Revision History

Revision	Date	Comments
1.0	2011-12-9	初次版本

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Designed by FriendlyARM

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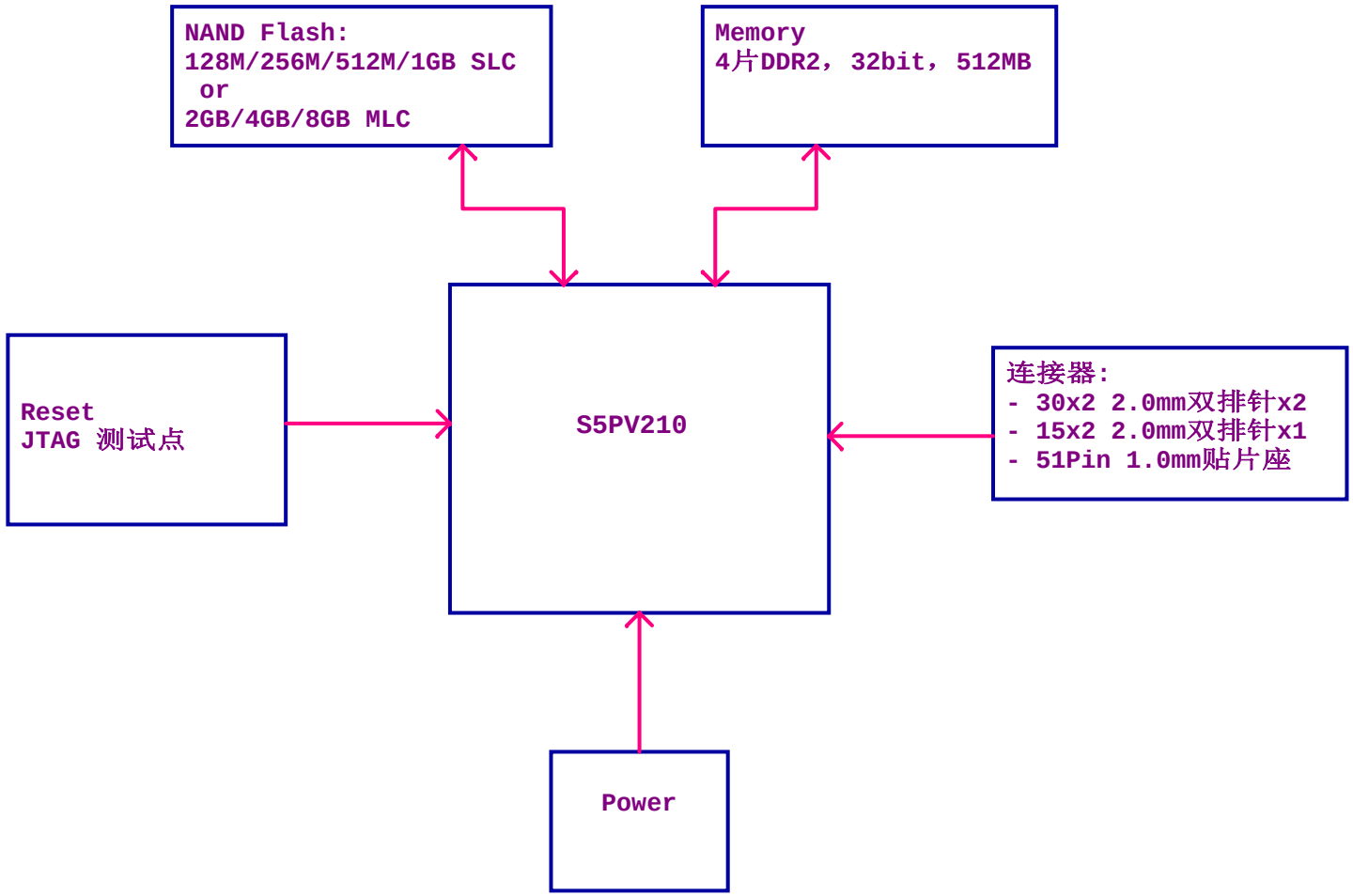

