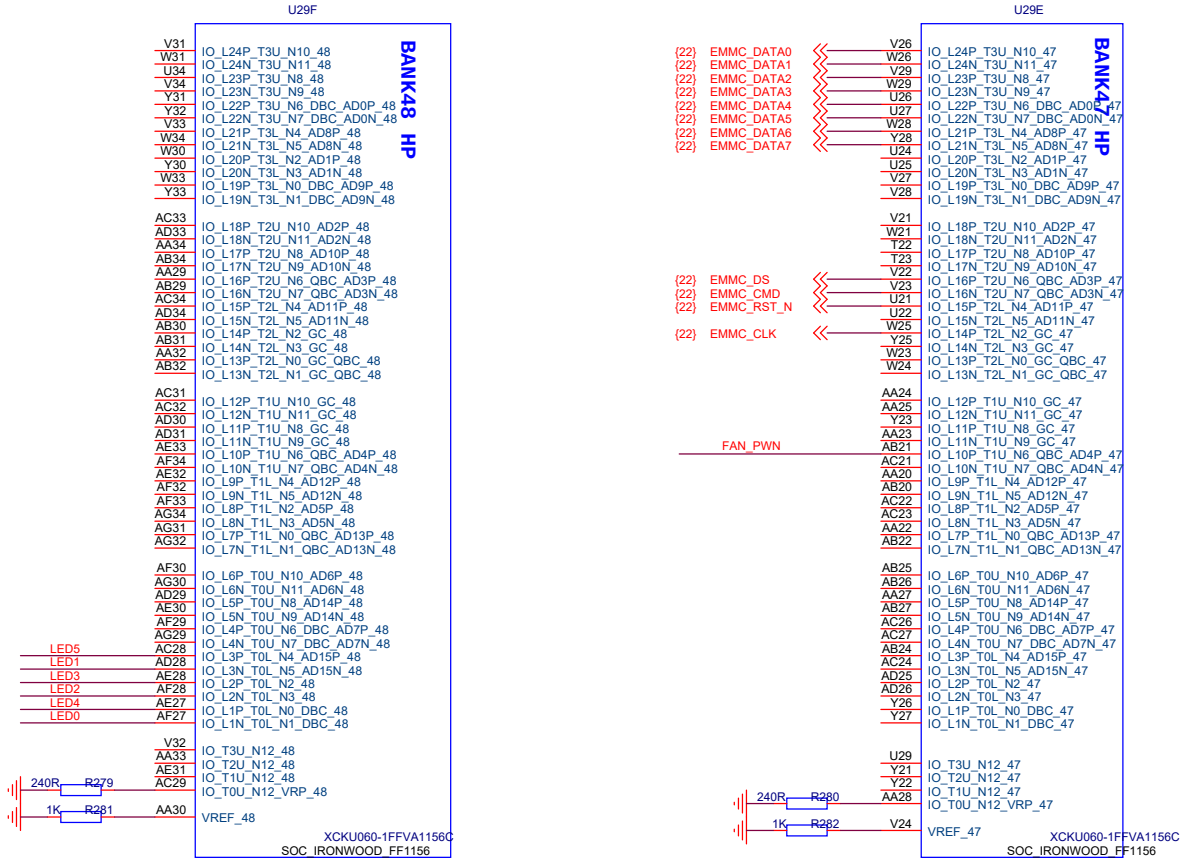

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Size A3	Document Number <Doc>	Rev 1
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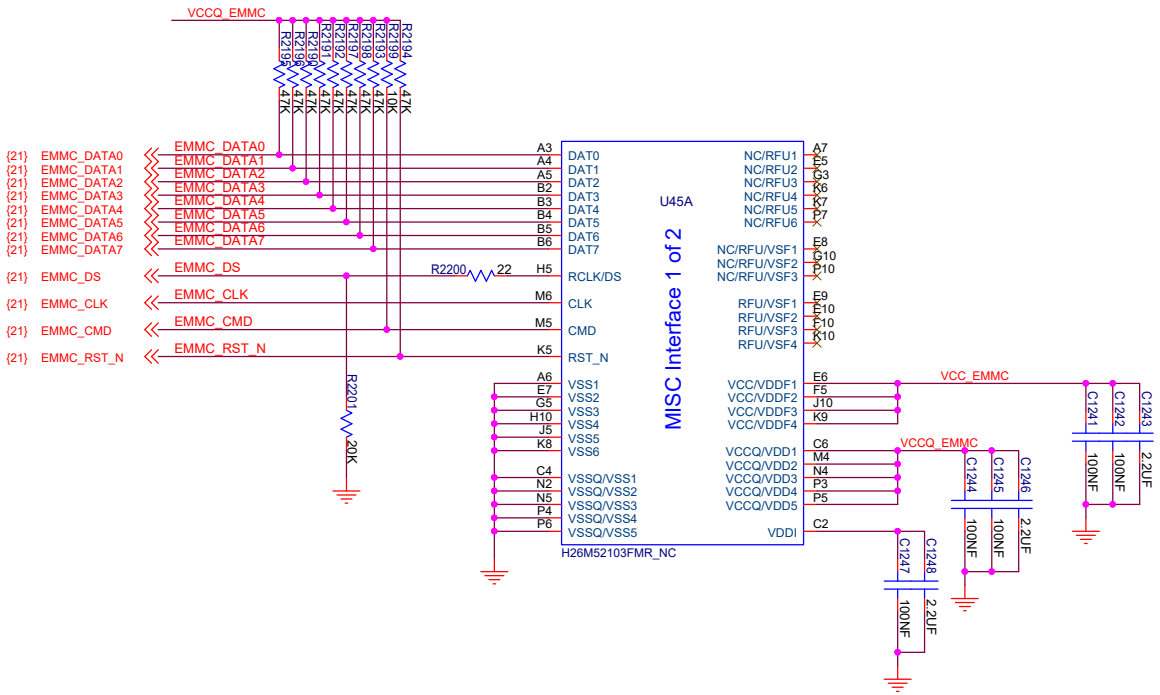
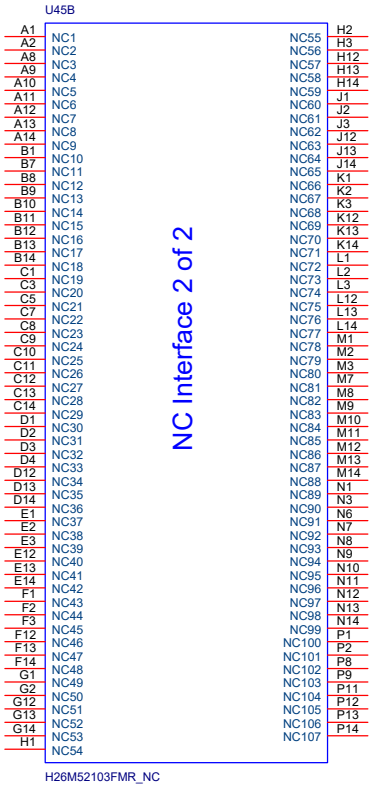
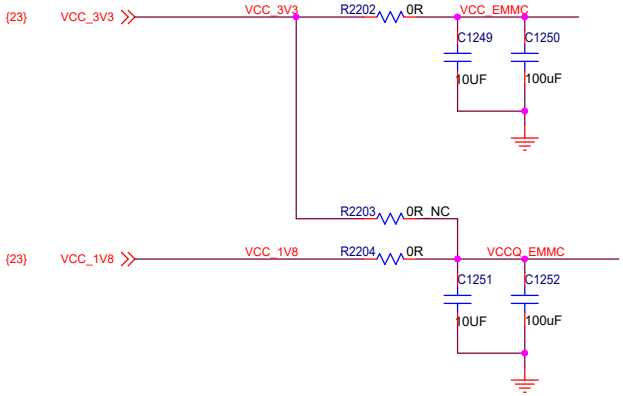
EMMC







