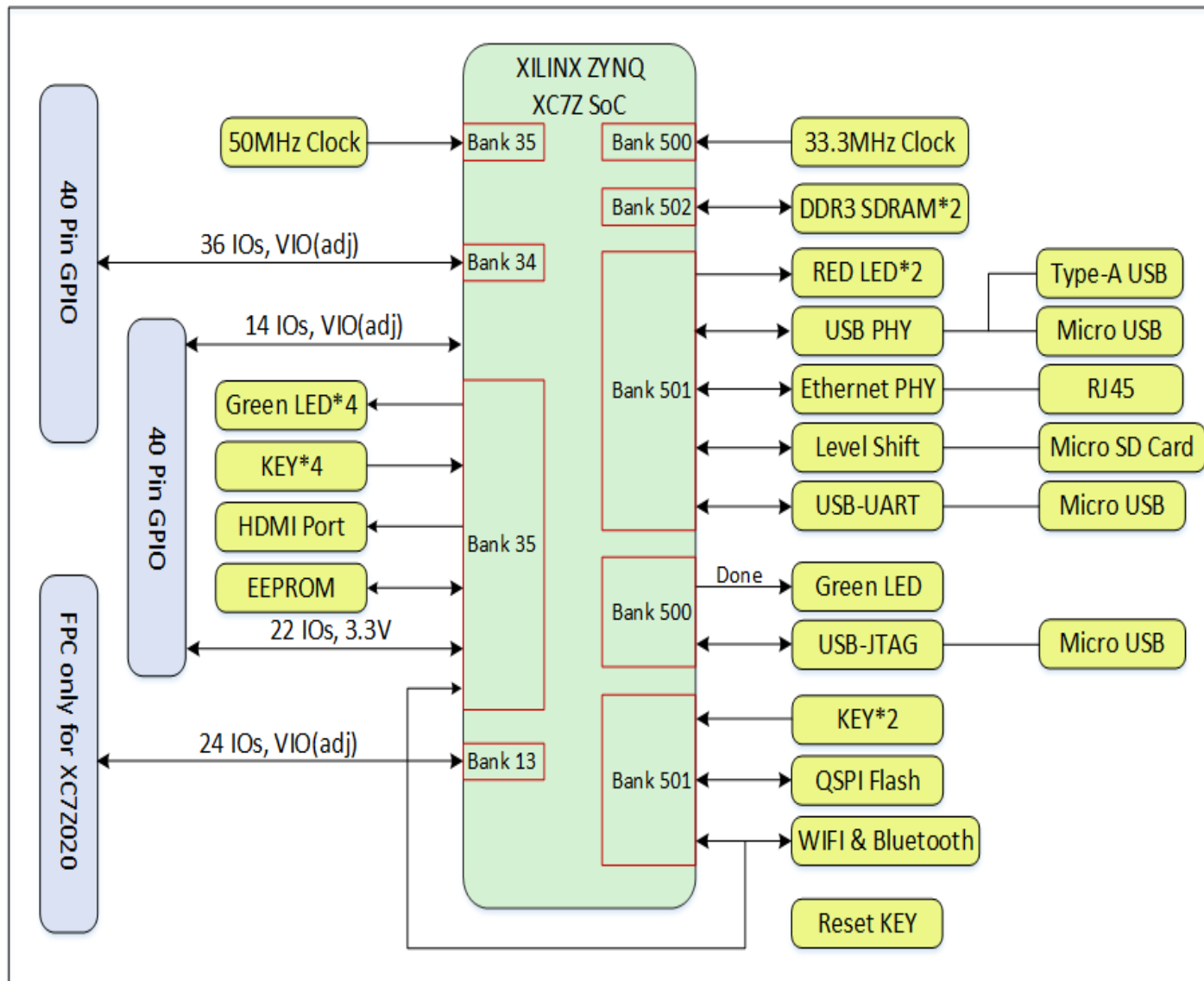
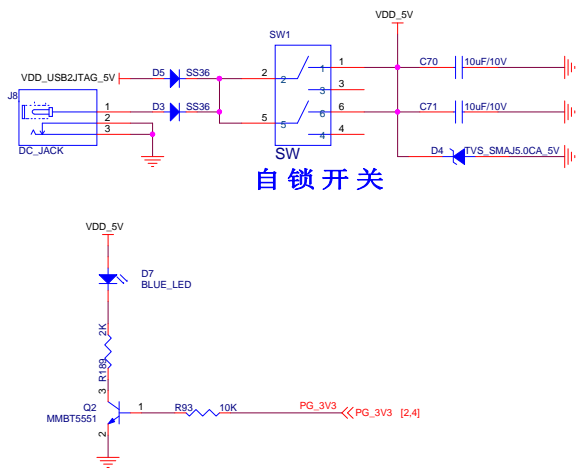


Xilinx Zynq-7000 FPGA Board (MicroZus)

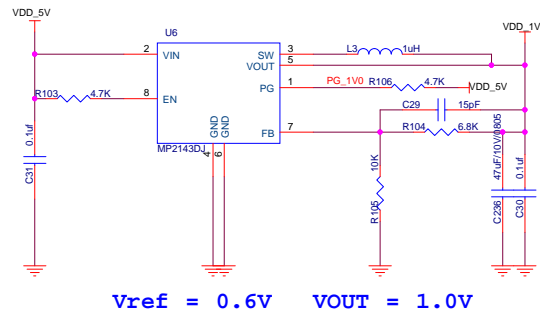


Page Num	Description
Page00	Block
Page01	POWER
Page02	ZYNQ7010_POWER
Page03	ZYNQ7010_CONFIG
Page04	ZYNQ7010_PL
Page05	ZYNQ7010_PS
Page06	ZYNQ7010_DDR
Page07	DDR3
Page08	USB TO UART
Page09	USB OTG
Page10	GPHY
Page11	WIFI、 BT
Page12	HDMI_INTERFACE
Page13	CONNECTOR
Page14	EEPROM&QSPI FLASH&SD
Page15	KEY&LED
Page16	USB TO JTAG