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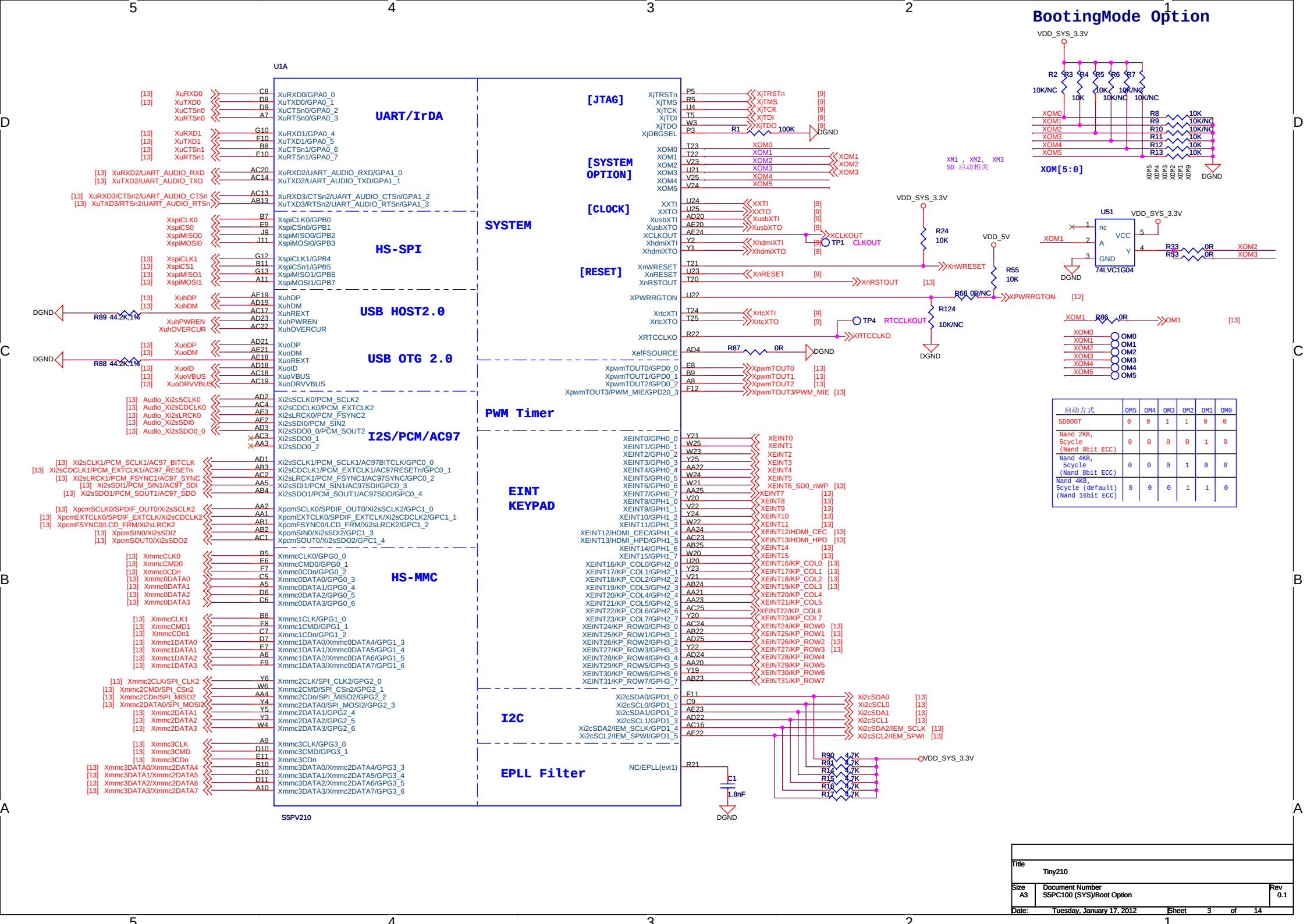
BootingMode Option
U1A
S5PV210
UART/IrDA
HS-SPI
USB HOST2.0
USB OTG 2.0
I2S/PCM/AC97
HS-MMC
SYSTEM
PWM Timer
EINT
KEYPAD
I2C
EPLL Filter
[JTAG]
[SYSTEM OPTION]
[CLOCK]
[RESET]
XOM[5:0]
XM1 , XM2, XM3
SD 启动相关
74LVC1G04
启动方式
SDBOOT
Nand 2KB, 5cycle (Nand 8bit ECC)
Nand 4KB, 5cycle (Nand 8bit ECC)
Nand 4KB, 5cycle (default) (Nand 16bit ECC)
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Tiny210
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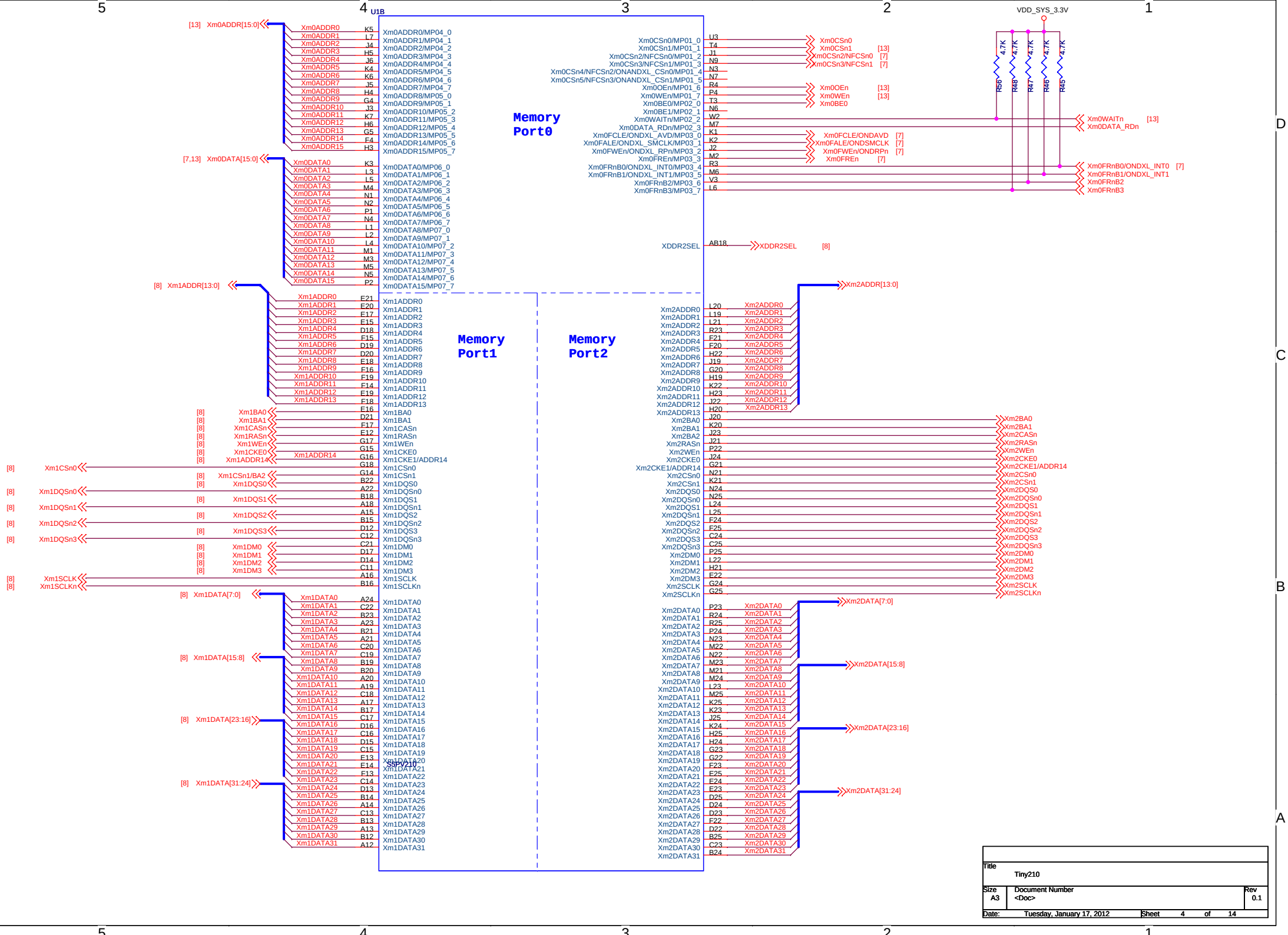

