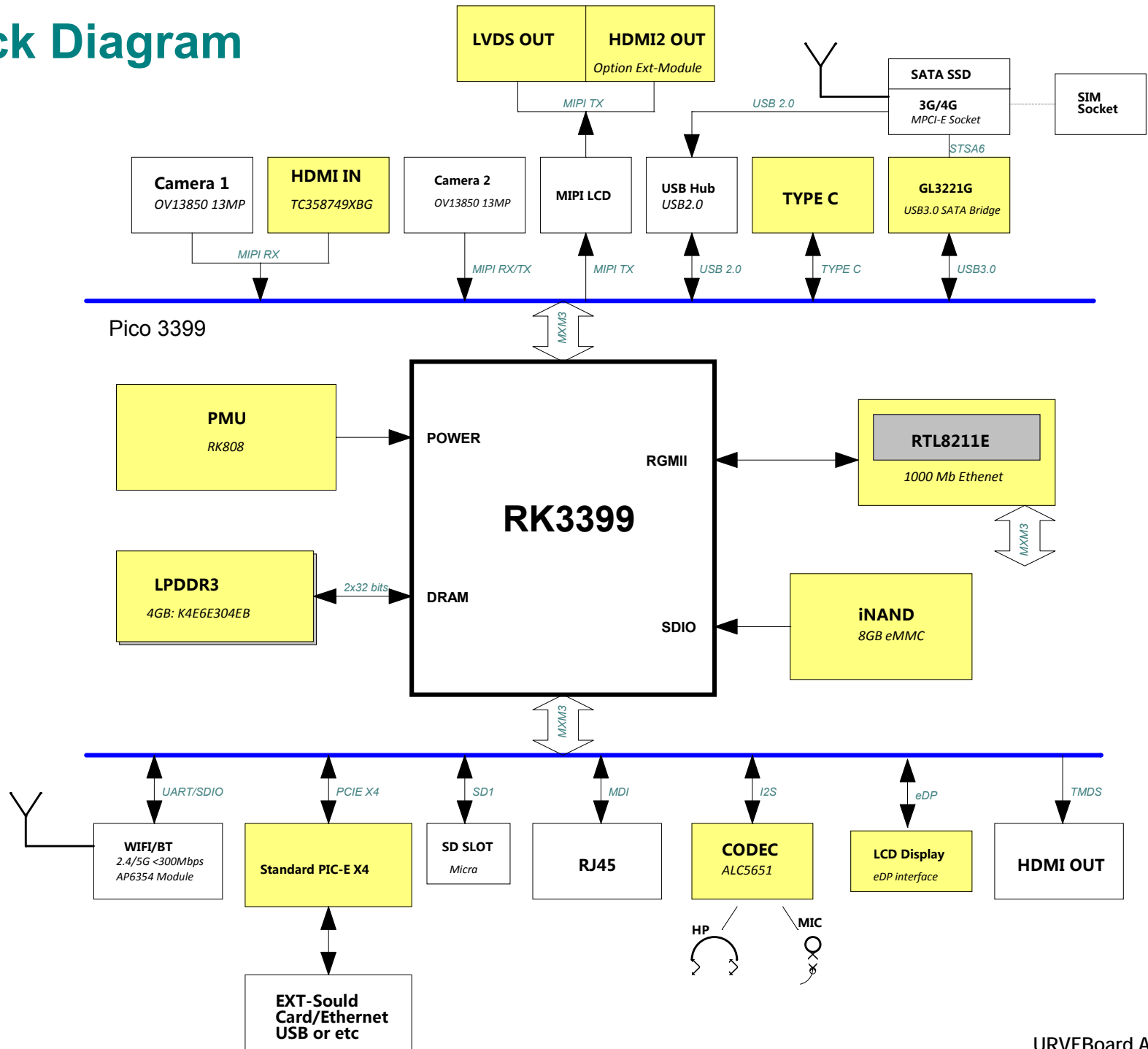


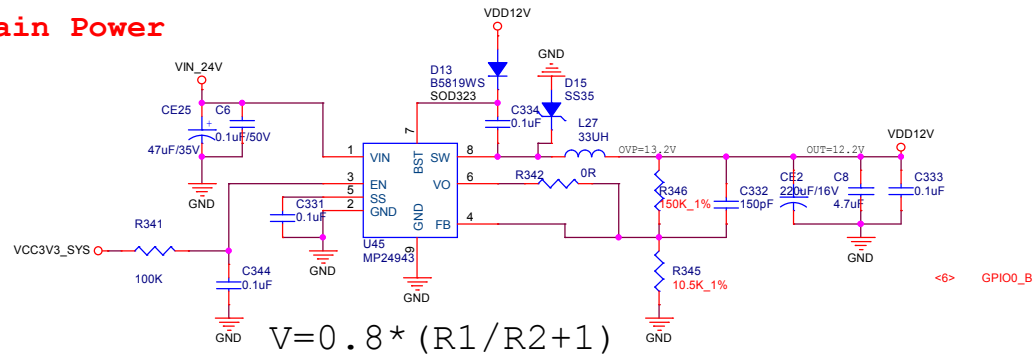
Block Diagram



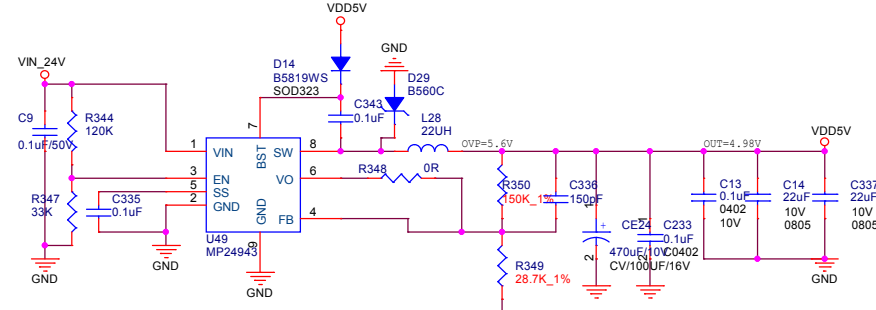
RK3399 I2C MAP

Port	Pin name	Domain	Bus name	Pull-up voltage	Slave Device	Slave Addr (MS 7Bits)	Note	Slave Bus Capability
I2C0	GPIO1_B7/SPI3_RXD/I2C0_SDA GPIO1_C0/SPI3_TXD/I2C0_SCL	PMUIO2 VCC_1V8	I2C_SDA_PMIC I2C_SCL_PMIC	VCC_1V8	Rockchip RK808	0x1b	PMIC	
					SYR838PKC&SYR837PKC	0x41&0x40	DC regulator	100kHz,400KHz, 1MHz fast mode+ 3.4MHz high-speed mode
I2C1	GPIO4_A1/I2C1_SDA GPIO4_A2/I2C1_SCL	APIO5 VCCA1V8_CODEC	I2C1_SDA I2C1_SCL	VCCA1V8_CODEC	Reartek ALC5651	0x34	Audio codec	
					Fairchild FUSB302B	0x44	USB-TypeC Mux	100kHz,400KHz, 1MHz fast mode+
					Option for PCIE module		PCI-E	
I2C2	GPIO2_A0/VOP_D0/CIF_D0/I2C2_SDA GPIO2_A1/VOP_D1/CIF_D1/I2C2_SCL	APIO2 VCC1V8_DVP	I2C2_SDA I2C2_SCL	VCC1V8_DVP	TC358749XBG	0x0f	HDMI IN	