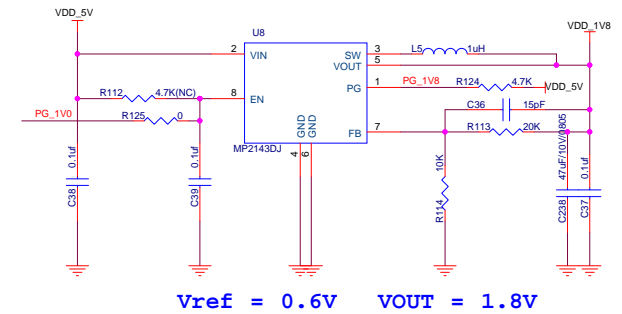
POWER_INPUT



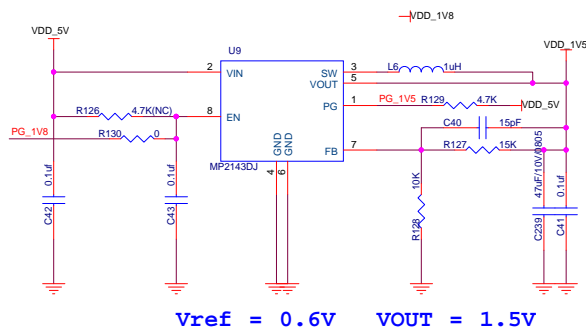
POWER_1V0



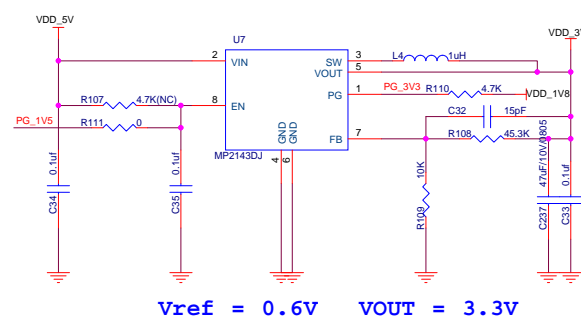
POWER_1V8



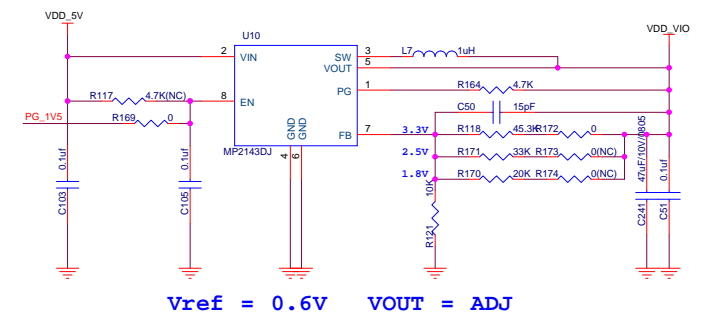
POWER_1V5



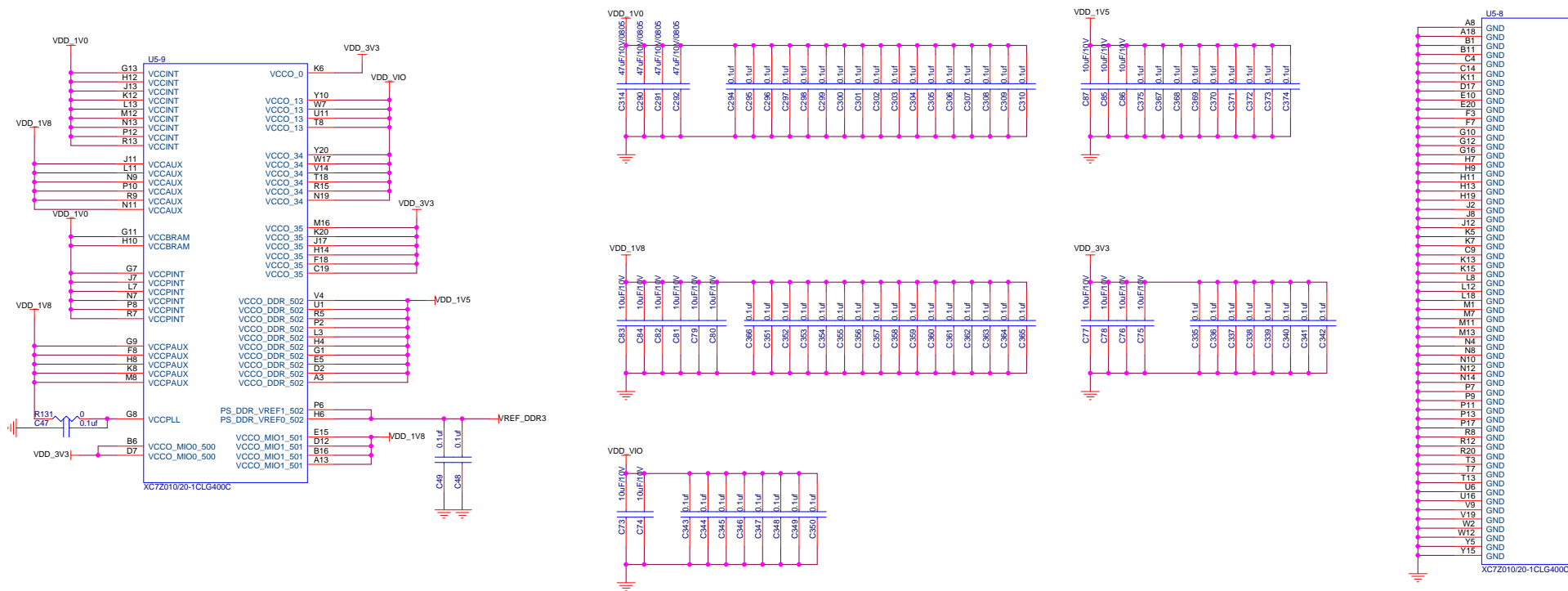
POWER_3V3



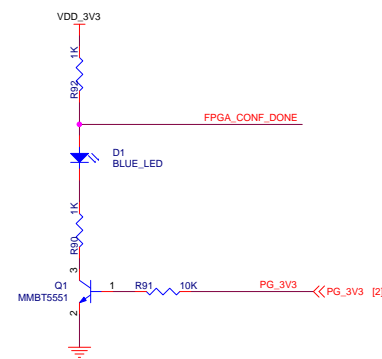
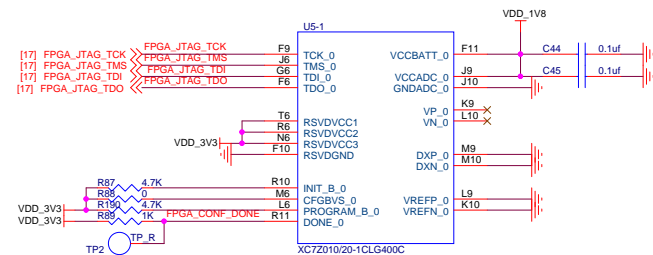
POWER_VIO



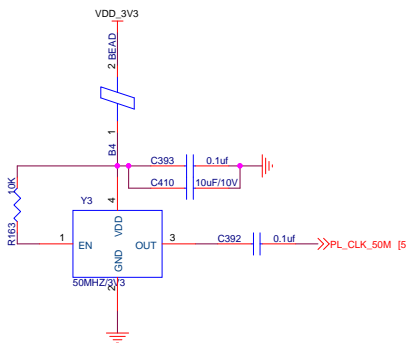
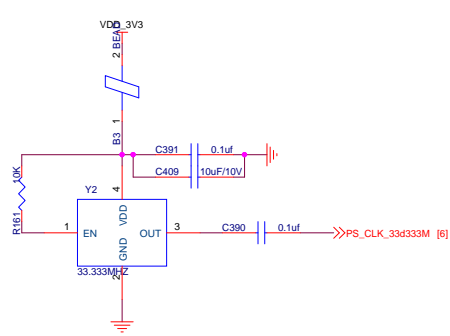
FPGA_POWER