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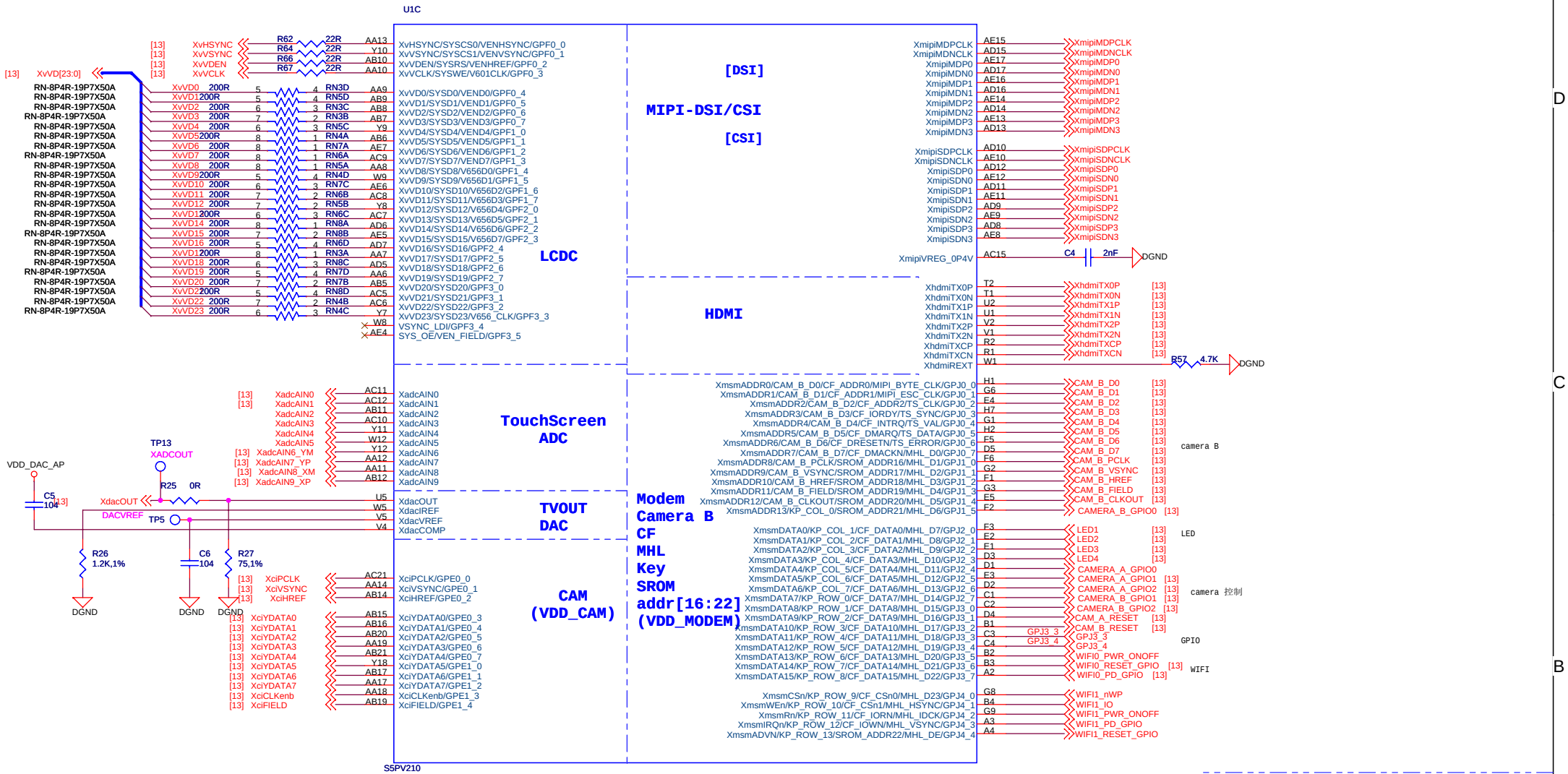
U1C
[DSI]
MIPI-DSI/CSI
[CSI]
LCDC
HDMI
TouchScreen ADC
TVOUT DAC
Modem
Camera B
CF
MHL
Key
SROM
addr[16:22]
(VDD_MODEM)
CAM (VDD_CAM)
S5PV210
XvHSYNC/SYSCS0/VENHSYNC/GPF0_0
XvVSYNC/SYSCS1/VENVSYNC/GPF0_1
XvVDEN/SYSRS/VENHREF/GPF0_2
XvVCLK/SYSWE/V601CLK/GPF0_3
XvVD0/SYSD0/VEND0/GPF0_4
XvVD1/SYSD1/VEND1/GPF0_5
XvVD2/SYSD2/VEND2/GPF0_6
XvVD3/SYSD3/VEND3/GPF0_7
XvVD4/SYSD4/VEND4/GPF1_0
XvVD5/SYSD5/VEND5/GPF1_1
XvVD6/SYSD6/VEND6/GPF1_2
XvVD7/SYSD7/VEND7/GPF1_3
XvVD8/SYSD8/V656D0/GPF1_4
XvVD9/SYSD9/V656D1/GPF1_5
XvVD10/SYSD10/V656D2/GPF1_6
XvVD11/SYSD11/V656D3/GPF1_7
XvVD12/SYSD12/V656D4/GPF2_0
XvVD13/SYSD13/V656D5/GPF2_1
XvVD14/SYSD14/V656D6/GPF2_2
XvVD15/SYSD15/V656D7/GPF2_3
XvVD16/SYSD16/GPF2_4
XvVD17/SYSD17/GPF2_5
XvVD18/SYSD18/GPF2_6
XvVD19/SYSD19/GPF2_7
XvVD20/SYSD20/GPF3_0
XvVD21/SYSD21/GPF3_1
XvVD22/SYSD22/GPF3_2
XvVD23/SYSD23/V656_CLK/GPF3_3
VSYNC_LDI/GPF3_4
SYS_OE/VEN_FIELD/GPF3_5
XmipiMDPCLK
XmipiMDNCLK
XmipiMDP0
XmipiMDN0
XmipiMDP1
XmipiMDN1
XmipiMDP2
XmipiMDN2
XmipiMDP3
XmipiMDN3
XmipiSDPCLK
XmipiSDNCLK
XmipiSDP0
XmipiSDN0
XmipiSDP1
XmipiSDN1
XmipiSDP2
XmipiSDN2
XmipiSDP3
XmipiSDN3
XmipiVREG_0P4V
C4
2nF
DGND
XhdmiTX0P
XhdmiTX0N
XhdmiTX1P
XhdmiTX1N
XhdmiTX2P
XhdmiTX2N
XhdmiTXCP
XhdmiTXCN
XhdmiREXT
R57
4.7K
XadcAIN0
XadcAIN1
XadcAIN2
XadcAIN3
XadcAIN4
XadcAIN5
XadcAIN6
XadcAIN7
XadcAIN8
XadcAIN9
XdacOUT
XdacIREF
XdacVREF
XdacCOMP
XciPCLK/GPE0_0
XciVSYNC/GPE0_1
XciHREF/GPE0_2
XciYDATA0/GPE0_3
XciYDATA1/GPE0_4
XciYDATA2/GPE0_5
XciYDATA3/GPE0_6
XciYDATA4/GPE0_7
XciYDATA5/GPE1_0
XciYDATA6/GPE1_1
XciYDATA7/GPE1_2
XciCLKenb/GPE1_3
XciFIELD/GPE1_4
XmsmADDR0/CAM_B_D0/CF_ADDR0/MIPI_BYTE_CLK/GPJ0_0
XmsmADDR1/CAM_B_D1/CF_ADDR1/MIPI_ESC_CLK/GPJ0_1