					Option OV13850		MIPI RX0 Camera	
I2C3	GPIO4_C0/I2C3_SDA/UART2B_RX GPIO4_C1/I2C3_SCL/UART2B_TX	APIO4 VCC_3V0	I2C_SDA_HDMI I2C_SCL_HDMI	VCC3V0_IO				
I2C4	GPIO1_B3/I2C4_SDA GPIO1_B4/I2C4_SCL	PMUIO2 VCC_1V8	I2C4_SDA I2C4_SCL	VCC_1V8	Capellamicro CM3218	0x10,0x0c	ALS Sensor	
					AsahiKasei AK8963C		Compass	
					InverSense MPU6500	0x34	Accer+Gyro	
					Option OV13850		MIPI RX1 Camera (If 3D capture, Camera all use I2c2.)	
I2C5	GPIO3_B2/MAC_RXER/I2C5_SDA GPIO3_B3/MAC_CLK/I2C5_SCL	APIO1 VCC3V3_LAN	MAC_RXER GPIO3_B3	VCC3V3_IO				
I2C6	GPIO2_B1/SPI2_RXD/CIF_HREF/I2C6_SDA GPIO2_B2/SPI2_TXD/CIF_CLKIN/I2C6_SCL	APIO2 VCC1V8_DVP	I2C6_SDA I2C6_SCL	VCC1V8_DVP	GSL3680		Touch Panel	100KHz
I2C7	GPIO2_A7/VOP_D7/CIF_D7/I2C7_SDA GPIO2_B0/VOP_CLK/CIF_VSYNC/I2C7_SCL	APIO2 VCC1V8_DVP	I2C7_SDA I2C7_SCL	VCC1V8_DVP				