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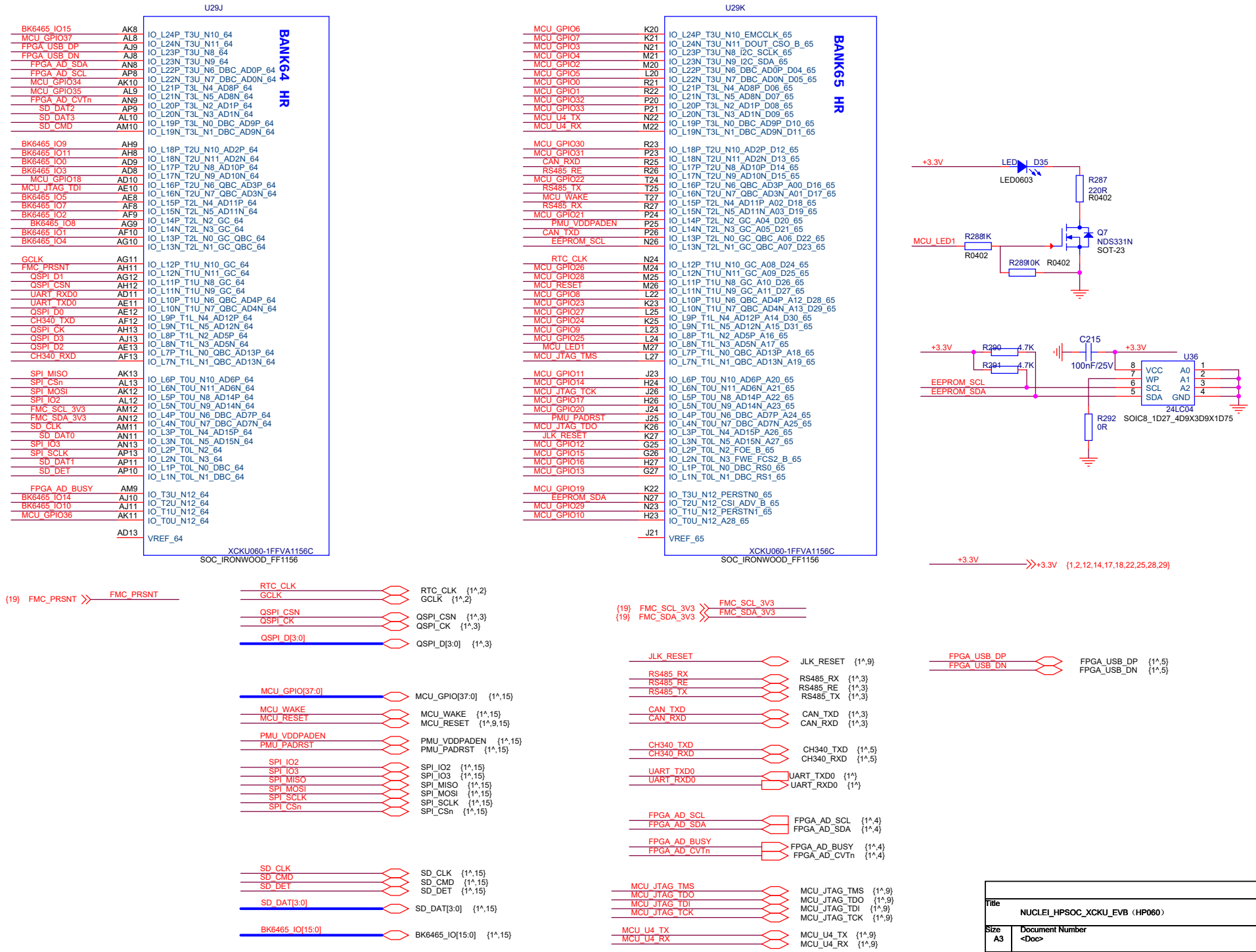
Size: A3	Document Number: <Doc>	Rev: 1
Date: Tuesday, October 12, 2021	Sheet 21 of 28	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BK6465_IO15 AK8
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FPGA_USB_DP AJ9
FPGA_USB_DN AJ8
FPGA_AD_SDA AN8
FPGA_AD_SCL AP8
MCU_GPIO34 AK10
MCU_GPIO35 AL9
FPGA_AD_CVTn AN9
SD_DAT2 AP9
SD_DAT3 AL10
SD_CMD AM10
BK6465_IO9 AH9
BK6465_IO11 AH8
BK6465_IO0 AD9
BK6465_IO3 AD8
MCU_GPIO18 AD10
MCU_JTAG_TDI AE10
BK6465_IO5 AE8
BK6465_IO7 AF8
BK6465_IO2 AF9
BK6465_IO8 AG9
BK6465_IO1 AF10
BK6465_IO4 AG10
GCLK AG11
FMC_PRSNT AH11
QSPI_D1 AG12
QSPI_CSN AH12
UART_RXD0 AD11
UART_TXD0 AE11
QSPI_D0 AE12
CH340_TXD AF12
QSPI_CK AH13
QSPI_D3 AJ13
QSPI_D2 AE13
CH340_RXD AF13
SPI_MISO AK13
SPI_CSn AL13
SPI_MOSI AK12
SPI_IO2 AL12
FMC_SCL_3V3 AM12
FMC_SDA_3V3 AN12
SD_CLK AM11
SD_DAT0 AN11
SPI_IO3 AN13
SPI_SCLK AP13
SD_DAT1 AP11
SD_DET AP10
FPGA_AD_BUSY AM9
BK6465_IO14 AJ10
BK6465_IO10 AJ11
MCU_GPIO36 AK11
AD13
IO_L24P_T3U_N10_64
IO_L24N_T3U_N11_64
IO_L23P_T3U_N8_64
IO_L23N_T3U_N9_64
IO_L22P_T3U_N6_DBC_AD0P_64
IO_L22N_T3U_N7_DBC_AD0N_64
IO_L21P_T3L_N4_AD8P_64
IO_L21N_T3L_N5_AD8N_64
IO_L20P_T3L_N2_AD1P_64
IO_L20N_T3L_N3_AD1N_64
IO_L19P_T3L_N0_DBC_AD9P_64
IO_L19N_T3L_N1_DBC_AD9N_64
IO_L18P_T2U_N10_AD2P_64
IO_L18N_T2U_N11_AD2N_64
IO_L17P_T2U_N8_AD10P_64
IO_L17N_T2U_N9_AD10N_64
IO_L16P_T2U_N6_QBC_AD3P_64
IO_L16N_T2U_N7_QBC_AD3N_64
IO_L15P_T2L_N4_AD11P_64
IO_L15N_T2L_N5_AD11N_64
IO_L14P_T2L_N2_GC_64
IO_L14N_T2L_N3_GC_64
IO_L13P_T2L_N0_GC_QBC_64
IO_L13N_T2L_N1_GC_QBC_64
IO_L12P_T1U_N10_GC_64
IO_L12N_T1U_N11_GC_64
IO_L11P_T1U_N8_GC_64
IO_L11N_T1U_N9_GC_64
IO_L10P_T1U_N6_QBC_AD4P_64
IO_L10N_T1U_N7_QBC_AD4N_64
IO_L9P_T1L_N4_AD12P_64
IO_L9N_T1L_N5_AD12N_64
IO_L8P_T1L_N2_AD5P_64
IO_L8N_T1L_N3_AD5N_64
IO_L7P_T1L_N0_QBC_AD13P_64
IO_L7N_T1L_N1_QBC_AD13N_64
IO_L6P_T0U_N10_AD6P_64
IO_L6N_T0U_N11_AD6N_64
IO_L5P_T0U_N8_AD14P_64
IO_L5N_T0U_N9_AD14N_64
IO_L4P_T0U_N6_DBC_AD7P_64
IO_L4N_T0U_N7_DBC_AD7N_64
IO_L3P_T0L_N4_AD15P_64
IO_L3N_T0L_N5_AD15N_64
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IO_L2N_T0L_N3_64
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IO_T0U_N12_64
VREF_64
XCKU060-1FFVA1156C
SOC_IRONWOOD_FF1156
U29K
BANK65 HR
MCU_GPIO6 K20
MCU_GPIO7 K21
MCU_GPIO3 N21
MCU_GPIO4 M21
MCU_GPIO2 M20
MCU_GPIO5 L20
MCU_GPIO0 R21
MCU_GPIO1 R22
MCU_GPIO32 P20
MCU_GPIO33 P21
MCU_U4_TX N22
MCU_U4_RX M22
MCU_GPIO30 R23
MCU_GPIO31 P23
CAN_RXD R25
RS485_RE R26
MCU_GPIO22 T24
RS485_TX T25
MCU_WAKE T27
RS485_RX R27
MCU_GPIO21 P24
PMU_VDDPADEN P25
CAN_TXD P26
EEPROM_SCL N26
RTC_CLK N24
MCU_GPIO26 M24
MCU_GPIO28 M25
MCU_RESET M26
MCU_GPIO8 L22
MCU_GPIO23 K23
MCU_GPIO27 L25
MCU_GPIO24 K25
MCU_GPIO9 L23
MCU_GPIO25 L24
MCU_LED1 M27
MCU_JTAG_TMS L27
MCU_GPIO11 J23
MCU_GPIO14 H24
MCU_JTAG_TCK J26
MCU_GPIO17 H26
MCU_GPIO20 J24
PMU_PADRST J25
MCU_JTAG_TDO K26
JLK_RESET K27
MCU_GPIO12 G25
MCU_GPIO15 G26
MCU_GPIO16 H27
MCU_GPIO13 G27
MCU_GPIO19 K22
EEPROM_SDA N27
MCU_GPIO29 N23
MCU_GPIO10 H23
J21
IO_L24P_T3U_N10_EMCCLK_65
IO_L24N_T3U_N11_DOUT_CSO_B_65
IO_L23P_T3U_N8_I2C_SCLK_65
IO_L23N_T3U_N9_I2C_SDA_65