XmsmADDR2/CAM_B_D2/CF_ADDR2/TS_CLK/GPJ0_2
XmsmADDR3/CAM_B_D3/CF_IORDY/TS_SYNC/GPJ0_3
XmsmADDR4/CAM_B_D4/CF_INTRQ/TS_VAL/GPJ0_4
XmsmADDR5/CAM_B_D5/CF_DMARQ/TS_DATA/GPJ0_5
XmsmADDR6/CAM_B_D6/CF_DRESETN/TS_ERROR/GPJ0_6
XmsmADDR7/CAM_B_D7/CF_DMACKN/MHL_D0/GPJ0_7
XmsmADDR8/CAM_B_PCLK/SROM_ADDR16/MHL_D1/GPJ1_0
XmsmADDR9/CAM_B_VSYNC/SROM_ADDR17/MHL_D2/GPJ1_1
XmsmADDR10/CAM_B_HREF/SROM_ADDR18/MHL_D3/GPJ1_2
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XmsmADDR12/CAM_B_CLKOUT/SROM_ADDR20/MHL_D5/GPJ1_4
XmsmADDR13/KP_COL_0/SROM_ADDR21/MHL_D6/GPJ1_5
XmsmDATA0/KP_COL_1/CF_DATA0/MHL_D7/GPJ2_0
XmsmDATA1/KP_COL_2/CF_DATA1/MHL_D8/GPJ2_1
XmsmDATA2/KP_COL_3/CF_DATA2/MHL_D9/GPJ2_2
XmsmDATA3/KP_COL_4/CF_DATA3/MHL_D10/GPJ2_3
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XmsmDATA5/KP_COL_6/CF_DATA5/MHL_D12/GPJ2_5
XmsmDATA6/KP_COL_7/CF_DATA6/MHL_D13/GPJ2_6
XmsmDATA7/KP_ROW_0/CF_DATA7/MHL_D14/GPJ2_7
XmsmDATA8/KP_ROW_1/CF_DATA8/MHL_D15/GPJ3_0
XmsmDATA9/KP_ROW_2/CF_DATA9/MHL_D16/GPJ3_1
XmsmDATA10/KP_ROW_3/CF_DATA10/MHL_D17/GPJ3_2
XmsmDATA11/KP_ROW_4/CF_DATA11/MHL_D18/GPJ3_3
XmsmDATA12/KP_ROW_5/CF_DATA12/MHL_D19/GPJ3_4
XmsmDATA13/KP_ROW_6/CF_DATA13/MHL_D20/GPJ3_5
XmsmDATA14/KP_ROW_7/CF_DATA14/MHL_D21/GPJ3_6
XmsmDATA15/KP_ROW_8/CF_DATA15/MHL_D22/GPJ3_7
XmsmCSn/KP_ROW_9/CF_CSn0/MHL_D23/GPJ4_0
XmsmWEn/KP_ROW_10/CF_CSn1/MHL_HSYNC/GPJ4_1
XmsmRn/KP_ROW_11/CF_IORN/MHL_IDCK/GPJ4_2
XmsmIRQn/KP_ROW_12/CF_IOWN/MHL_VSYNC/GPJ4_3
XmsmADVN/KP_ROW_13/SROM_ADDR22/MHL_DE/GPJ4_4
camera B
LED
camera 控制
GPIO
WIFI
VDD_DAC_AP
TP13
XADCOUT
TP5
DACVREF
R25 0R
R26 1.2K,1%
C6 104
R27 75,1%
C5 104
VDD_SYS_3.3V
R22 10K
R21 10K
R23 10K
R19 10K
R20 10K
R18 10K
硬件 版本识别
Title
Tiny210
Size A3
Document Number <Doc>
Rev 0.1
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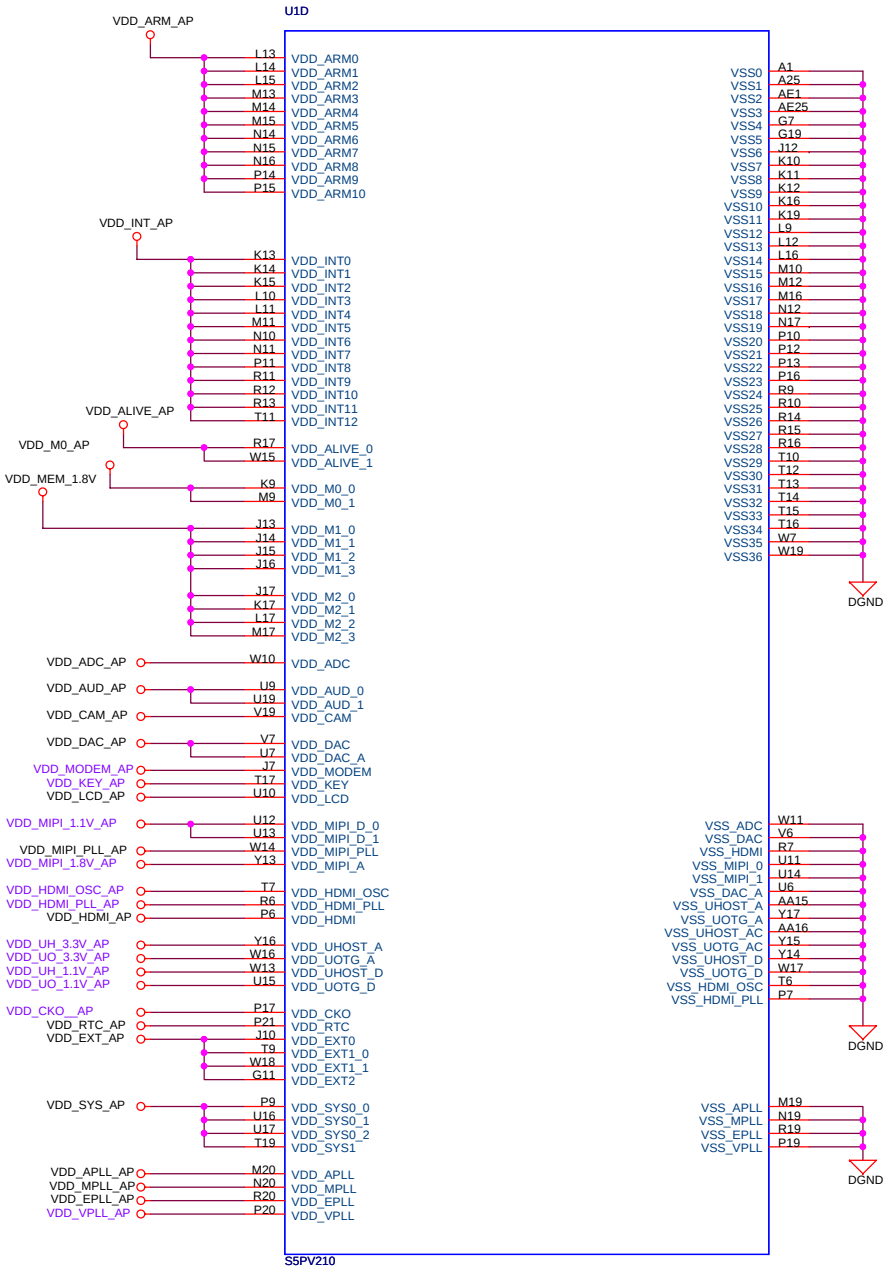