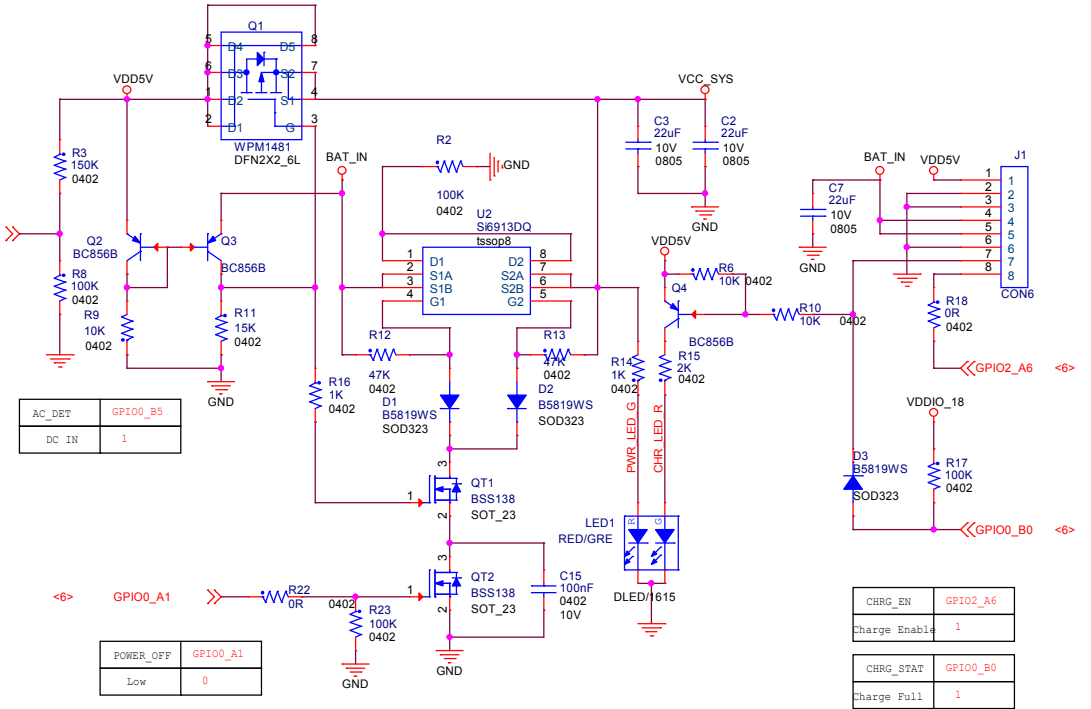
Main Power



$$V = 0.8 * (R1/R2 + 1)$$



$$V = 0.8 * (R1/R2 + 1)$$

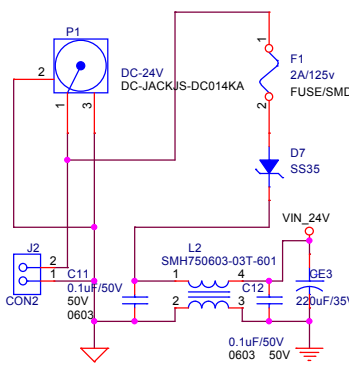


AC_DET	GPIO0_B5
DC IN	1

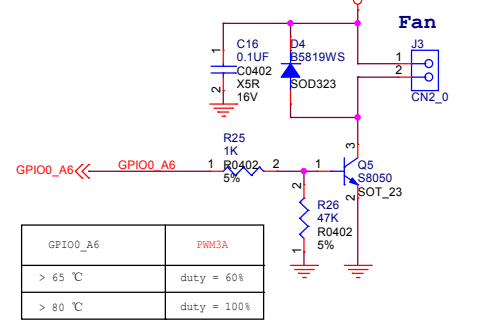
POWER_OFF	GPIO0_A1
Low	0

CHRG_EN	GPIO2_A6
Charge Enable	1

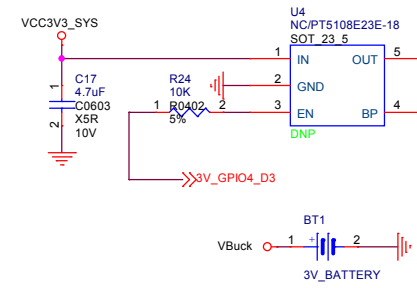
CHRG_STAT	GPIO0_B0
Charge Full	1



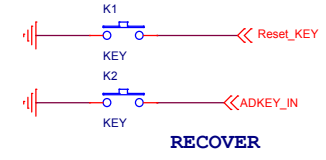
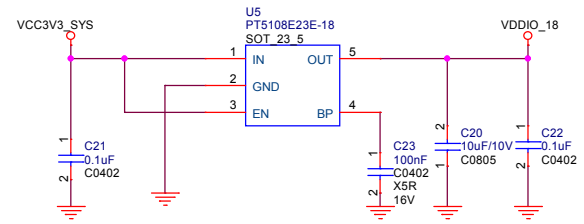
cooler for RK3399



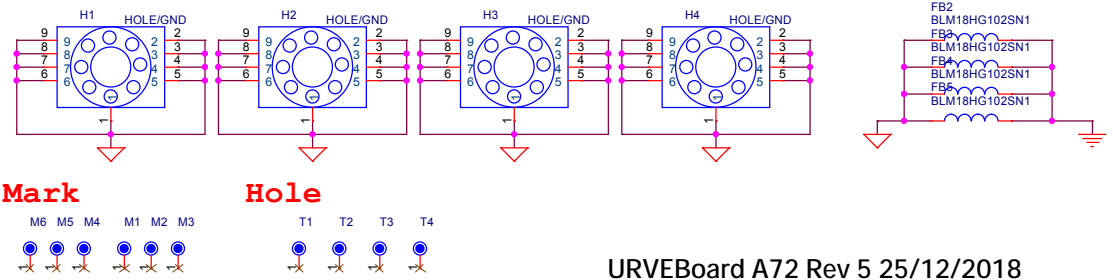
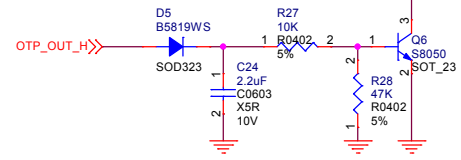
GPIO0_A6	FAN3A
> 65 °C	duty = 60%
> 80 °C	duty = 100%