IO_L22P_T3U_N6_DBC_AD0P_D04_65
IO_L22N_T3U_N7_DBC_AD0N_D05_65
IO_L21P_T3L_N4_AD8P_D06_65
IO_L21N_T3L_N5_AD8N_D07_65
IO_L20P_T3L_N2_AD1P_D08_65
IO_L20N_T3L_N3_AD1N_D09_65
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IO_L19N_T3L_N1_DBC_AD9N_D11_65
IO_L18P_T2U_N10_AD2P_D12_65
IO_L18N_T2U_N11_AD2N_D13_65
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IO_L17N_T2U_N9_AD10N_D15_65
IO_L16P_T2U_N6_QBC_AD3P_A00_D16_65
IO_L16N_T2U_N7_QBC_AD3N_A01_D17_65
IO_L15P_T2L_N4_AD11P_A02_D18_65
IO_L15N_T2L_N5_AD11N_A03_D19_65
IO_L14P_T2L_N2_GC_A04_D20_65
IO_L14N_T2L_N3_GC_A05_D21_65
IO_L13P_T2L_N0_GC_QBC_A06_D22_65
IO_L13N_T2L_N1_GC_QBC_A07_D23_65
IO_L12P_T1U_N10_GC_A08_D24_65
IO_L12N_T1U_N11_GC_A09_D25_65
IO_L11P_T1U_N8_GC_A10_D26_65
IO_L11N_T1U_N9_GC_A11_D27_65
IO_L10P_T1U_N6_QBC_AD4P_A12_D28_65
IO_L10N_T1U_N7_QBC_AD4N_A13_D29_65
IO_L9P_T1L_N4_AD12P_A14_D30_65
IO_L9N_T1L_N5_AD12N_A15_D31_65
IO_L8P_T1L_N2_AD5P_A16_65
IO_L8N_T1L_N3_AD5N_A17_65
IO_L7P_T1L_N0_QBC_AD13P_A18_65
IO_L7N_T1L_N1_QBC_AD13N_A19_65
IO_L6P_T0U_N10_AD6P_A20_65
IO_L6N_T0U_N11_AD6N_A21_65
IO_L5P_T0U_N8_AD14P_A22_65
IO_L5N_T0U_N9_AD14N_A23_65
IO_L4P_T0U_N6_DBC_AD7P_A24_65
IO_L4N_T0U_N7_DBC_AD7N_A25_65
IO_L3P_T0L_N4_AD15P_A26_65
IO_L3N_T0L_N5_AD15N_A27_65
IO_L2P_T0L_N2_FOE_B_65
IO_L2N_T0L_N3_FWE_FCS2_B_65
IO_L1P_T0L_N0_DBC_RS0_65
IO_L1N_T0L_N1_DBC_RS1_65
IO_T3U_N12_PERSTN0_65
IO_T2U_N12_CSI_ADV_B_65
IO_T1U_N12_PERSTN1_65
IO_T0U_N12_A28_65
VREF_65
XCKU060-1FFVA1156C
SOC_IRONWOOD_FF1156
+3.3V
LED
D35
LED0603
R287
220R
R0402
MCU_LED1
R288
1K
R0402
Q7
NDS331N
SOT-23
R289
10K
R0402
+3.3V
R290
4.7K
R291
4.7K
C215
100nF/25V
+3.3V
U36
VCC
WP
SCL
SDA
A0
A1
A2
GND
24LC04
SOIC8_1D27_4D9X3D9X1D75
EEPROM_SCL
EEPROM_SDA
R292
0R
+3.3V
+3.3V {1,2,12,14,17,18,22,25,28,29}
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FMC_PRSNT
RTC_CLK
GCLK
RTC_CLK {1^,2}
GCLK {1^,2}
QSPI_CSN
QSPI_CK
QSPI_CSN {1^,3}
QSPI_CK {1^,3}
QSPI_D[3:0]
QSPI_D[3:0] {1^,3}
{19} FMC_SCL_3V3
{19} FMC_SDA_3V3
FMC_SCL_3V3
FMC_SDA_3V3
JLK_RESET
JLK_RESET {1^,9}
RS485_RX
RS485_RE
RS485_TX
RS485_RX {1^,3}
RS485_RE {1^,3}
RS485_TX {1^,3}
CAN_TXD
CAN_RXD
CAN_TXD {1^,3}
CAN_RXD {1^,3}
FPGA_USB_DP
FPGA_USB_DN
FPGA_USB_DP {1^,5}
FPGA_USB_DN {1^,5}
MCU_GPIO[37:0]
MCU_GPIO[37:0] {1^,15}
MCU_WAKE
MCU_RESET
MCU_WAKE {1^,15}
MCU_RESET {1^,9,15}
PMU_VDDPADEN
PMU_PADRST
PMU_VDDPADEN {1^,15}
PMU_PADRST {1^,15}
SPI_IO2
SPI_IO3
SPI_MISO
SPI_MOSI
SPI_SCLK
SPI_CSn
SPI_IO2 {1^,15}
SPI_IO3 {1^,15}
SPI_MISO {1^,15}
SPI_MOSI {1^,15}
SPI_SCLK {1^,15}
SPI_CSn {1^,15}
CH340_TXD
CH340_RXD
CH340_TXD {1^,5}
CH340_RXD {1^,5}
UART_TXD0
UART_RXD0
UART_TXD0 {1^}
UART_RXD0 {1^}
FPGA_AD_SCL
FPGA_AD_SDA
FPGA_AD_SCL {1^,4}
FPGA_AD_SDA {1^,4}
FPGA_AD_BUSY
FPGA_AD_CVTn
FPGA_AD_BUSY {1^,4}
FPGA_AD_CVTn {1^,4}
SD_CLK
SD_CMD
SD_DET
SD_CLK {1^,15}
SD_CMD {1^,15}
SD_DET {1^,15}
SD_DAT[3:0]
SD_DAT[3:0] {1^,15}
MCU_JTAG_TMS
MCU_JTAG_TDO
MCU_JTAG_TDI
MCU_JTAG_TCK
MCU_JTAG_TMS {1^,9}
MCU_JTAG_TDO {1^,9}
MCU_JTAG_TDI {1^,9}
MCU_JTAG_TCK {1^,9}
BK6465_IO[15:0]
BK6465_IO[15:0] {1^,15}
MCU_U4_TX
MCU_U4_RX
MCU_U4_TX {1^,9}
MCU_U4_RX {1^,9}
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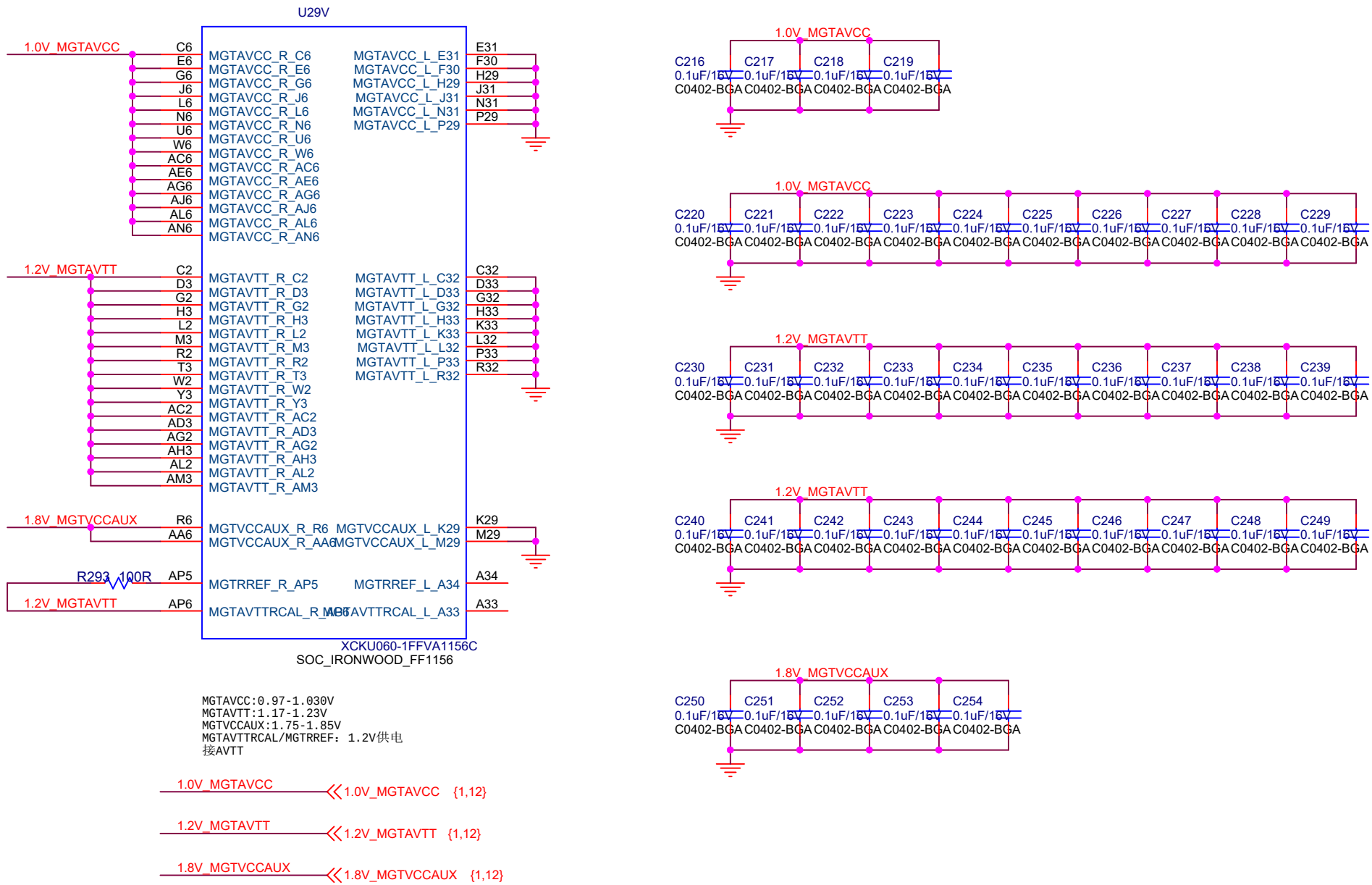