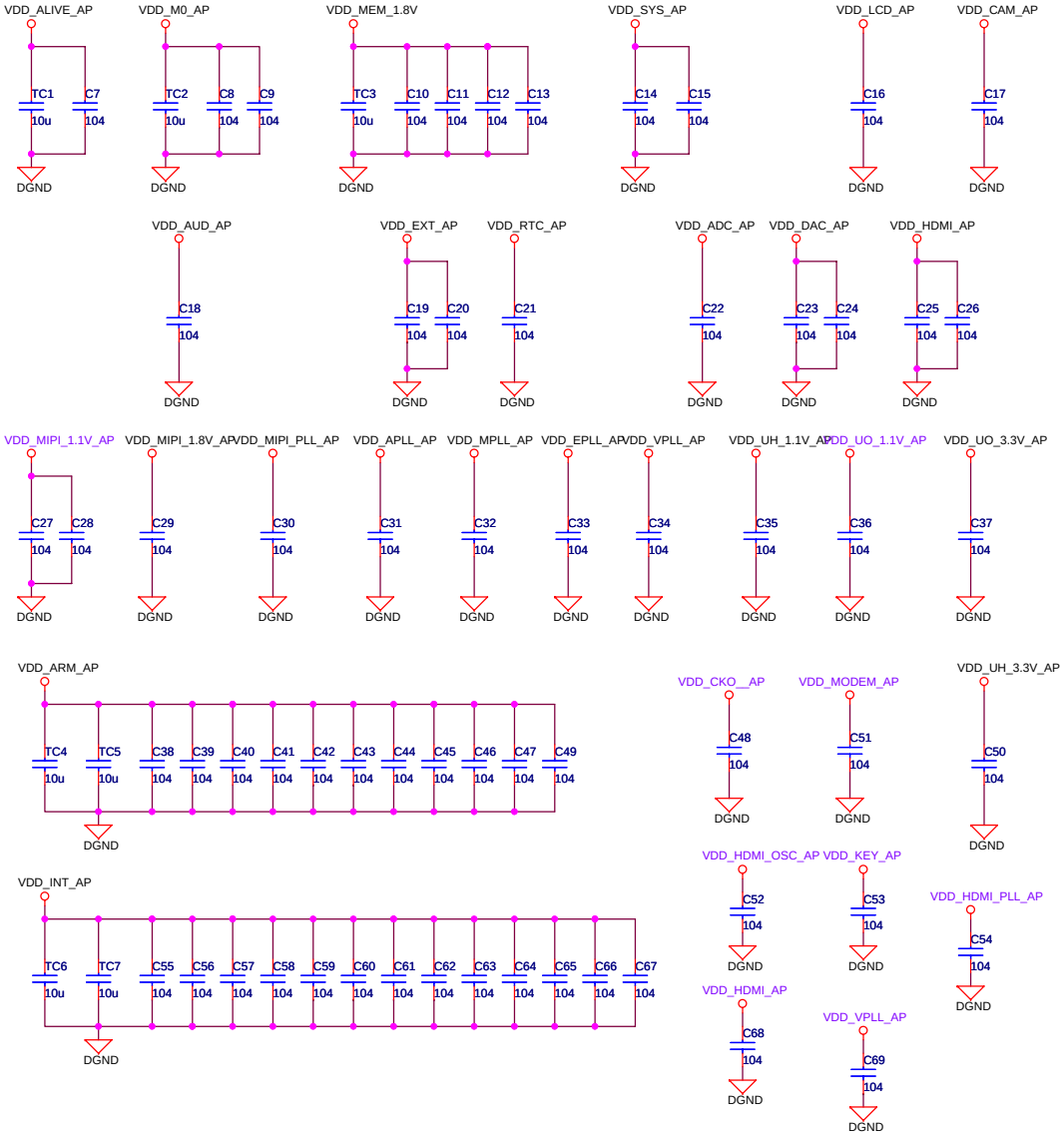

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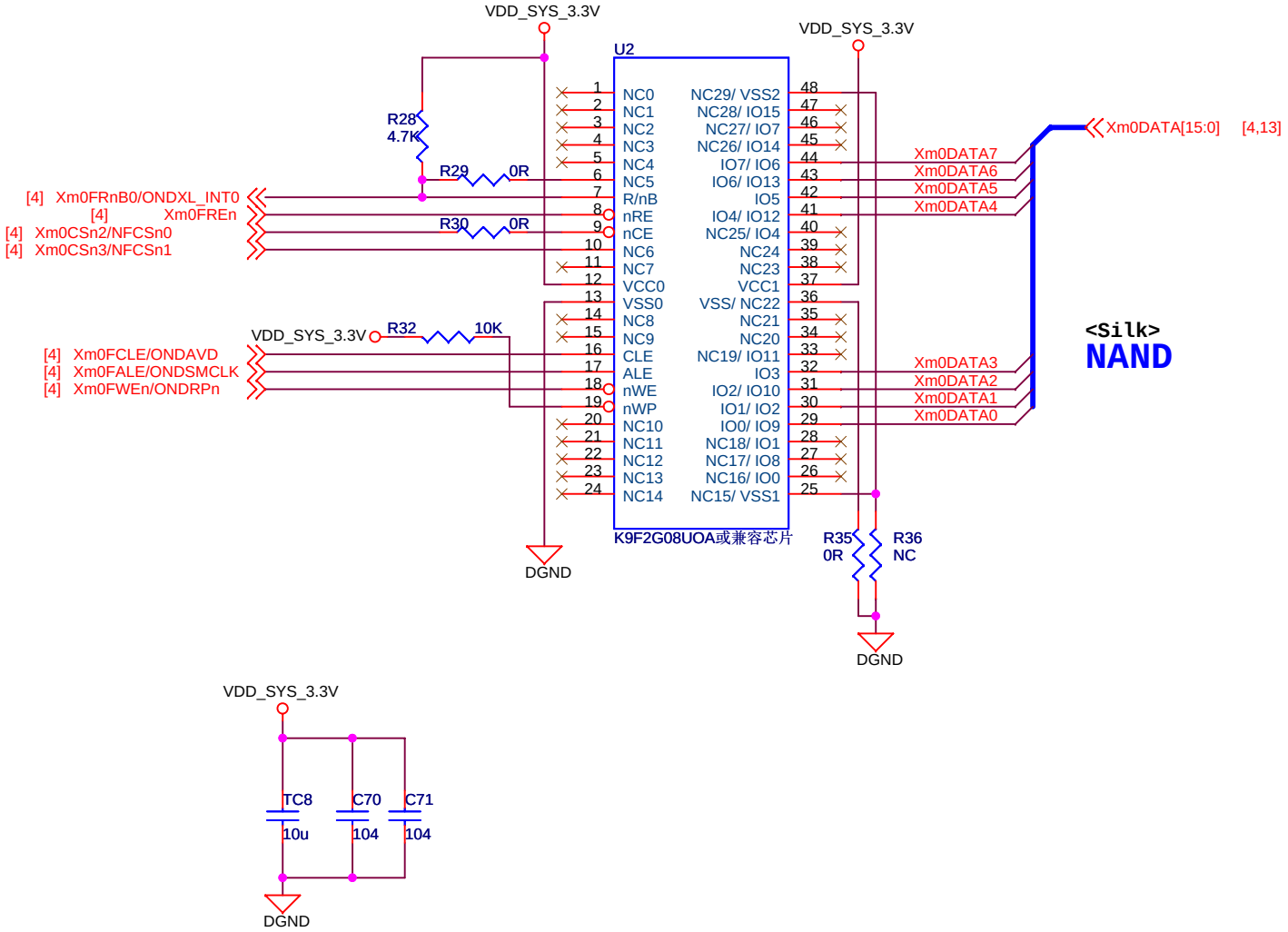
NAND Flash memory



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