RTC Power



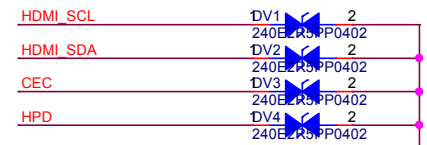
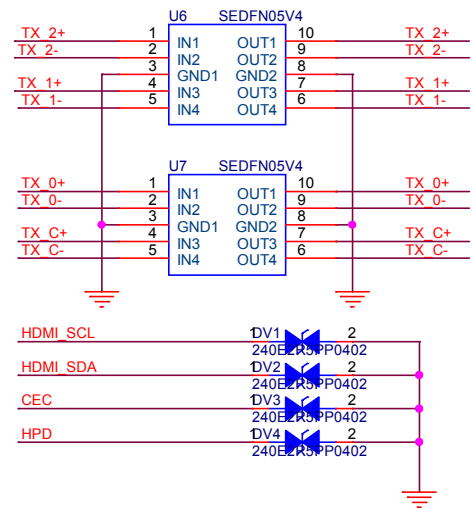
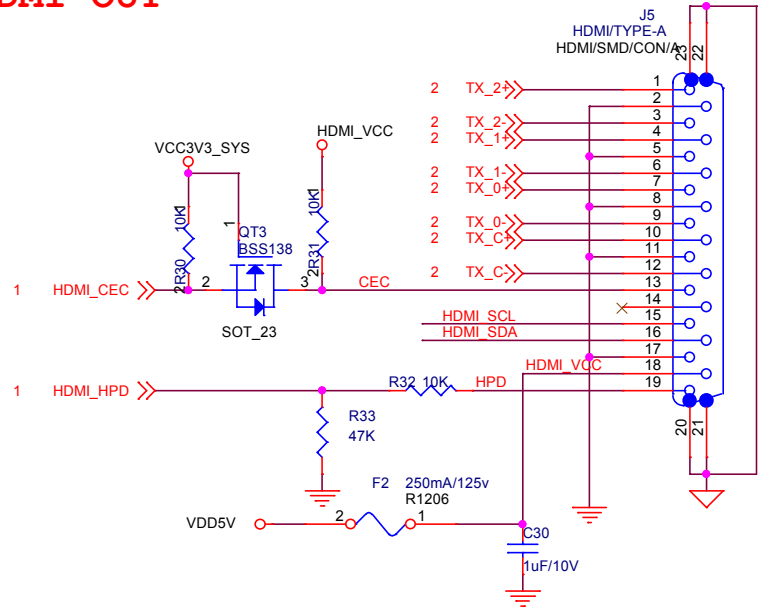
RECOVER