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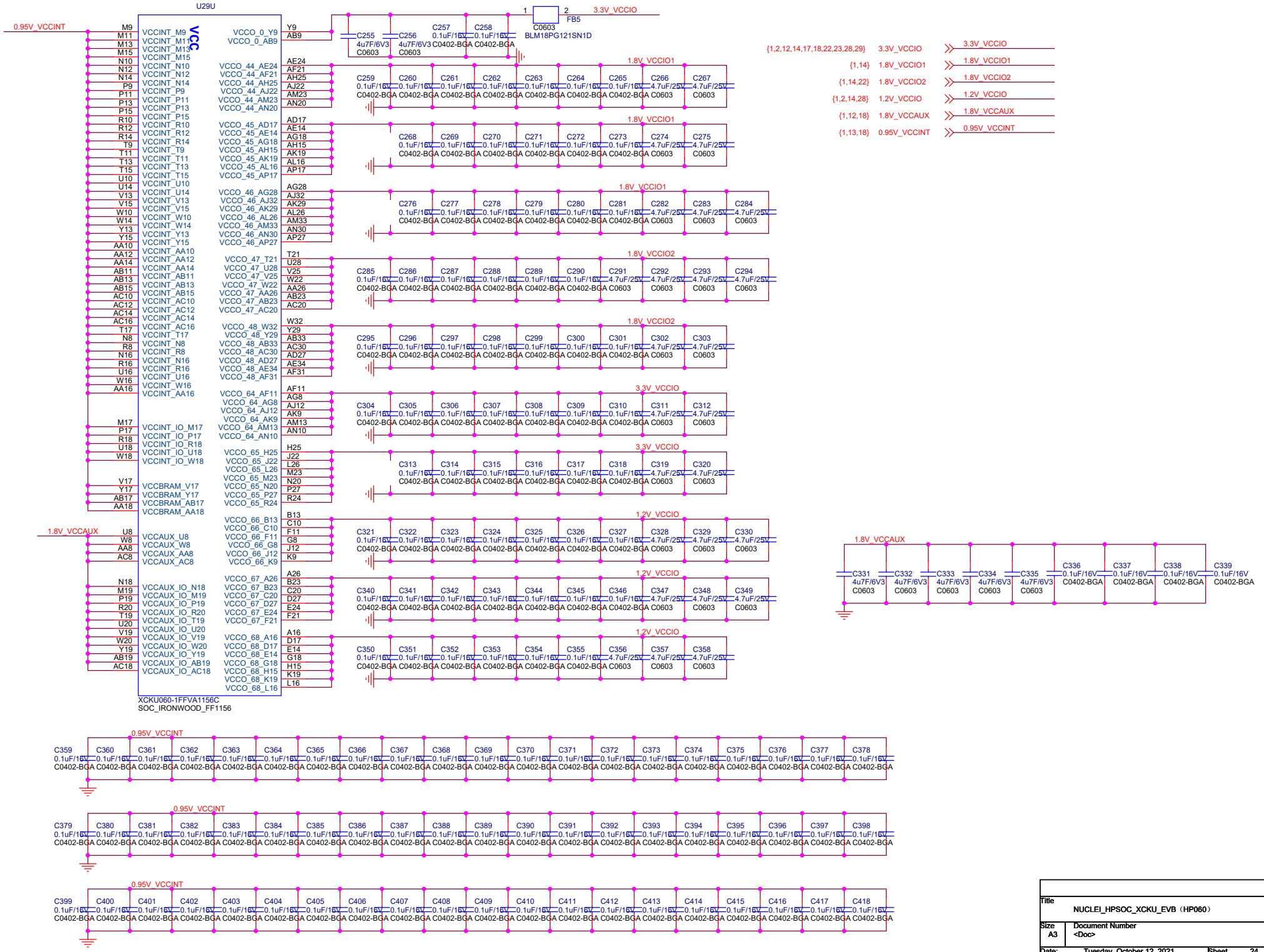

