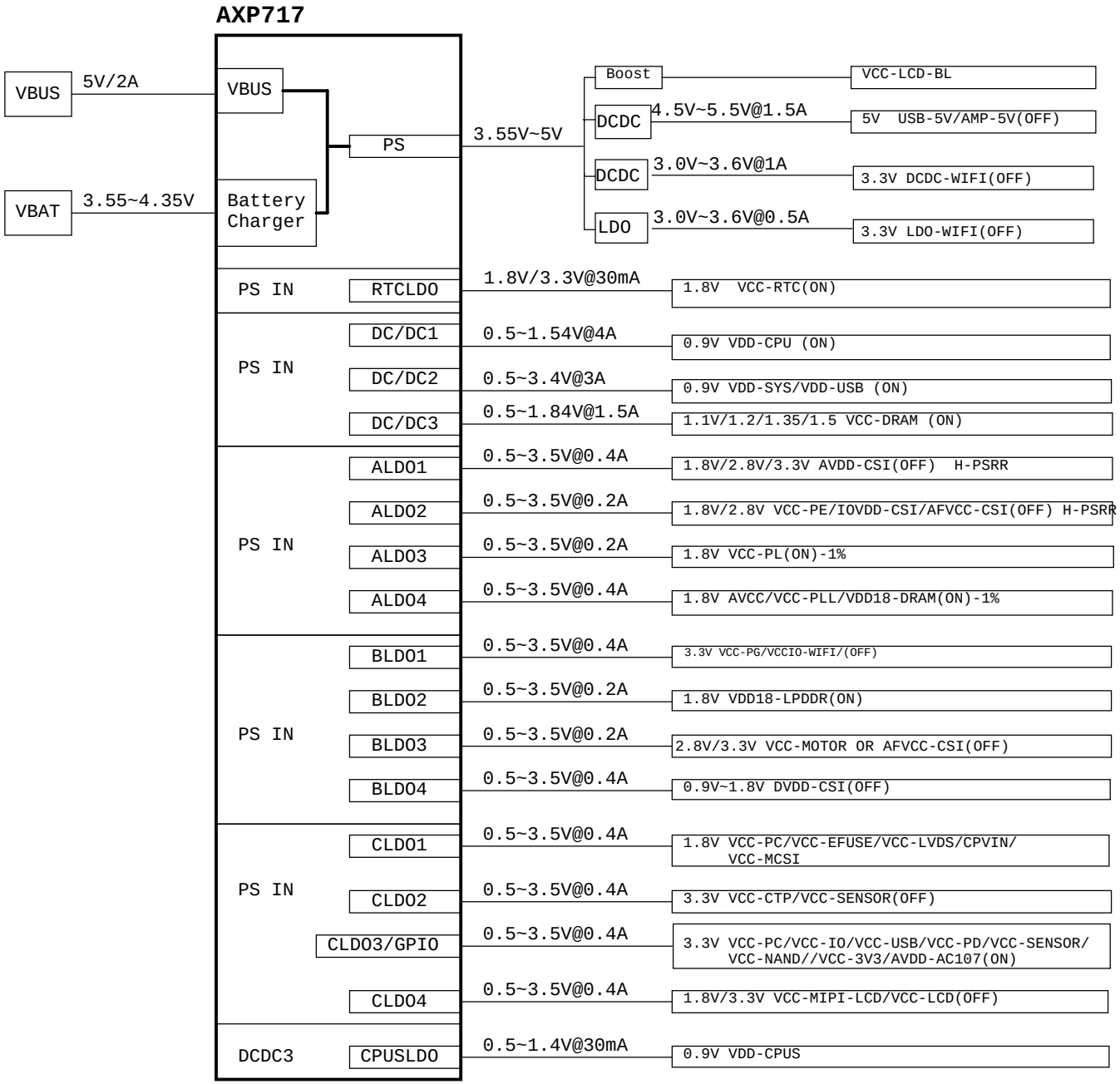
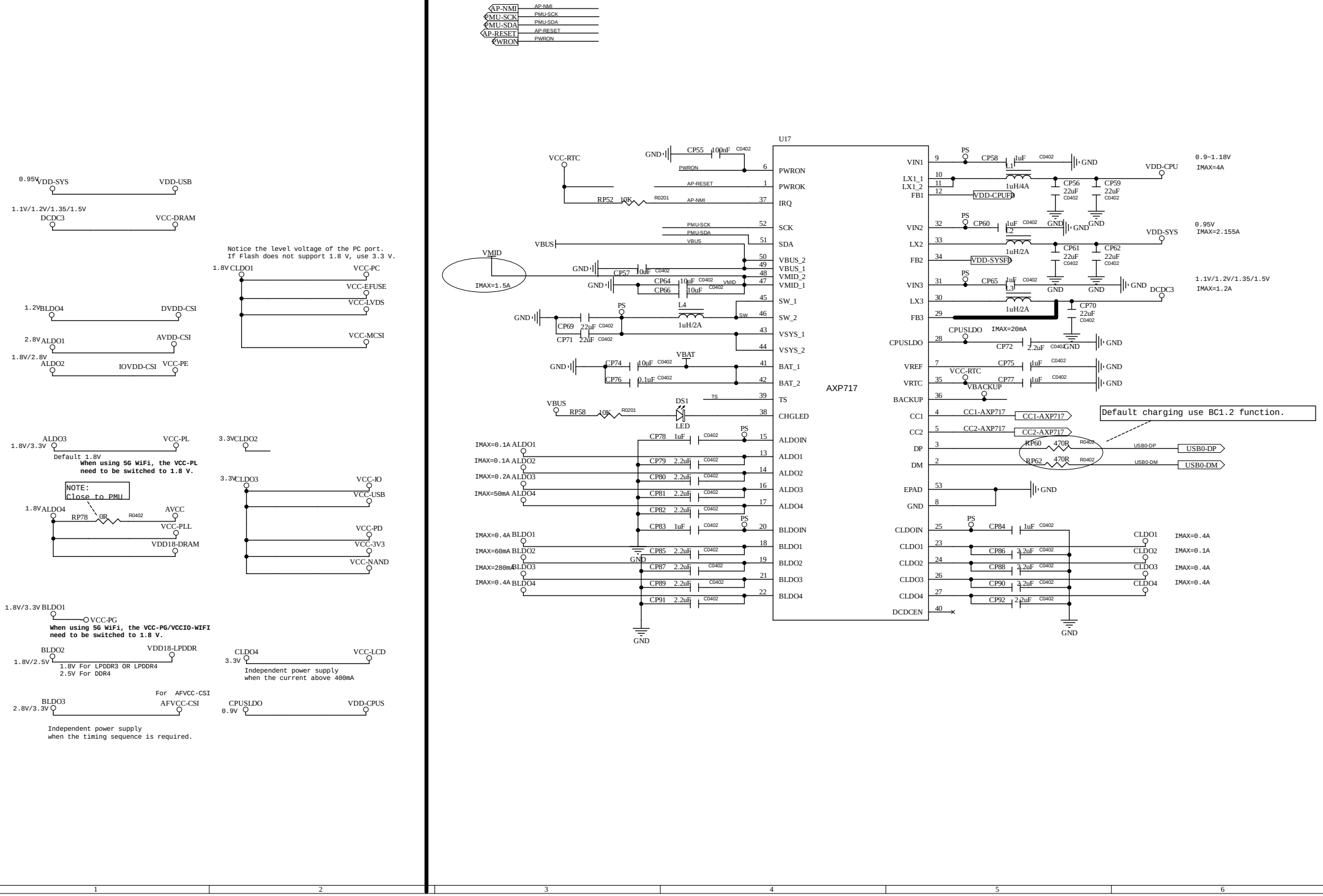
DEFAULT POWER ON

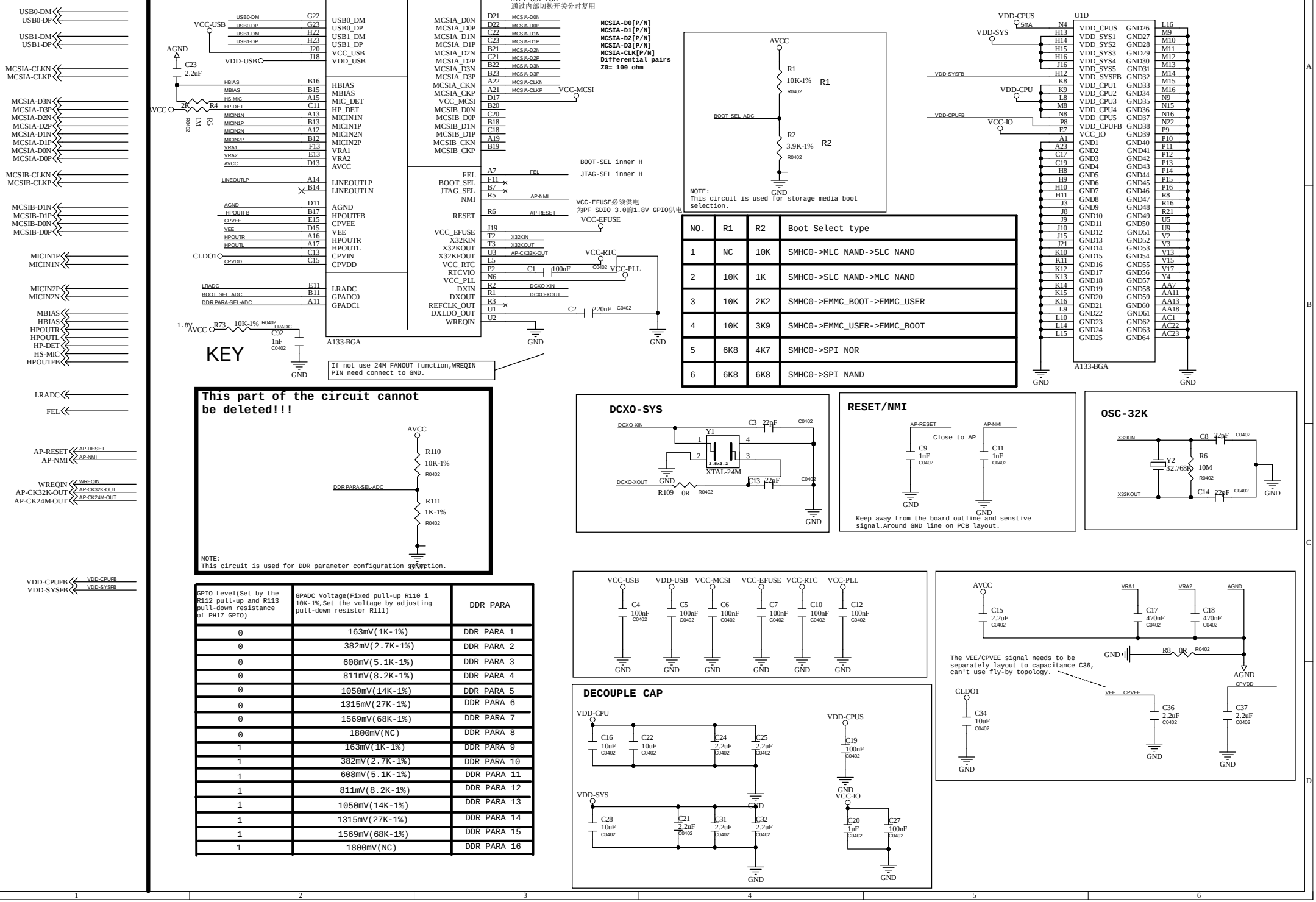
DEFAULT POWER OFF



PMIC

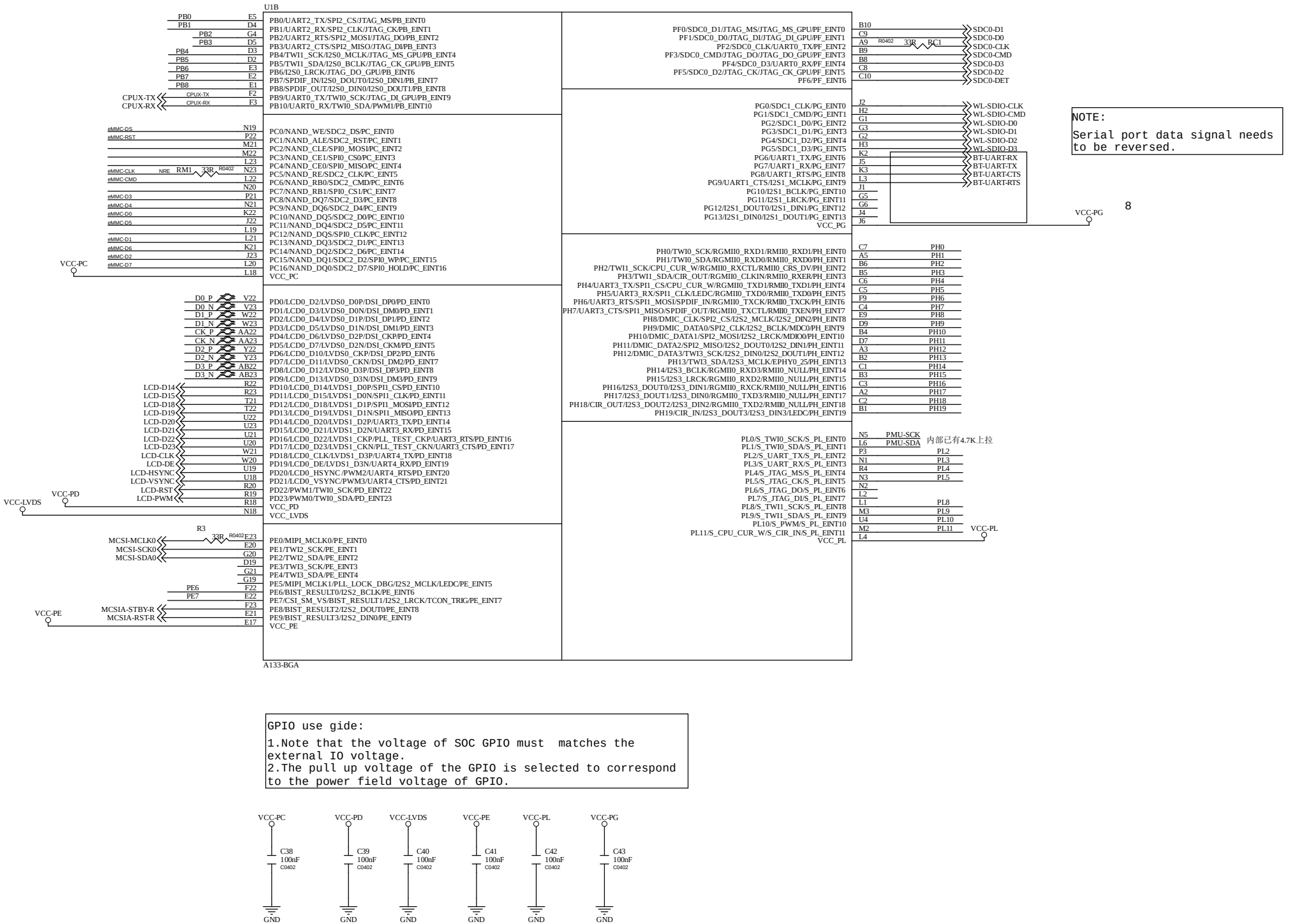

AP-NMI
PMU-SCK
PMU-SDA
AP-RESET
PWRON
U17
AXP717
VCC-RTC
VMID
IMAX=1.5A
VBUS
VBAT
DS1
LED
TS
RP52 10K
RP58 10K
CP55 100nF