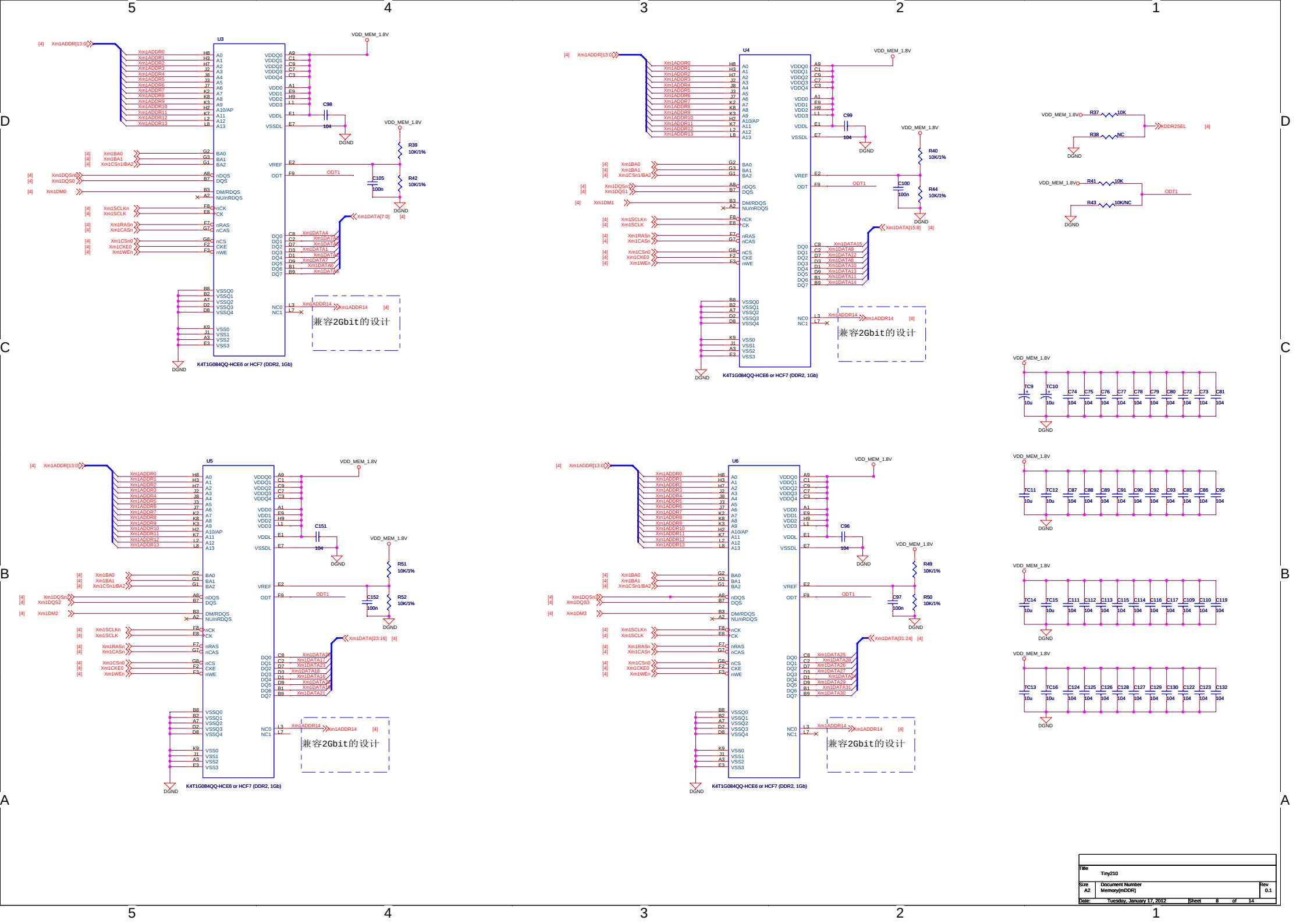
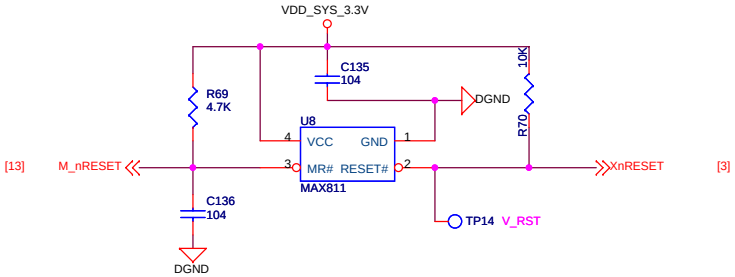
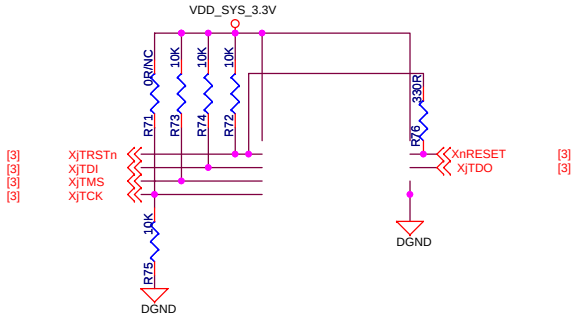
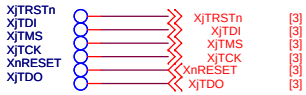