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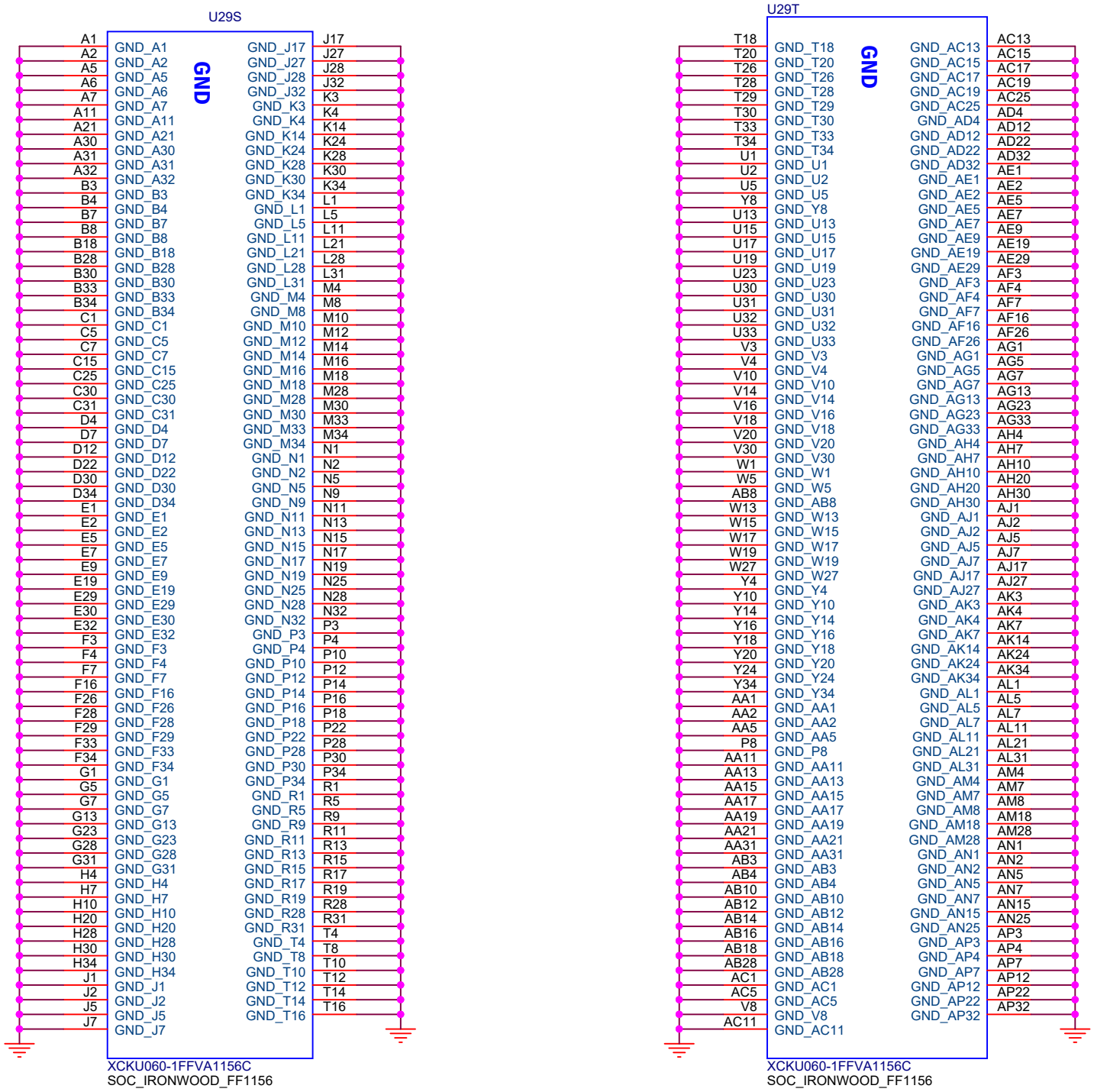