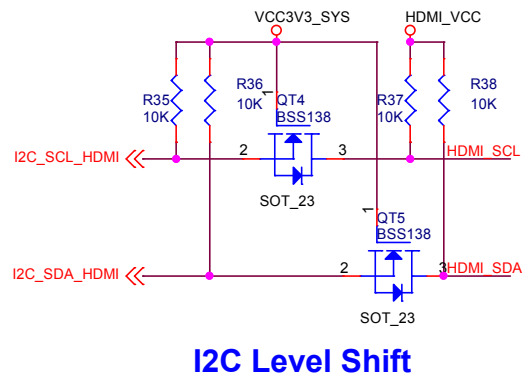
Mark

Hole

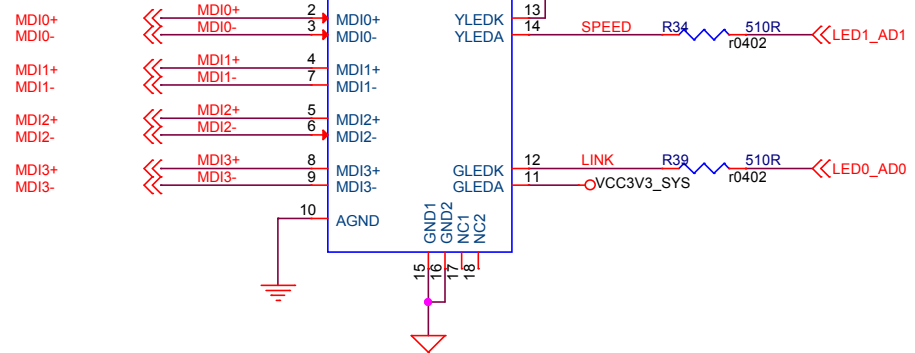
HDMI OUT



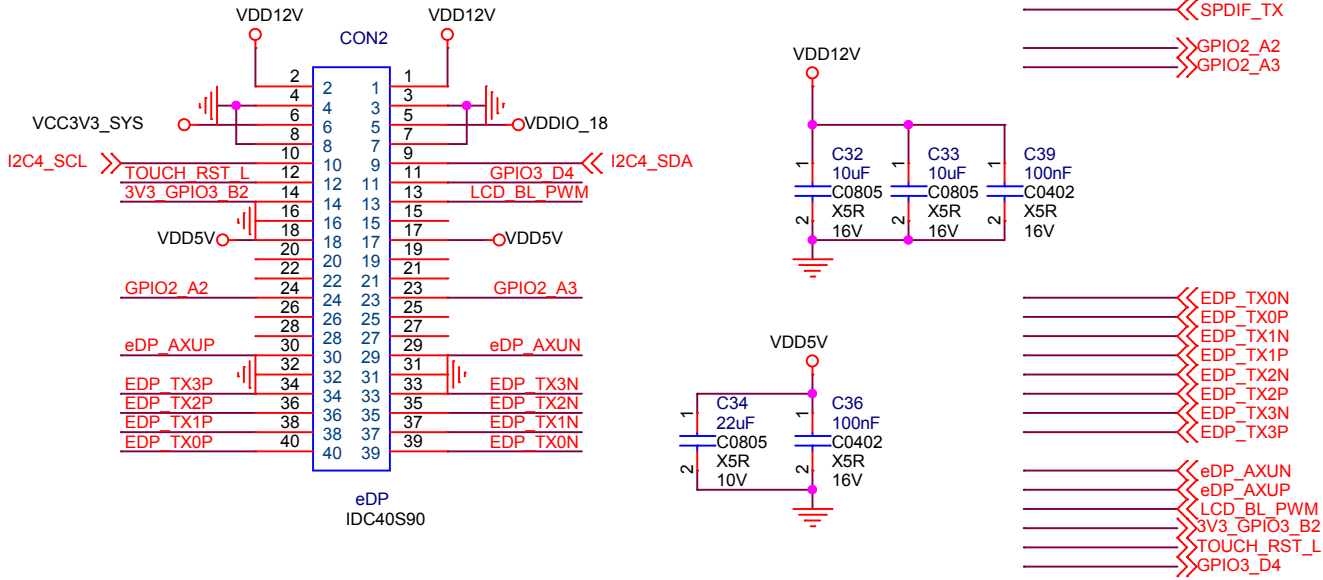
ETHERNET



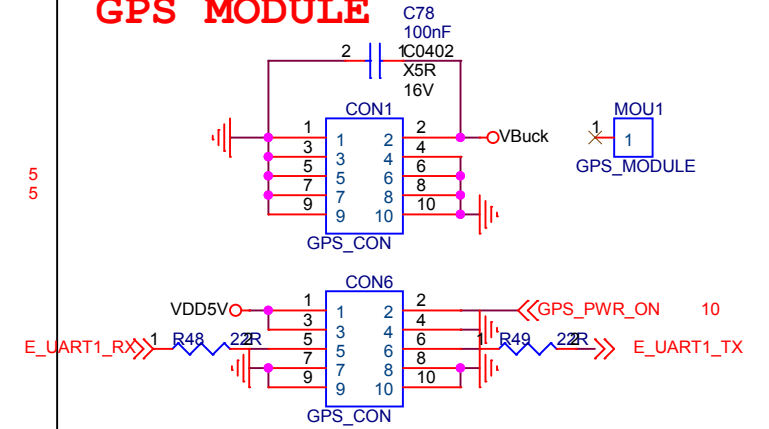
I2C Level Shift



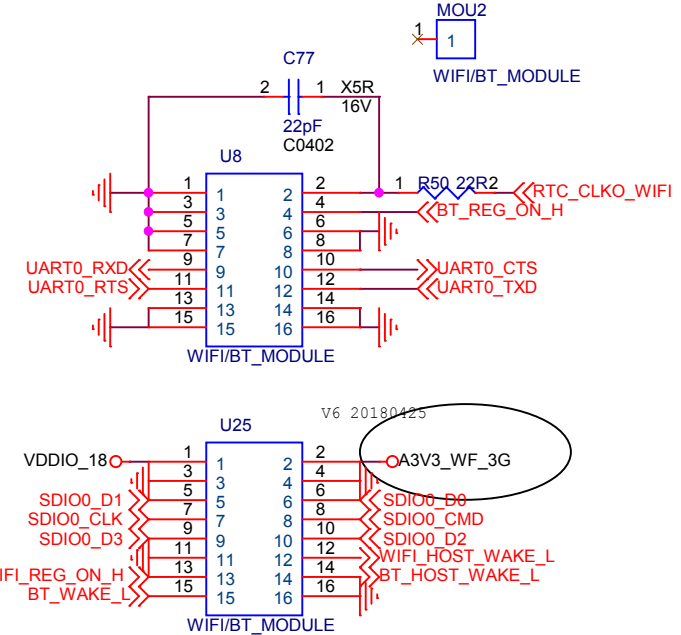