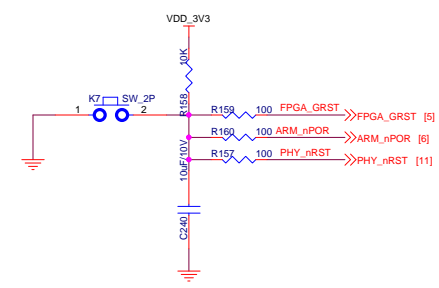
ZYNQ_CONFIG



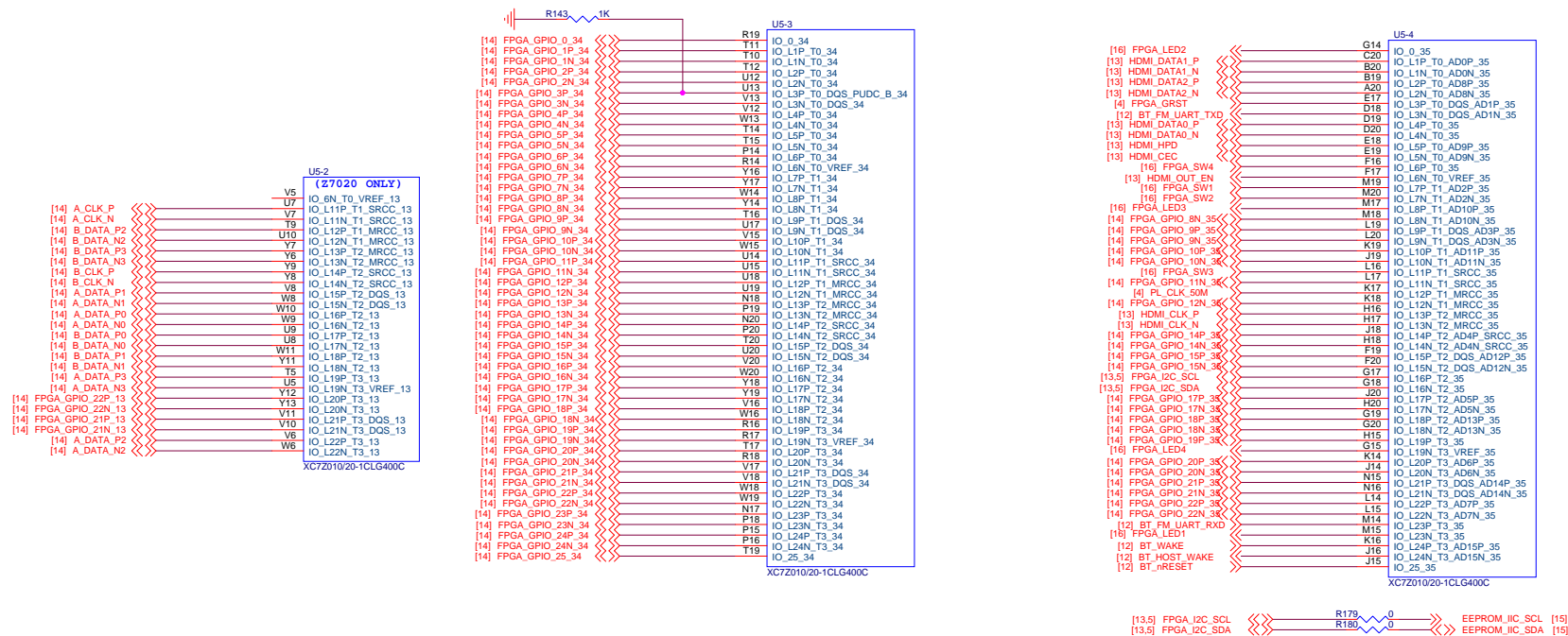
ZYNQ_CLK



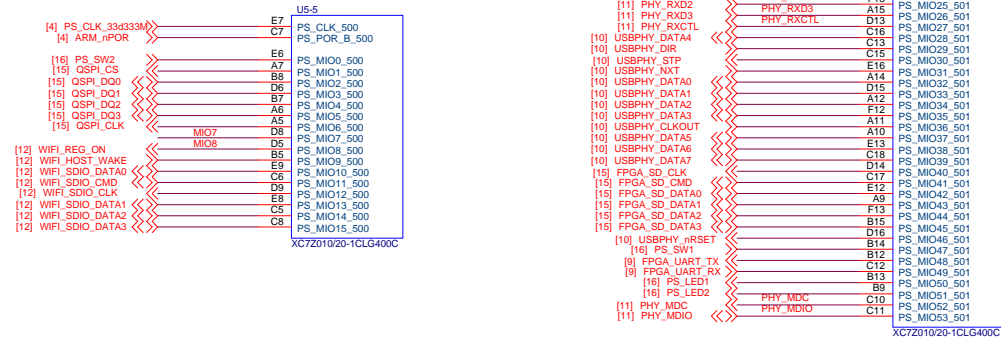
ZYNQ_RST



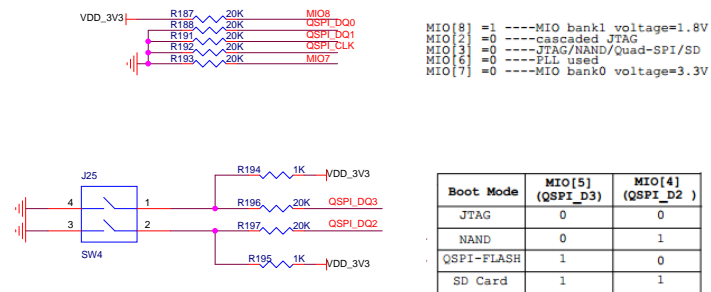
FPGA_PL



FPGA_PS



BOOT_OPTION

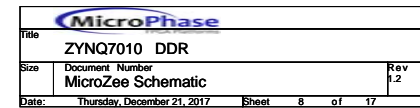


The diagram illustrates the DDR3 interface connections between the PS (Processing System) and the U5-7 (DDR3 Memory Bank). The connections are organized into several groups:

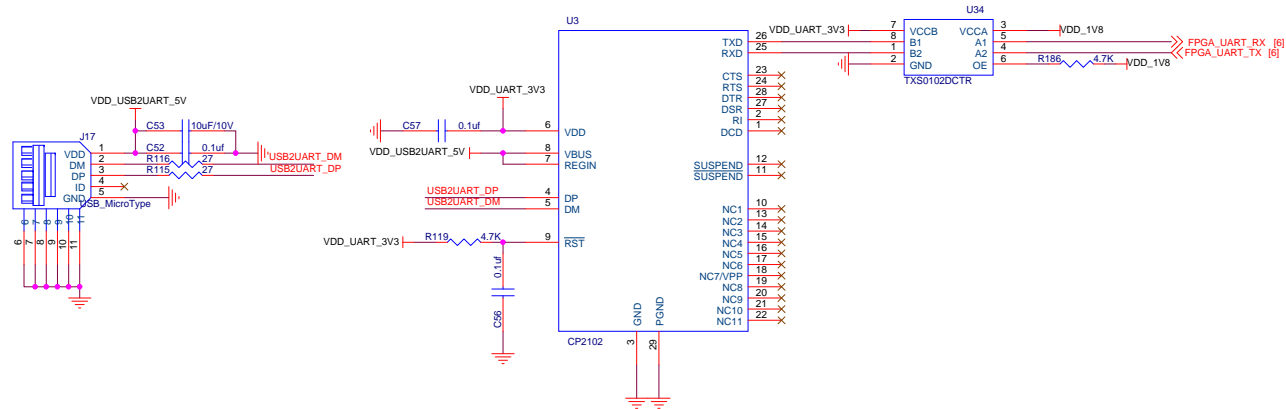
- Address and Data Bus:** PS signals like PS_DDR3_A0 through PS_DDR3_A14 connect to U5-7 pins N2 through F4. PS signals like PS_DDR3_nCS, PS_DDR3_nWE, PS_DDR3_nCAS, PS_DDR3_nRAS, and PS_DDR3_nRESET connect to U5-7 pins N1 through B4. PS signals like PS_DDR3_CLK_P and PS_DDR3_CLK_N connect to U5-7 pins L2 and M2. PS signals like PS_DDR3_BA0 through PS_DDR3_BA2 connect to U5-7 pins L5 through J5. PS signal PS_DDR3_ODT connects to U5-7 pin N5.
- Control and Status:** PS signals like PS_VRP and PS_VRN connect to U5-7 pins H5 and G5. PS signal PS_ODT connects to U5-7 pin N5.
- Power and Ground:** PS signals like PS_VDD and PS_GND connect to U5-7 pins H5 and G5. PS signal PS_ODT connects to U5-7 pin N5.
- Memory Bank Signals:** U5-7 pins C3 through V3 connect to PS signals like PS_DDR3_DQ0 through PS_DDR3_DQ31. U5-7 pins A1 through Y1 connect to PS signals like PS_DDR3_DM0 through PS_DDR3_DM3. U5-7 pins C2 through W4 connect to PS signals like PS_DDR3_DQS_P0 through PS_DDR3_DQS_N3.