U3
U4
U5
U6
K4T1G084QQ-HCE6 or HCF7 (DDR2, 1Gb)
兼容2Gbit的设计
VDD_MEM_1.8V
DGND
Xm1ADDR[13:0]
Xm1DATA[7:0]
Xm1DATA[15:8]
Xm1DATA[23:16]
Xm1DATA[31:24]
C98
C99
C100
C151
C96
C152
C97
R39 10K/1%
R40 10K/1%
R44 10K/1%
R51 10K/1%
R49 10K/1%
R52 10K/1%
R50 10K/1%
R42 10K/1%
C105 100n
R37 10K
R38 NC
R41 10K
R43 10K/NC
DDR2SEL
ODT1
Tiny210
Memory(mDDR)
Tuesday, January 17, 2012

复位电路

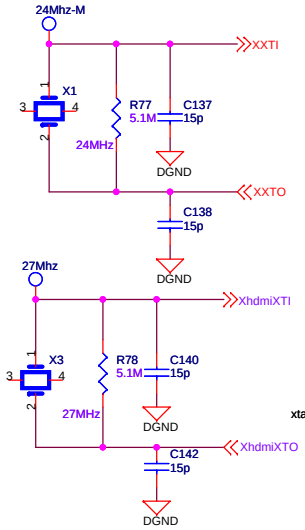


JTAG测试点

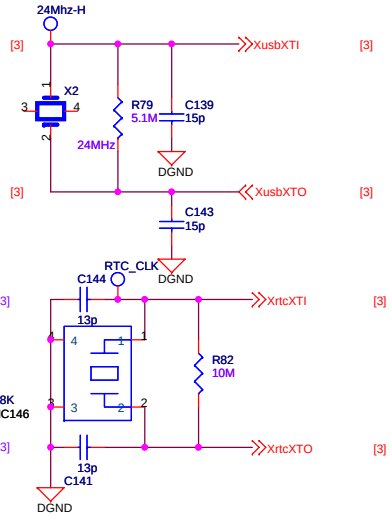




For PLL



For USB HOST



For VEDIO

For RTC

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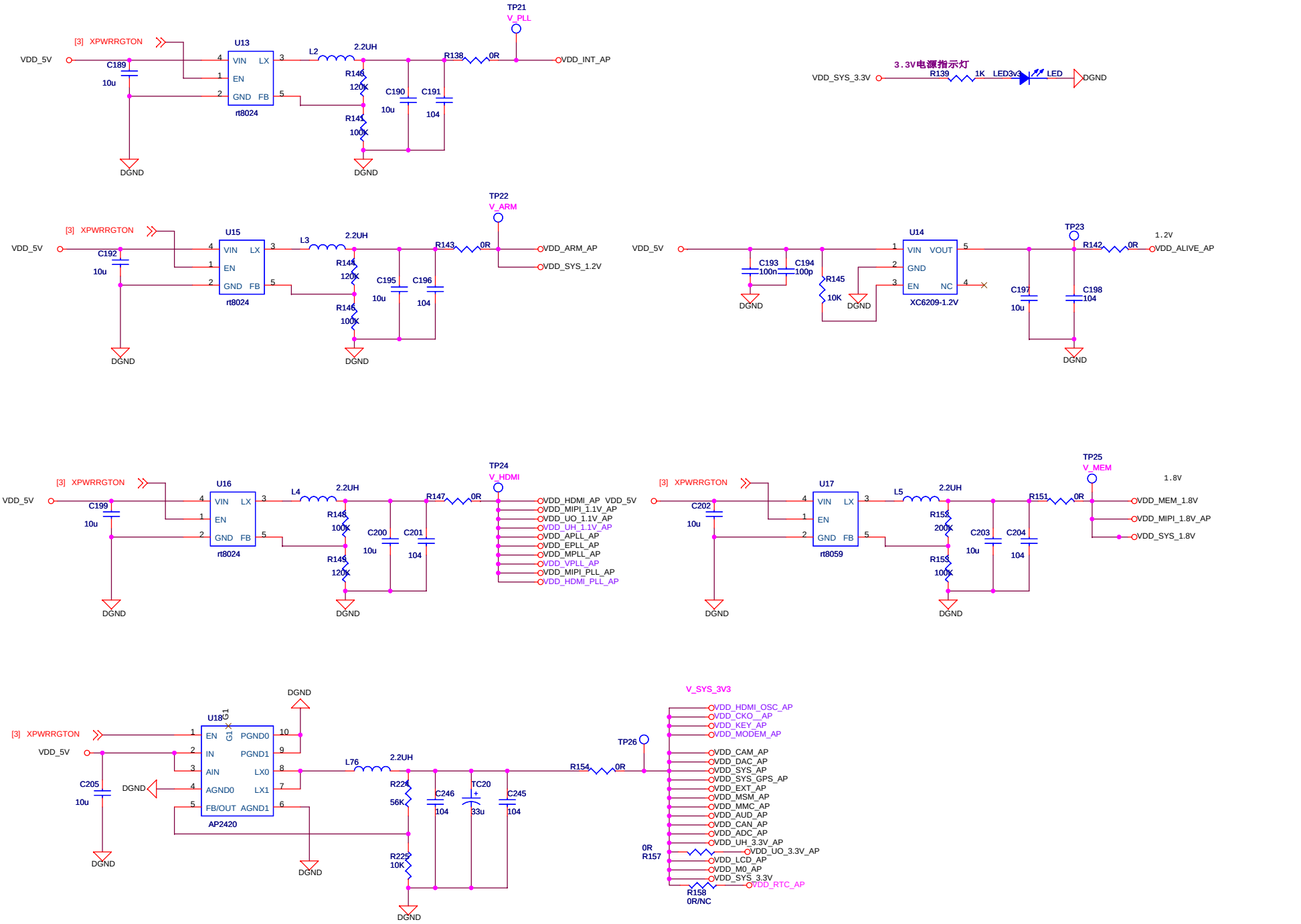