eDP Panel & GPIO



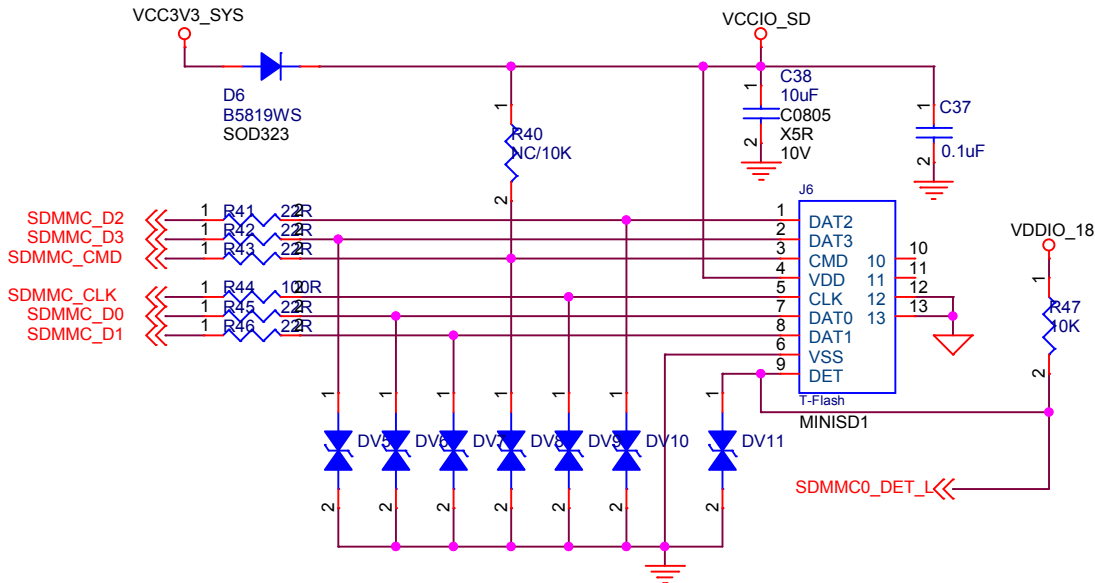
GPS MODULE



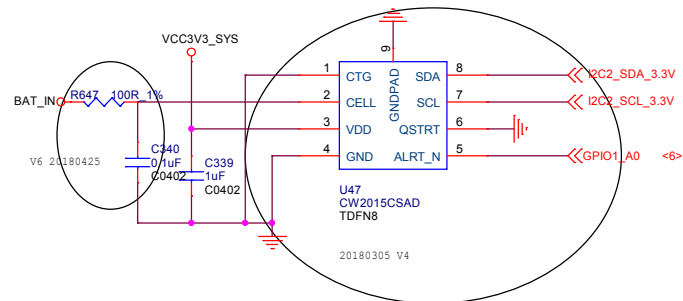
WIFI/BT MODULE



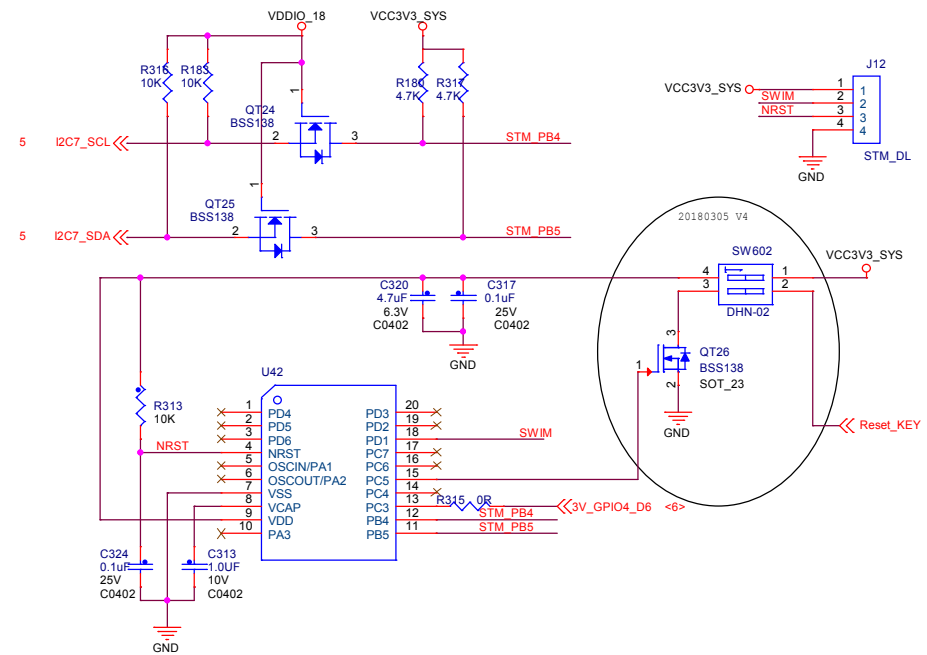
Micro SD



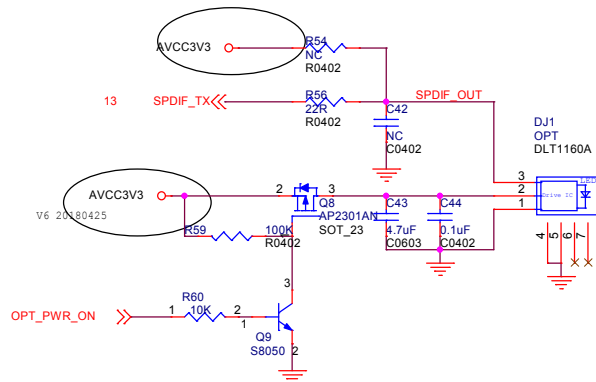
Battery voltage level status



WATCH DOG