POWER_VTT&REF

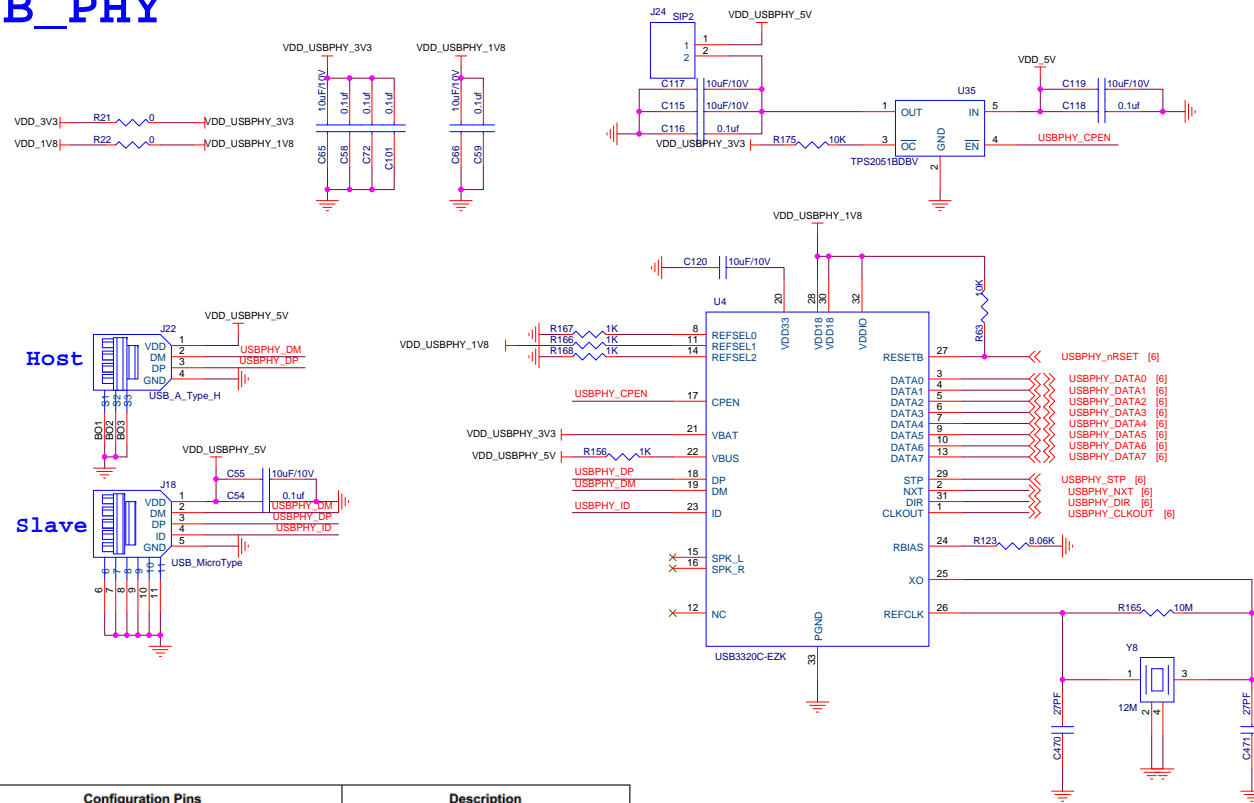
ODT



USB2UART

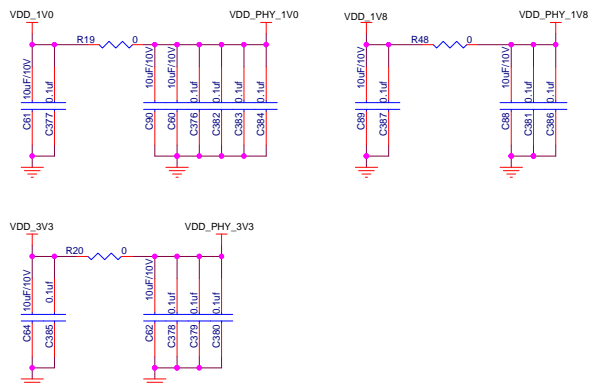


USB_PHY

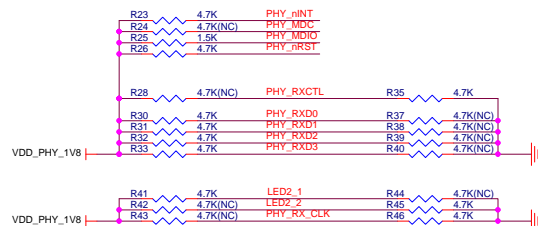


Configuration Pins			Description
REFSEL[2]	REFSEL[1]	REFSEL[0]	Reference Frequency
0	0	0	52 MHz
0	0	1	38.4 MHz
0	1	0	12 MHz
0	1	1	27 MHz
1	0	0	13 MHz
1	0	1	19.2 MHz
1	1	0	26 MHz
1	1	1	24 MHz