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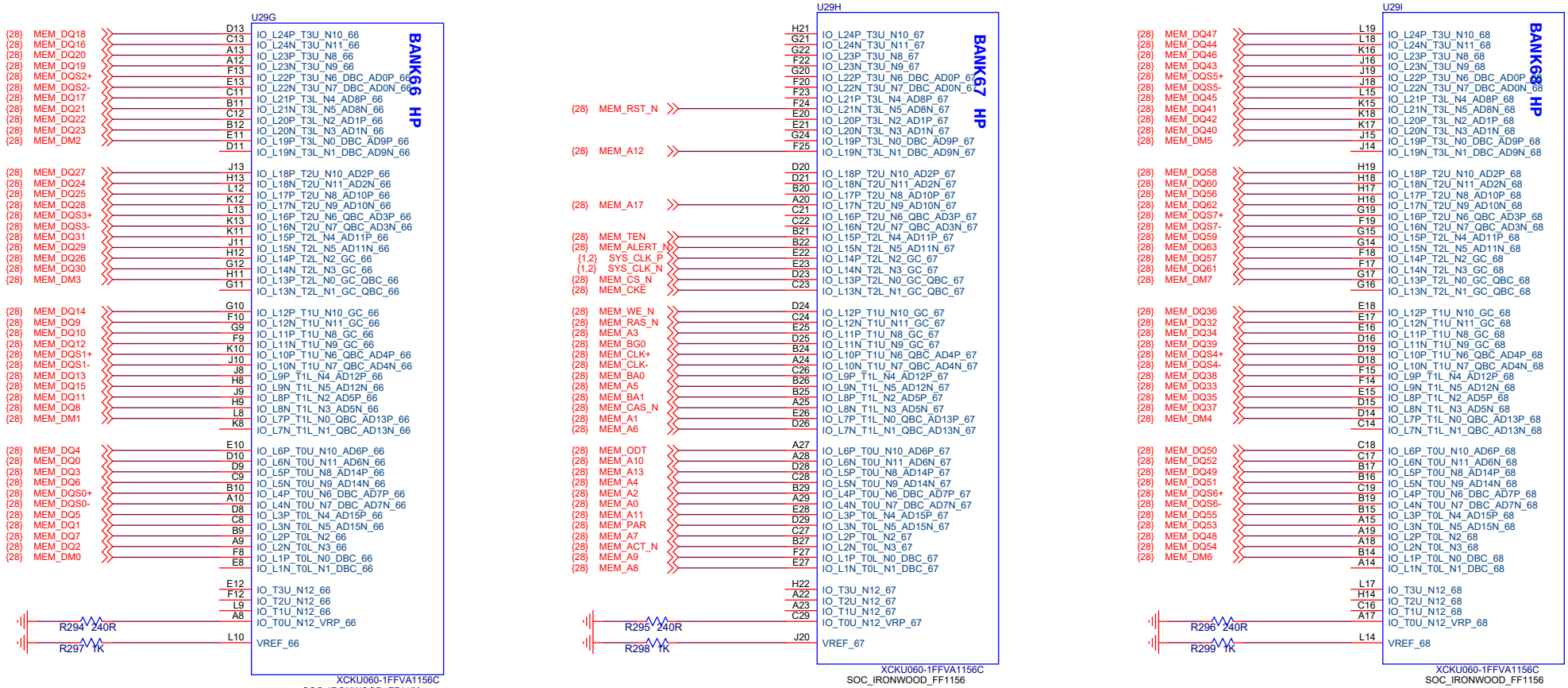