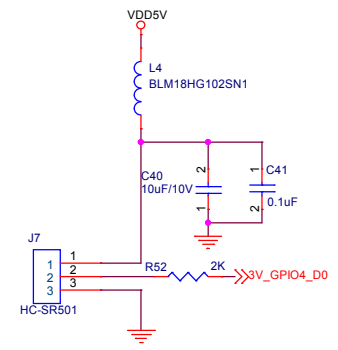
OPT



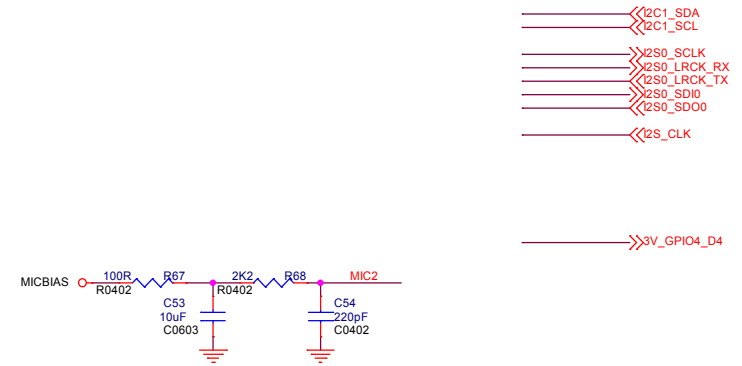
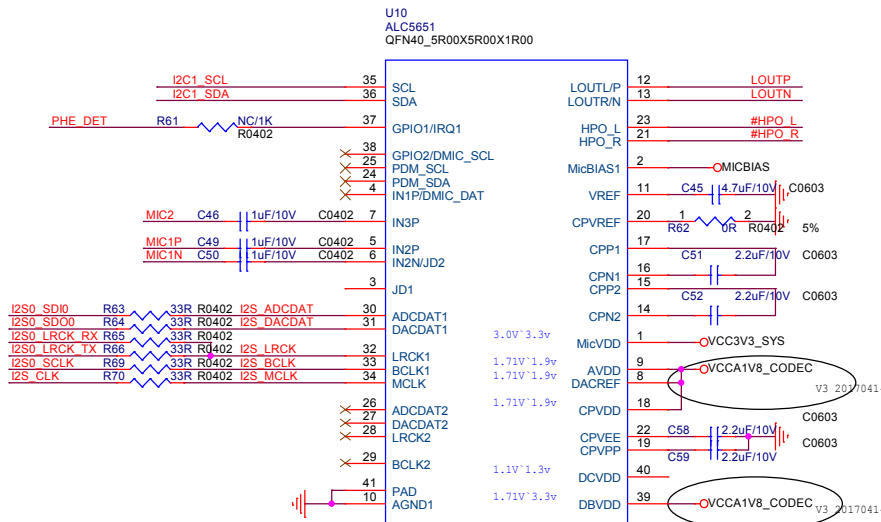
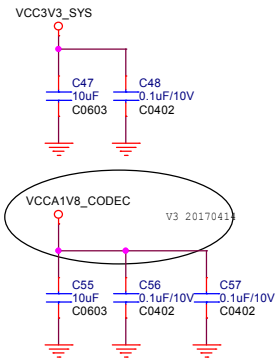
LED



PIR sensor

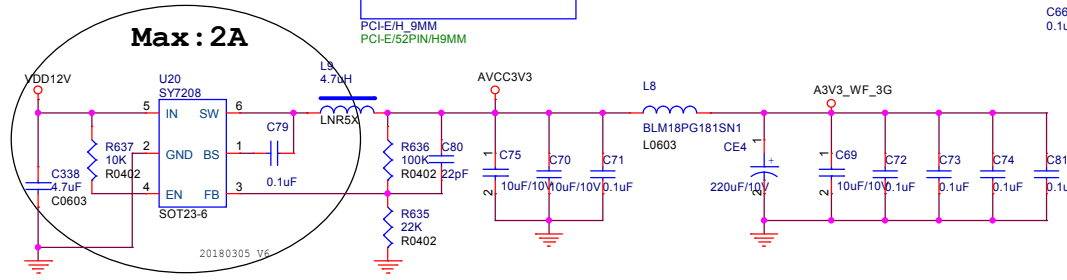
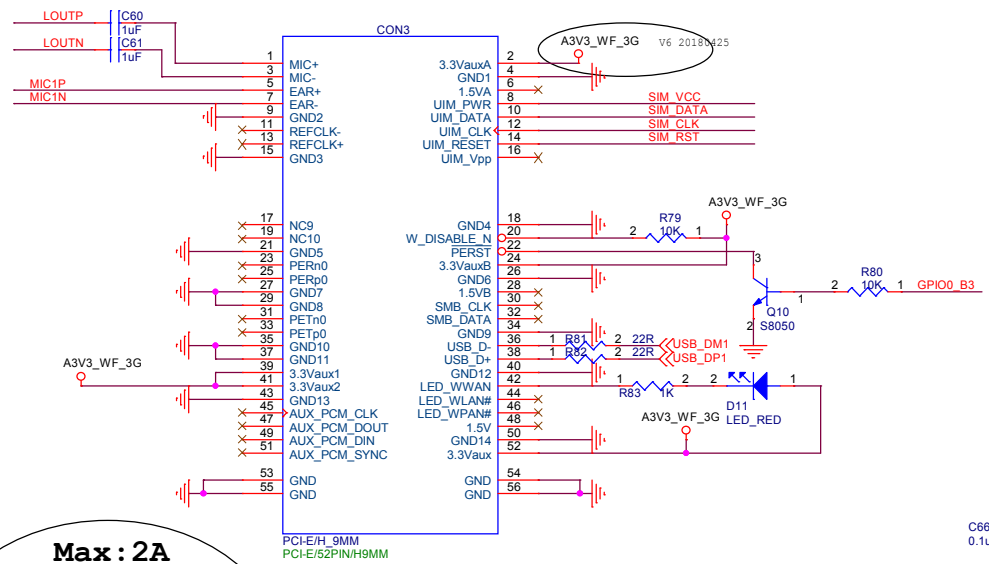