CP57 10uF
CP64 10uF
CP66 10uF
CP69 22uF
CP71 22uF
L4 1uH/2A
CP74 10uF
CP76 0.1uF
CP78 1uF
CP79 2.2uF
CP80 2.2uF
CP81 2.2uF
CP82 2.2uF
CP83 1uF
CP85 2.2uF
CP87 2.2uF
CP89 2.2uF
CP91 2.2uF
IMAX=0.1A ALDO1
IMAX=0.1A ALDO2
IMAX=0.2A ALDO3
IMAX=50mA ALDO4
IMAX=0.4A BLDO1
IMAX=60mA BLDO2
IMAX=280mA BLDO3
IMAX=0.4A BLDO4
PWRON
PWROK
IRQ
SCK
SDA
VBUS_2
VBUS_1
VMID_2
VMID_1
SW_1
SW_2
VSYS_1
VSYS_2
BAT_1
BAT_2
TS
CHGLED
ALDOIN
ALDO1
ALDO2
ALDO3
ALDO4
BLDOIN
BLDO1
BLDO2
BLDO3
BLDO4
VIN1
LX1_1
LX1_2
FB1
VIN2
LX2
FB2
VIN3
LX3
FB3
CPUSLDO
VREF
VRTC
BACKUP
CC1
CC2
DP
DM
EPAD
GND
CLDOIN
CLDO1
CLDO2
CLDO3
CLDO4
DCDCEN
CP58 1uF
CP56 22uF
CP59 22uF
CP60 1uF
CP61 22uF
CP62 22uF
CP65 1uF
CP70 22uF
CP72 2.2uF
CP75 1uF
CP77 1uF
CP84 1uF
CP86 2.2uF
CP88 2.2uF
CP90 2.2uF
CP92 2.2uF
1uH/4A
1uH/2A
1uH/2A
VDD-CPUFB
VDD-SYSFB
VDD-CPU
VDD-SYS
DCDC3
0.9~1.18V
IMAX=4A
0.95V
IMAX=2.155A
1.1V/1.2V/1.35/1.5V
IMAX=1.2A
IMAX=20mA
VBACKUP
CC1-AXP717
CC2-AXP717
RP60 470R
RP62 470R
USB0-DP
USB0-DM
Default charging use BC1.2 function.