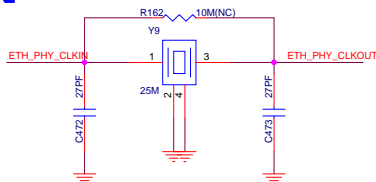
PHY POWER



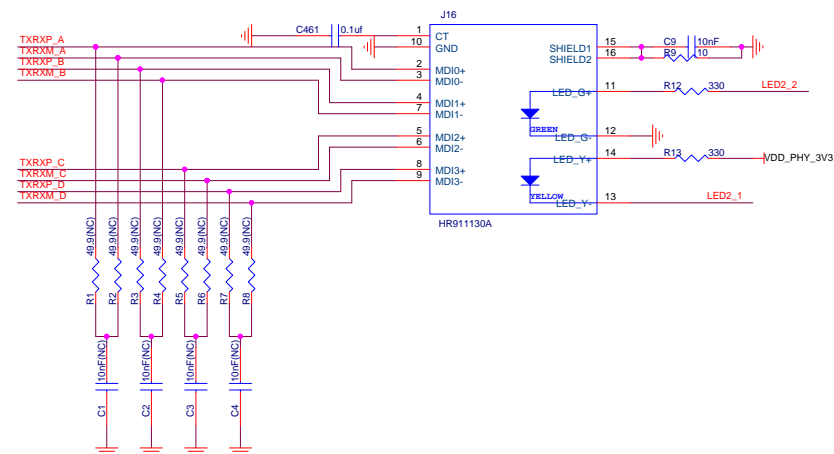
PHY CONFIG



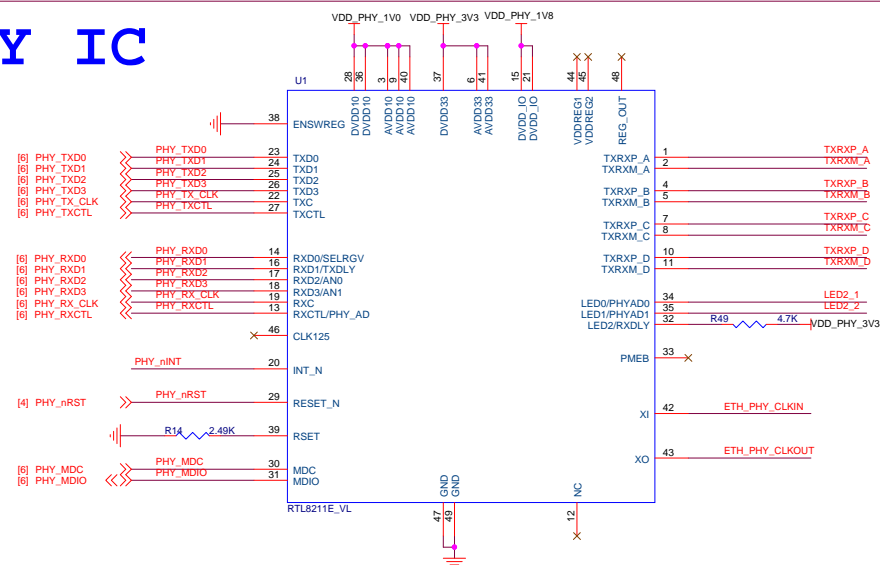
PHY CLK



RJ45



PHY IC



WIFI&BT

The schematic diagram illustrates the AP6212/AP6212A module, which is compatible with AP6212 and AP6212A designs. The module is centered around the U2 chip, which has various pins connected to external components and signals.

Power and Ground Connections:

- VDD_WIFI_BT_3V3:** Connected to the VBAT pin (9) and VDDIO pin (22) of U2. It also passes through a 10M pull-up resistor (R47) and a 100nF capacitor (C67) to ground.
- VDD_WIFI_BT_3V3:** Connected to the VIN_LDO pin (23) of U2. It also passes through a 100nF capacitor (C68) and a 0.1uF capacitor (C69) to ground.
- VDD_WIFI_BT_3V3:** Connected to the VIN_LDO_OUT pin (21) of U2. It also passes through a 100nF capacitor (C67) and a 0.1uF capacitor (C69) to ground.
- VDD_WIFI_BT_3V3:** Connected to the VDDIO pin (22) of U2. It also passes through a 100nF capacitor (C68) and a 0.1uF capacitor (C69) to ground.

Control and Status Connections:

- WIFI_HOST_WAKE:** Connected to pin 13 of U2.
- WIFI_REG_ON:** Connected to pin 12 of U2.
- BT_WAKE:** Connected to pin 6 of U2.
- BT_HOST_WAKE:** Connected to pin 7 of U2.
- BT_RST_N:** Connected to pin 34 of U2.
- WIFI_SDIO_DATA2:** Connected to pin 14 of U2.
- WIFI_SDIO_DATA3:** Connected to pin 15 of U2.
- WIFI_SDIO_CMD:** Connected to pin 16 of U2.
- WIFI_SDIO_CLK:** Connected to pin 17 of U2.
- WIFI_SDIO_DATA0:** Connected to pin 18 of U2.
- WIFI_SDIO_DATA1:** Connected to pin 19 of U2.
- BT_FM_UART_TXD:** Connected to pin 42 of U2.
- BT_FM_UART_RXD:** Connected to pin 43 of U2.
- UART_CTS_N:** Connected to pin 44 of U2.
- UART_RTS_N:** Connected to pin 41 of U2.
- PCM_CLK:** Connected to pin 26 of U2.
- PCM_SYNC:** Connected to pin 27 of U2.
- PCM_IN:** Connected to pin 25 of U2.
- PCM_OUT:** Connected to pin 25 of U2.
- GPIO1:** Connected to pin 40 of U2.
- GPIO2:** Connected to pin 39 of U2.
- GPIO3:** Connected to pin 38 of U2.
- GPIO4:** Connected to pin 37 of U2.
- TP3:** Connected to pin 47 of U2.
- TP2:** Connected to pin 46 of U2.
- TP1:** Connected to pin 45 of U2.
- LPO:** Connected to pin 24 of U2.
- XTAL_IN:** Connected to pin 10 of U2.
- XTAL_OUT:** Connected to pin 11 of U2.