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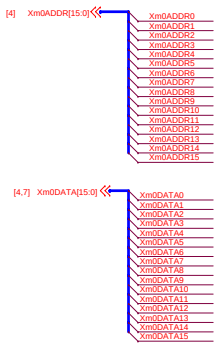
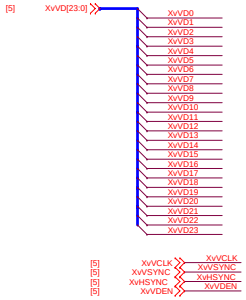
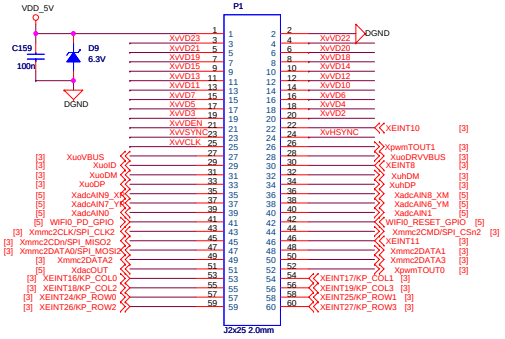
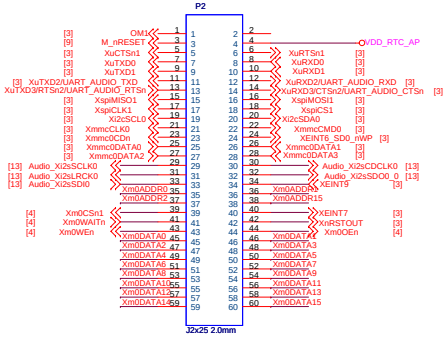
系统总线

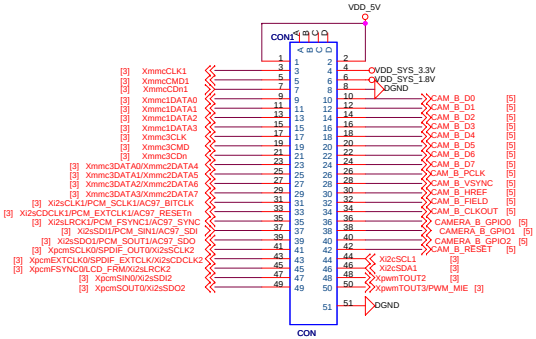


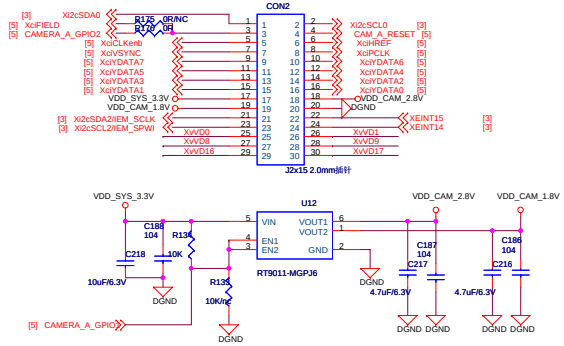
LCD总线



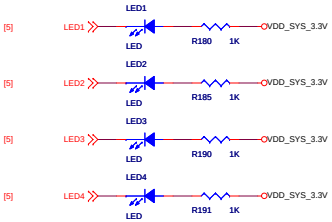




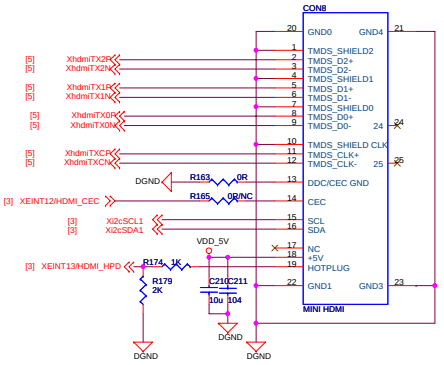




LED x 4



MINI HDMI接口电路



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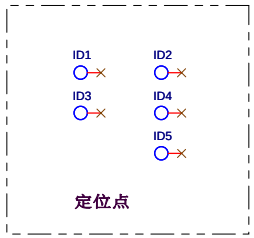

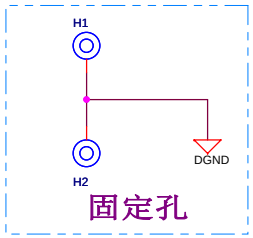

Title: Tiny210		
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