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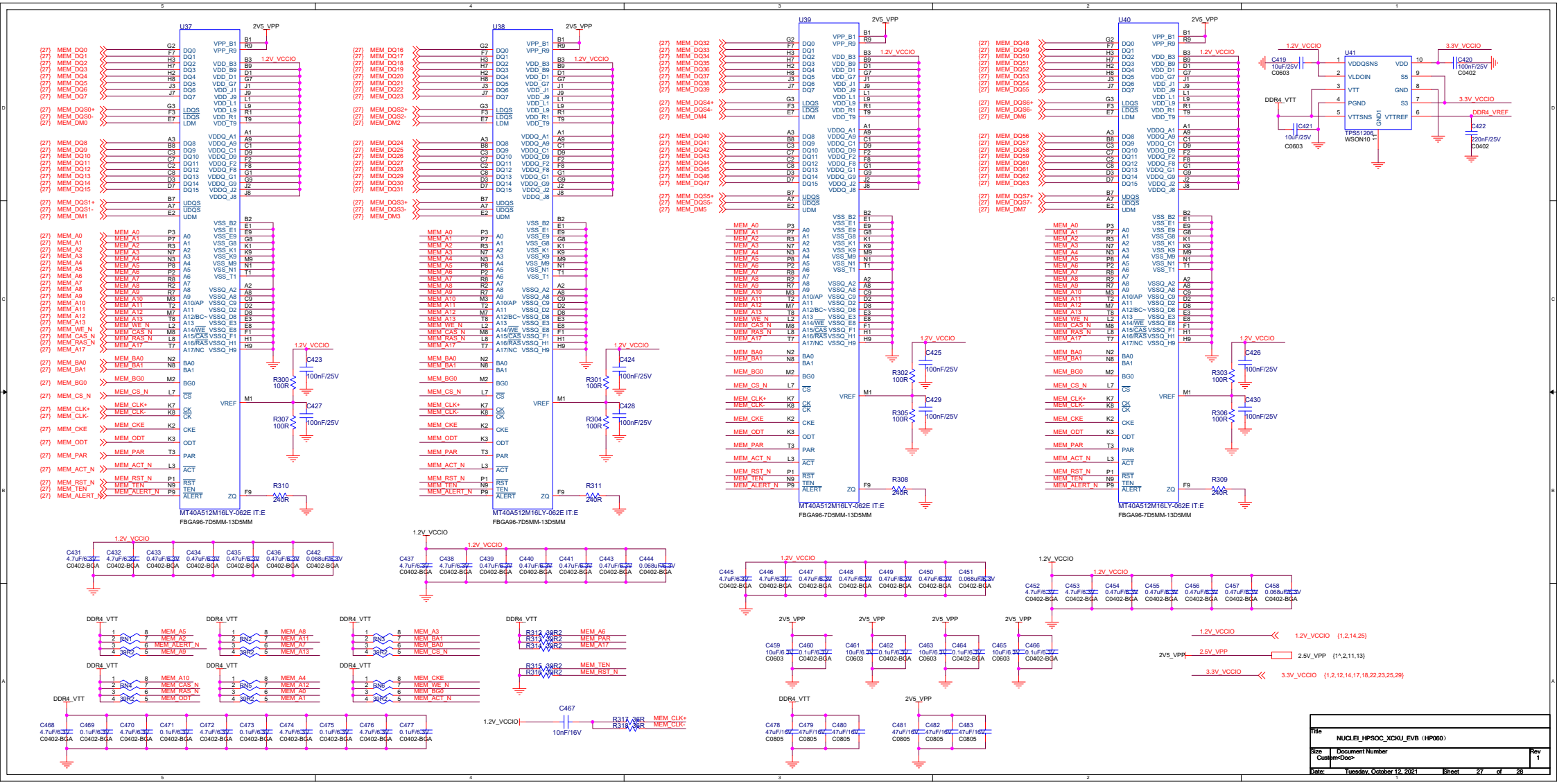
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U40
MT40A512M16LY-062E IT:E
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1.2V_VCCIO
DDR4_VTT
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WSON10
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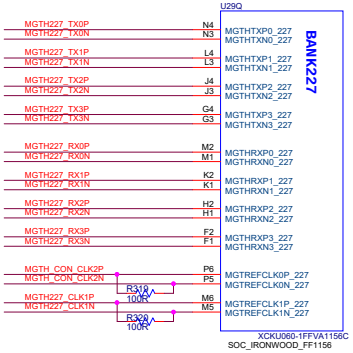