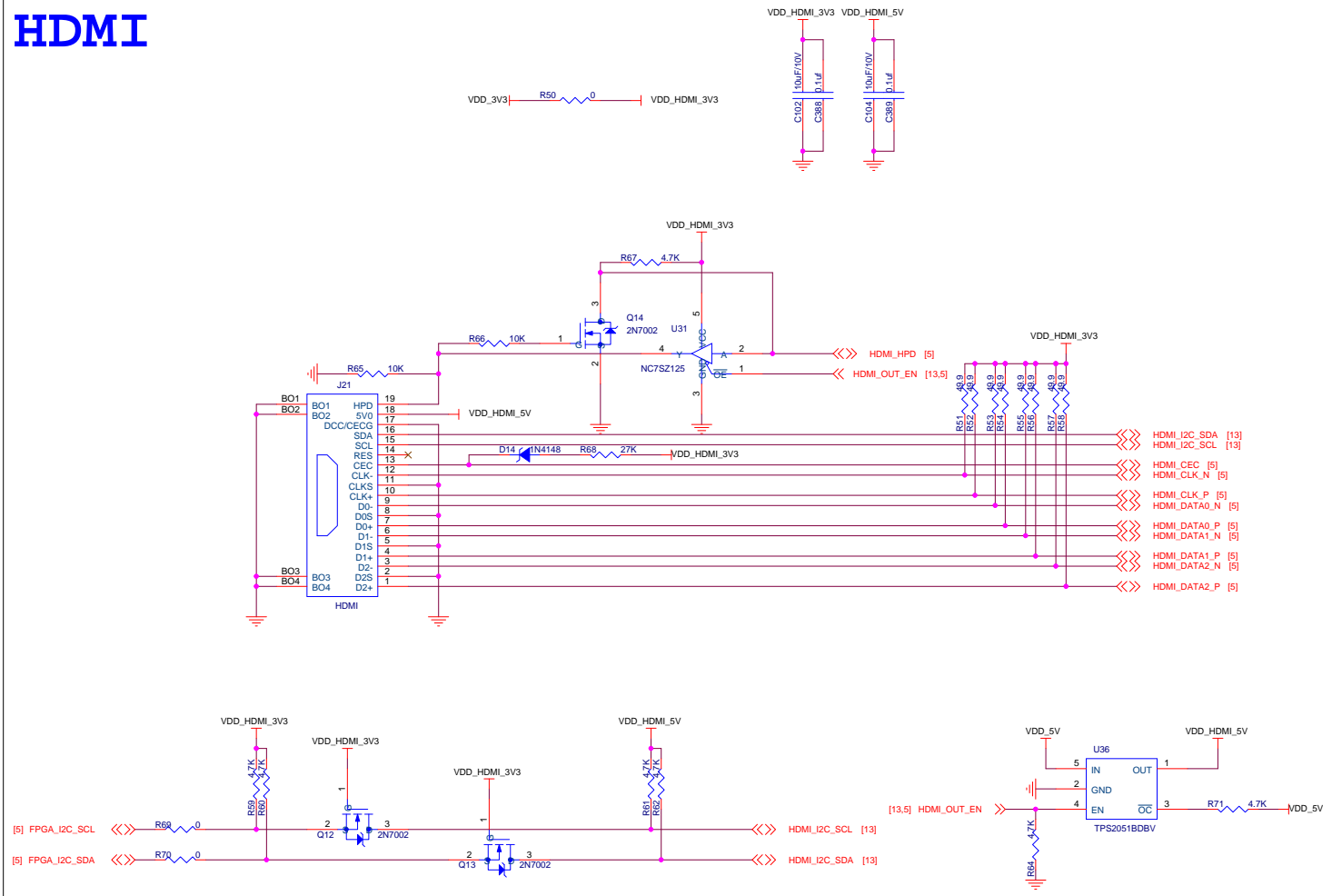
Data and Signal Connections:

- WL_BT_ANT:** Connected to pin 2 of U2.
- FM_RX:** Connected to pin 4 of U2.
- ANT1:** Connected to pin 1 of U2.
- ANT_WIFI:** Connected to pin 2 of U2.
- FM:** Connected to pin 4 of U2.
- TP4:** Connected to pin 4 of U2.
- NC1:** Connected to pin 5 of U2.
- NC2:** Connected to pin 29 of U2.
- NC3:** Connected to pin 30 of U2.
- NC4:** Connected to pin 31 of U2.
- NC5:** Connected to pin 32 of U2.
- NC6:** Connected to pin 33 of U2.

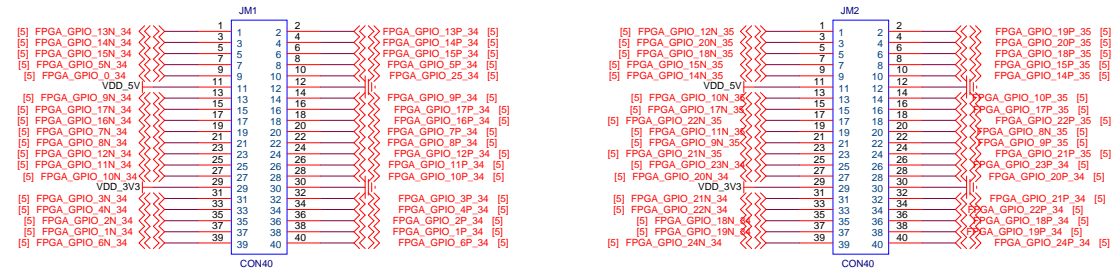
External Components and Signals:

- R257:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 14 of U2.
- R258:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 15 of U2.
- R259:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 16 of U2.
- R260:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 17 of U2.
- R261:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 18 of U2.
- R262:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 19 of U2.
- R263:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 20 of U2.
- R264:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 21 of U2.
- R265:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 22 of U2.
- R266:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 23 of U2.
- R267:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 24 of U2.
- R268:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 25 of U2.
- R269:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 26 of U2.
- R270:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 27 of U2.
- R271:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 28 of U2.
- R272:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 29 of U2.
- R273:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 30 of U2.
- R274:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 31 of U2.
- R275:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 32 of U2.
- R276:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 33 of U2.
- R277:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 34 of U2.
- R278:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 35 of U2.
- R279:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 36 of U2.
- R280:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 37 of U2.
- R281:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 38 of U2.
- R282:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 39 of U2.
- R283:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 40 of U2.
- R284:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 41 of U2.
- R285:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 42 of U2.
- R286:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 43 of U2.
- R287:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 44 of U2.
- R288:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 45 of U2.
- R289:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 46 of U2.
- R290:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 47 of U2.
- R291:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 48 of U2.
- R292:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 49 of U2.
- R293:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 50 of U2.
- R294:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 51 of U2.
- R295:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 52 of U2.
- R296:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 53 of U2.
- R297:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 54 of U2.
- R298:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 55 of U2.
- R299:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 56 of U2.
- R300:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 57 of U2.
- R301:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 58 of U2.
- R302:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 59 of U2.
- R303:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 60 of U2.
- R304:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 61 of U2.
- R305:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 62 of U2.
- R306:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 63 of U2.
- R307:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 64 of U2.
- R308:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 65 of U2.
- R309:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 66 of U2.
- R310:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 67 of U2.
- R311:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 68 of U2.
- R312:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 69 of U2.
- R313:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 70 of U2.
- R314:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 71 of U2.
- R315:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 72 of U2.
- R316:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 73 of U2.
- R317:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 74 of U2.
- R318:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 75 of U2.
- R319:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 76 of U2.
- R320:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 77 of U2.
- R321:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 78 of U2.
- R322:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 79 of U2.
- R323:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 80 of U2.
- R324:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 81 of U2.
- R325:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 82 of U2.
- R326:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 83 of U2.
- R327:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 84 of U2.
- R328:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 85 of U2.
- R329:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 86 of U2.
- R330:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 87 of U2.
- R331:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 88 of U2.
- R332:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 89 of U2.
- R333:** 10K resistor connected to VDD_WIFI_BT_3V3 and pin 90 of U2.</