0.95V VDD-SYS
1.1V/1.2V/1.35/1.5V DCDC3
1.8V CLDO1 VCC-PC
VCC-EFUSE
VCC-LVDS
VCC-MCSI
Notice the level voltage of the PC port.
If Flash does not support 1.8 V, use 3.3 V.
1.2V BLDO4 DVDD-CSI
2.8V ALDO1 AVDD-CSI
1.8V/2.8V ALDO2 IOVDD-CSI VCC-PE
1.8V/3.3V ALDO3 VCC-PL
Default 1.8V
When using 5G WiFi, the VCC-PL need to be switched to 1.8 V.
NOTE: Close to PMU
1.8V ALDO4 RP78 0R R0402 AVCC
VCC-PLL
VDD18-DRAM
3.3V CLDO2
3.3V CLDO3 VCC-IO
VCC-USB
VCC-PD
VCC-3V3
VCC-NAND
1.8V/3.3V BLDO1 VCC-PG
When using 5G WiFi, the VCC-PG/VCCIO-WIFI need to be switched to 1.8 V.
BLDO2 1.8V/2.5V VDD18-LPDDR
1.8V For LPDDR3 OR LPDDR4
2.5V For DDR4
CLDO4 3.3V VCC-LCD
Independent power supply when the current above 400mA
For AFVCC-CSI
BLDO3 2.8V/3.3V AFVCC-CSI
CPUSLDO 0.9V VDD-CPUS
Independent power supply when the timing sequence is required.

CPU SYS



NO.	R1	R2	Boot Select type
1	NC	10K	SMHC0->MLC NAND->SLC NAND
2	10K	1K	SMHC0->SLC NAND->MLC NAND
3	10K	2K2	SMHC0->EMMC_BOOT->EMMC_USER
4	10K	3K9	SMHC0->EMMC_USER->EMMC_BOOT
5	6K8	4K7	SMHC0->SPI NOR
6	6K8	6K8	SMHC0->SPI NAND

GPIO Level(Set by the R112 pull-up and R113 pull-down resistance of PH17 GPIO)	GPADC Voltage(Fixed pull-up R110 i 10K-1%,Set the voltage by adjusting pull-down resistor R111)	DDR PARA
0	163mV(1K-1%)	DDR PARA 1
0	382mV(2.7K-1%)	DDR PARA 2
0	608mV(5.1K-1%)	DDR PARA 3
0	811mV(8.2K-1%)	DDR PARA 4
0	1050mV(14K-1%)	DDR PARA 5
0	1315mV(27K-1%)	DDR PARA 6
0	1569mV(68K-1%)	DDR PARA 7
0	1800mV(NC)	DDR PARA 8
1	163mV(1K-1%)	DDR PARA 9
1	382mV(2.7K-1%)	DDR PARA 10
1	608mV(5.1K-1%)	DDR PARA 11
1	811mV(8.2K-1%)	DDR PARA 12
1	1050mV(14K-1%)	DDR PARA 13
1	1315mV(27K-1%)	DDR PARA 14
1	1569mV(68K-1%)	DDR PARA 15
1	1800mV(NC)	DDR PARA 16


U1B
PB0 E5
PB1 D4
PB2 G4
PB3 D5
PB4 D3
PB5 D2
PB6 E3
PB7 E2
PB8 E1
CPUX-TX F2
CPUX-RX F3
PB0/UART2_TX/SPI2_CS/JTAG_MS/PB_EINT0
PB1/UART2_RX/SPI2_CLK/JTAG_CK/PB_EINT1
PB2/UART2_RTS/SPI2_MOSI/JTAG_DO/PB_EINT2