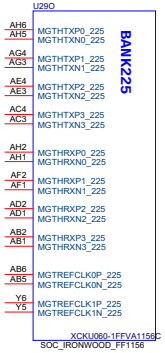

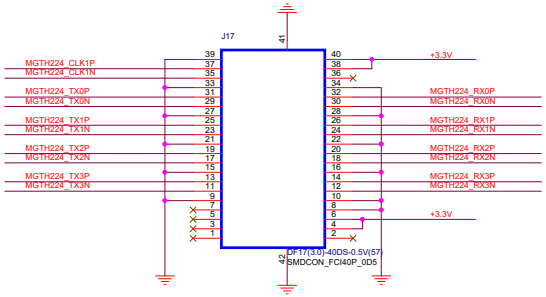

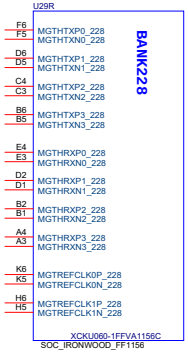

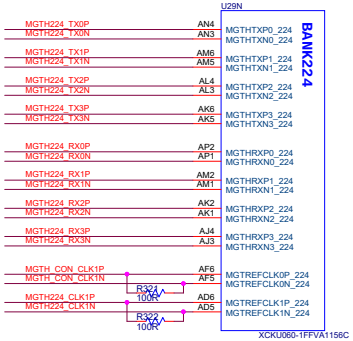

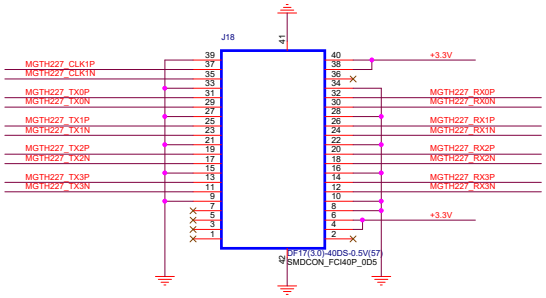

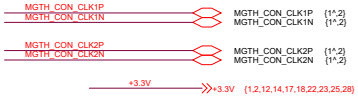

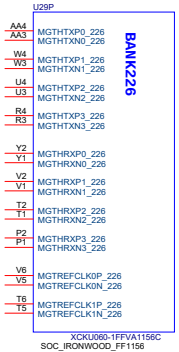

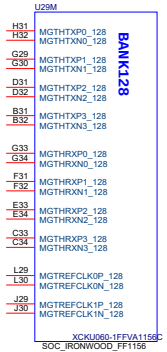

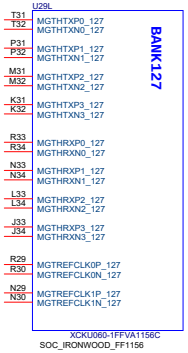

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