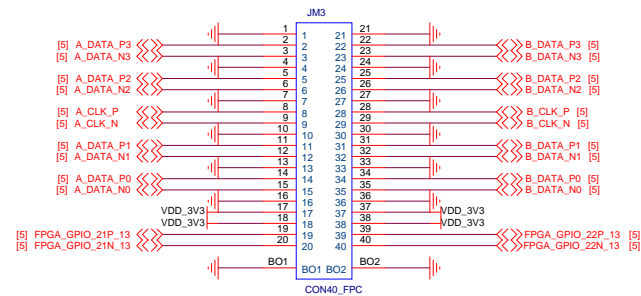
HDMI



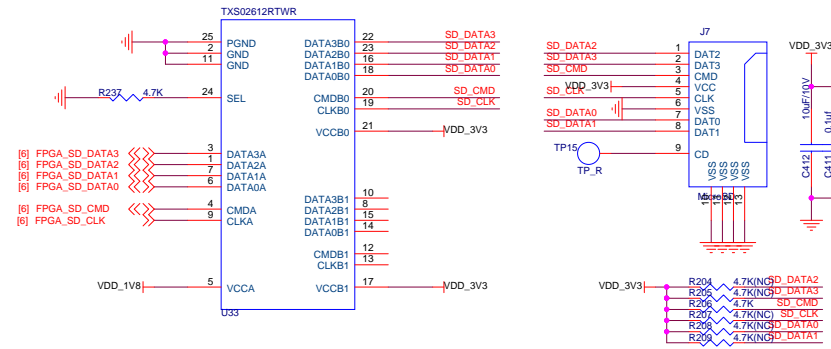
DIP CONNECTOR



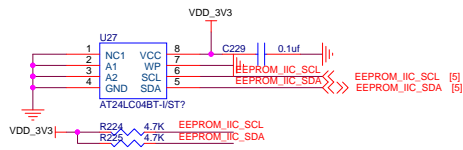
FPC CONNECTOR



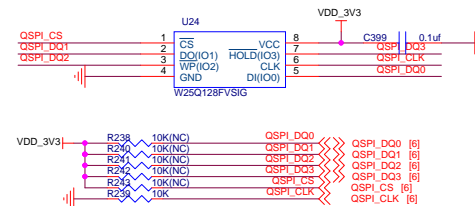
SD CARD



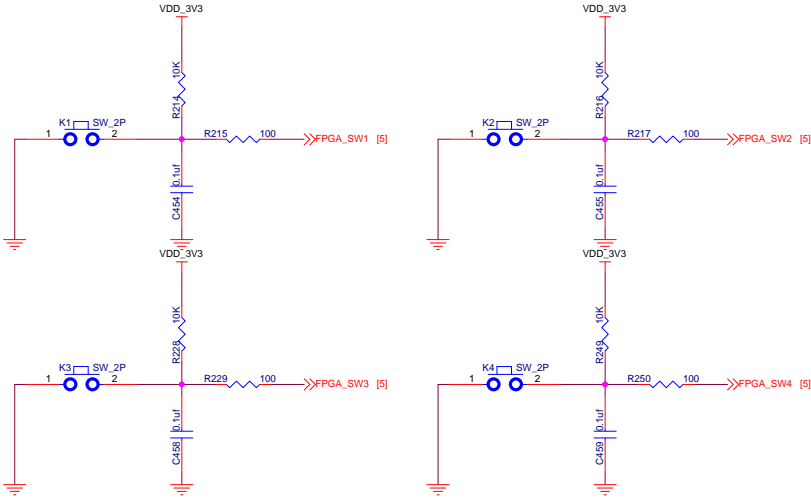
EEPROM



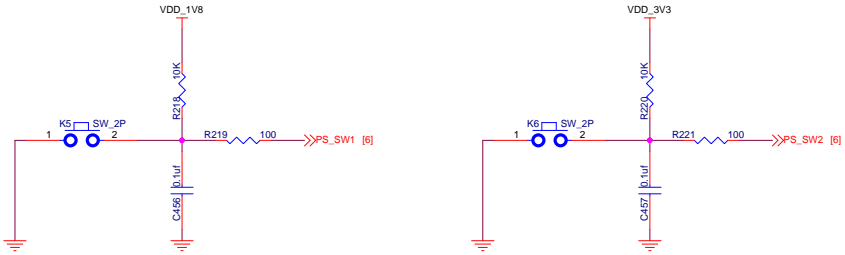
QSPI_FLASH



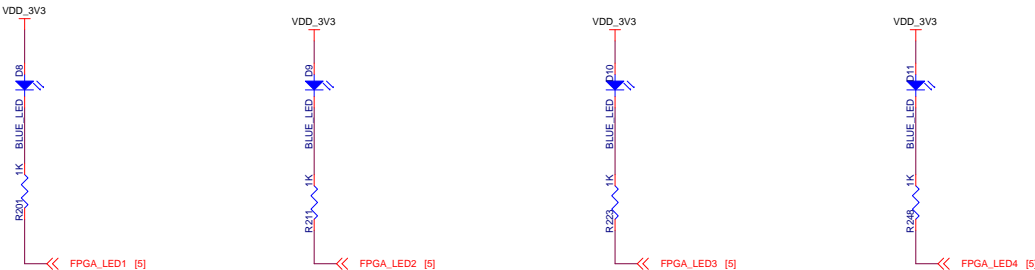
KEY_FPGA



LED_ARM



LED_FPGA



KEY_ARM



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