PB3/UART2_CTS/SPI2_MISO/JTAG_DI/PB_EINT3
PB4/TWI1_SCK/I2S0_MCLK/JTAG_MS_GPU/PB_EINT4
PB5/TWI1_SDA/I2S0_BCLK/JTAG_CK_GPU/PB_EINT5
PB6/I2S0_LRCK/JTAG_DO_GPU/PB_EINT6
PB7/SPDIF_IN/I2S0_DOUT0/I2S0_DIN1/PB_EINT7
PB8/SPDIF_OUT/I2S0_DIN0/I2S0_DOUT1/PB_EINT8
PB9/UART0_TX/TWI0_SCK/JTAG_DI_GPU/PB_EINT9
PB10/UART0_RX/TWI0_SDA/PWM1/PB_EINT10
PF0/SDC0_D1/JTAG_MS/JTAG_MS_GPU/PF_EINT0
PF1/SDC0_D0/JTAG_DI/JTAG_DI_GPU/PF_EINT1
PF2/SDC0_CLK/UART0_TX/PF_EINT2
PF3/SDC0_CMD/JTAG_DO/JTAG_DO_GPU/PF_EINT3
PF4/SDC0_D3/UART0_RX/PF_EINT4
PF5/SDC0_D2//JTAG_CK/JTAG_CK_GPU/PF_EINT5
PF6/PF_EINT6
B10 SDC0-D1
C9 SDC0-D0
A9 SDC0-CLK
B9 SDC0-CMD
B8 SDC0-D3
C8 SDC0-D2
C10 SDC0-DET
R4002 33R RC1
PG0/SDC1_CLK/PG_EINT0
PG1/SDC1_CMD/PG_EINT1
PG2/SDC1_D0/PG_EINT2
PG3/SDC1_D1/PG_EINT3
PG4/SDC1_D2/PG_EINT4
PG5/SDC1_D3/PG_EINT5
PG6/UART1_TX/PG_EINT6
PG7/UART1_RX/PG_EINT7
PG8/UART1_RTS/PG_EINT8
PG9/UART1_CTS/I2S1_MCLK/PG_EINT9
PG10/I2S1_BCLK/PG_EINT10
PG11/I2S1_LRCK/PG_EINT11
PG12/I2S1_DOUT0/I2S1_DIN1/PG_EINT12
PG13/I2S1_DIN0/I2S1_DOUT1/PG_EINT13
VCC_PG
J2 WL-SDIO-CLK
H2 WL-SDIO-CMD
G1 WL-SDIO-D0
G3 WL-SDIO-D1
G2 WL-SDIO-D2
H3 WL-SDIO-D3
K2 BT-UART-RX
J5 BT-UART-TX
K3 BT-UART-CTS
L3 BT-UART-RTS
J1
G5
G6
J4
J6
VCC-PG
NOTE:
Serial port data signal needs to be reversed.
8
PC0/NAND_WE/SDC2_DS/PC_EINT0
PC1/NAND_ALE/SDC2_RST/PC_EINT1
PC2/NAND_CLE/SPI0_MOSI/PC_EINT2
PC3/NAND_CE1/SPI0_CS0/PC_EINT3
PC4/NAND_CE0/SPI0_MISO/PC_EINT4
PC5/NAND_RE/SDC2_CLK/PC_EINT5
PC6/NAND_RB0/SDC2_CMD/PC_EINT6
PC7/NAND_RB1/SPI0_CS1/PC_EINT7
PC8/NAND_DQ7/SDC2_D3/PC_EINT8
PC9/NAND_DQ6/SDC2_D4/PC_EINT9
PC10/NAND_DQ5/SDC2_D0/PC_EINT10
PC11/NAND_DQ4/SDC2_D5/PC_EINT11
PC12/NAND_DQS/SPI0_CLK/PC_EINT12
PC13/NAND_DQ3/SDC2_D1/PC_EINT13
PC14/NAND_DQ2/SDC2_D6/PC_EINT14
PC15/NAND_DQ1/SDC2_D2/SPI0_WP/PC_EINT15
PC16/NAND_DQ0/SDC2_D7/SPI0_HOLD/PC_EINT16
VCC_PC
eMMC-DS N19
eMMC-RST P22
M21
M22
L23
eMMC-CLK NRE RM1 33R R0402 N23
eMMC-CMD L22
N20
eMMC-D3 P21
eMMC-D4 N21
eMMC-D0 K22
eMMC-D5 J22
L19
eMMC-D1 L21
eMMC-D6 K21
eMMC-D2 J23
eMMC-D7 L20
L18
VCC-PC
PH0/TWI0_SCK/RGMII0_RXD1/RMII0_RXD1/PH_EINT0
PH1/TWI0_SDA/RGMII0_RXD0/RMII0_RXD0/PH_EINT1
PH2/TWI1_SCK/CPU_CUR_W/RGMII0_RXCTL/RMII0_CRS_DV/PH_EINT2
PH3/TWI1_SDA/CIR_OUT/RGMII0_CLKIN/RMII0_RXER/PH_EINT3
PH4/UART3_TX/SPI1_CS/CPU_CUR_W/RGMII0_TXD1/RMII0_TXD1/PH_EINT4
PH5/UART3_RX/SPI1_CLK/LEDC/RGMII0_TXD0/RMII0_TXD0/PH_EINT5
PH6/UART3_RTS/SPI1_MOSI/SPDIF_IN/RGMII0_TXCK/RMII0_TXCK/PH_EINT6
PH7/UART3_CTS/SPI1_MISO/SPDIF_OUT/RGMII0_TXCTL/RMII0_TXEN/PH_EINT7
PH8/DMIC_CLK/SPI2_CS/I2S2_MCLK/I2S2_DIN2/PH_EINT8
PH9/DMIC_DATA0/SPI2_CLK/I2S2_BCLK/MDC0/PH_EINT9
PH10/DMIC_DATA1/SPI2_MOSI/I2S2_LRCK/MDIO0/PH_EINT10
PH11/DMIC_DATA2/SPI2_MISO/I2S2_DOUT0/I2S2_DIN1/PH_EINT11
PH12/DMIC_DATA3/TWI3_SCK/I2S2_DIN0/I2S2_DOUT1/PH_EINT12
PH13/TWI3_SDA/I2S3_MCLK/EPHY0_25/PH_EINT13
PH14/I2S3_BCLK/RGMII0_RXD3/RMII0_NULL/PH_EINT14
PH15/I2S3_LRCK/RGMII0_RXD2/RMII0_NULL/PH_EINT15
PH16/I2S3_DOUT0/I2S3_DIN1/RGMII0_RXCK/RMII0_NULL/PH_EINT16
PH17/I2S3_DOUT1/I2S3_DIN0/RGMII0_TXD3/RMII0_NULL/PH_EINT17
PH18/CIR_OUT/I2S3_DOUT2/I2S3_DIN2/RGMII0_TXD2/RMII0_NULL/PH_EINT18
PH19/CIR_IN/I2S3_DOUT3/I2S3_DIN3/LEDC/PH_EINT19
C7 PH0
A5 PH1
B6 PH2
B5 PH3
C6 PH4
C5 PH5
F9 PH6
C4 PH7
E9 PH8
D9 PH9
B4 PH10
D7 PH11
A3 PH12
B2 PH13
C1 PH14
B3 PH15
C3 PH16
A2 PH17
C2 PH18
B1 PH19
D0_P V22
D0_N V23
D1_P W22
D1_N W23
CK_P AA22
CK_N AA23
D2_P Y22
D2_N Y23
D3_P AB22
D3_N AB23
PD0/LCD0_D2/LVDS0_D0P/DSI_DP0/PD_EINT0
PD1/LCD0_D3/LVDS0_D0N/DSI_DM0/PD_EINT1
PD2/LCD0_D4/LVDS0_D1P/DSI_DP1/PD_EINT2
PD3/LCD0_D5/LVDS0_D1N/DSI_DM1/PD_EINT3
PD4/LCD0_D6/LVDS0_D2P/DSI_CKP/PD_EINT4
PD5/LCD0_D7/LVDS0_D2N/DSI_CKM/PD_EINT5
PD6/LCD0_D10/LVDS0_CKP/DSI_DP2/PD_EINT6
PD7/LCD0_D11/LVDS0_CKN/DSI_DM2/PD_EINT7
PD8/LCD0_D12/LVDS0_D3P/DSI_DP3/PD_EINT8
PD9/LCD0_D13/LVDS0_D3N/DSI_DM3/PD_EINT9
PD10/LCD0_D14/LVDS1_D0P/SPI1_CS/PD_EINT10
PD11/LCD0_D15/LVDS1_D0N/SPI1_CLK/PD_EINT11
PD12/LCD0_D18/LVDS1_D1P/SPI1_MOSI/PD_EINT12
PD13/LCD0_D19/LVDS1_D1N/SPI1_MISO/PD_EINT13
PD14/LCD0_D20/LVDS1_D2P/UART3_TX/PD_EINT14
PD15/LCD0_D21/LVDS1_D2N/UART3_RX/PD_EINT15
PD16/LCD0_D22/LVDS1_CKP/PLL_TEST_CKP/UART3_RTS/PD_EINT16
PD17/LCD0_D23/LVDS1_CKN/PLL_TEST_CKN/UART3_CTS/PD_EINT17
PD18/LCD0_CLK/LVDS1_D3P/UART4_TX/PD_EINT18
PD19/LCD0_DE/LVDS1_D3N/UART4_RX/PD_EINT19
PD20/LCD0_HSYNC /PWM2/UART4_RTS/PD_EINT20
PD21/LCD0_VSYNC/PWM3/UART4_CTS/PD_EINT21
PD22/PWM1/TWI0_SCK/PD_EINT22
PD23/PWM0/TWI0_SDA/PD_EINT23
VCC_PD
VCC_LVDS
LCD-D14 R22
LCD-D15 R23
LCD-D18 T21
LCD-D19 T22
LCD-D20 U22
LCD-D21 U23
LCD-D22 U21
LCD-D23 U20
LCD-CLK W21
LCD-DE W20
LCD-HSYNC U19
LCD-VSYNC U18
LCD-RST R20
LCD-PWM R19
R18
N18
VCC-PD
VCC-LVDS
PL0/S_TWI0_SCK/S_PL_EINT0
PL1/S_TWI0_SDA/S_PL_EINT1
PL2/S_UART_TX/S_PL_EINT2
PL3/S_UART_RX/S_PL_EINT3
PL4/S_JTAG_MS/S_PL_EINT4
PL5/S_JTAG_CK/S_PL_EINT5
PL6/S_JTAG_DO/S_PL_EINT6
PL7/S_JTAG_DI/S_PL_EINT7
PL8/S_TWI1_SCK/S_PL_EINT8
PL9/S_TWI1_SDA/S_PL_EINT9
PL10/S_PWM/S_PL_EINT10
PL11/S_CPU_CUR_W/S_CIR_IN/S_PL_EINT11
VCC_PL
N5 PMU-SCK
L6 PMU-SDA
内部已有4.7K上拉
P3 PL2
N1 PL3
R4 PL4
N3 PL5
N2
L2
L1 PL8
M3 PL9
U4 PL10
M2 PL11
L4
VCC-PL
R3 33R R0402
MCSI-MCLK0 E23
MCSI-SCK0 E20
MCSI-SDA0 G20
D19
G21
G19
PE6 F22
PE7 E22
F23
MCSIA-STBY-R E21
MCSIA-RST-R E17
VCC-PE
PE0/MIPI_MCLK0/PE_EINT0
PE1/TWI2_SCK/PE_EINT1
PE2/TWI2_SDA/PE_EINT2
PE3/TWI3_SCK/PE_EINT3
PE4/TWI3_SDA/PE_EINT4
PE5/MIPI_MCLK1/PLL_LOCK_DBG/I2S2_MCLK/LEDC/PE_EINT5
PE6/BIST_RESULT0/I2S2_BCLK/PE_EINT6
PE7/CSI_SM_VS/BIST_RESULT1/I2S2_LRCK/TCON_TRIG/PE_EINT7
PE8/BIST_RESULT2/I2S2_DOUT0/PE_EINT8
PE9/BIST_RESULT3/I2S2_DIN0/PE_EINT9
VCC_PE
A133-BGA
GPIO use gide:
1.Note that the voltage of SOC GPIO must matches the external IO voltage.
2.The pull up voltage of the GPIO is selected to correspond to the power field voltage of GPIO.
VCC-PC C38 100nF C0402 GND
VCC-PD C39 100nF C0402 GND
VCC-LVDS C40 100nF C0402 GND
VCC-PE C41 100nF C0402 GND
VCC-PL C42 100nF C0402 GND
VCC-PG C43 100nF C0402 GND