CODEC

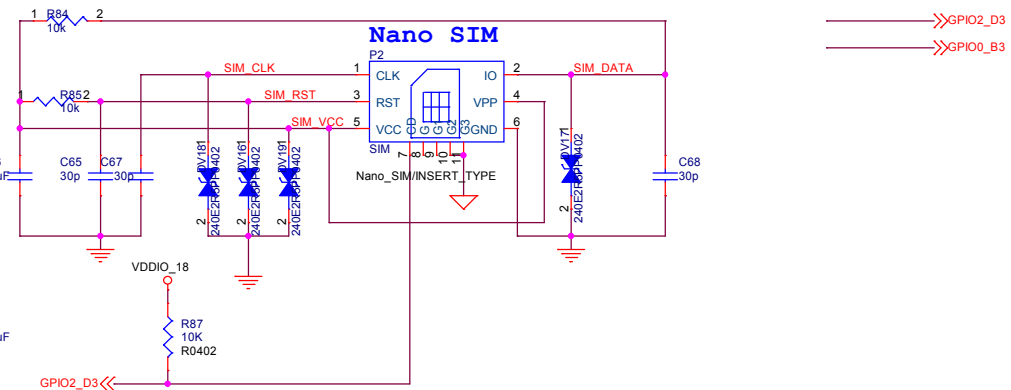
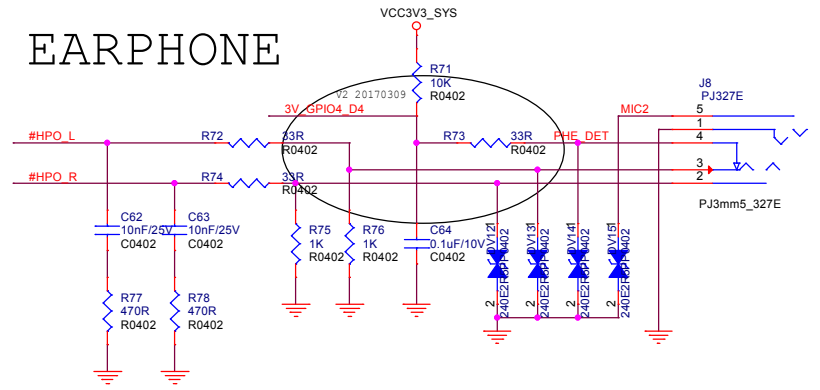


Mobile Module

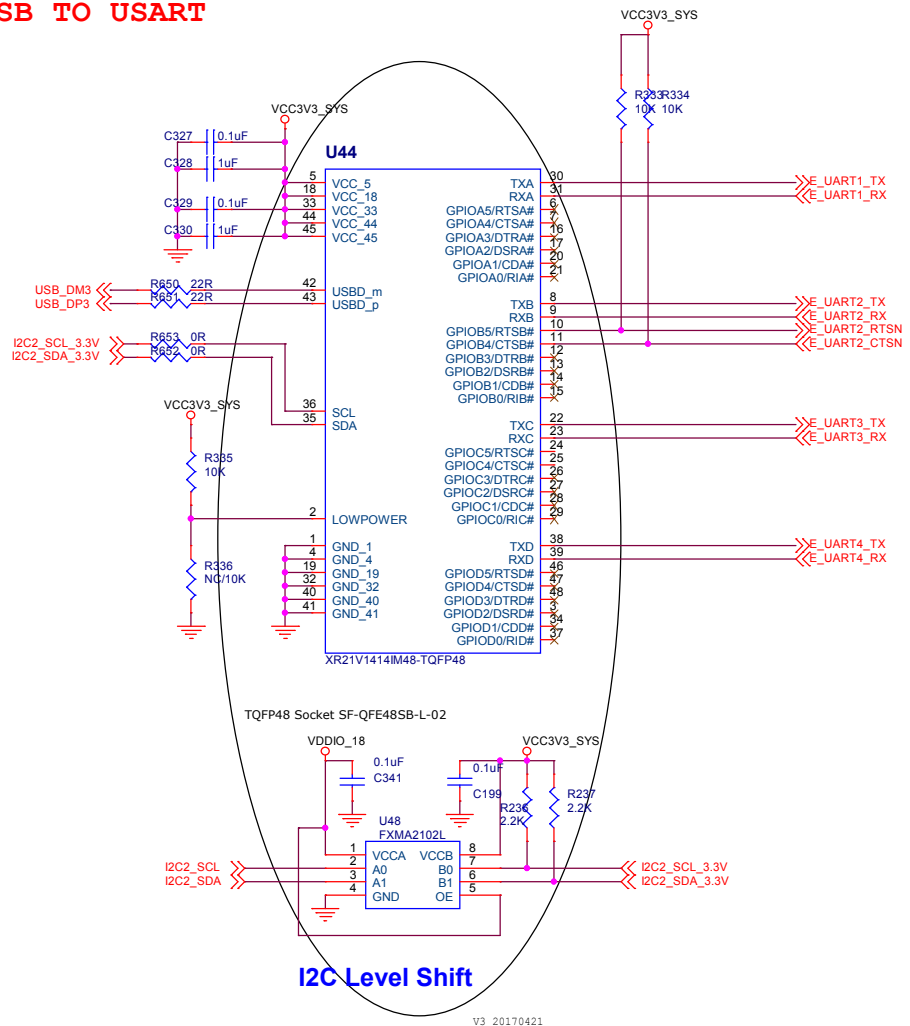
MINI PCI-E CON



EARPHONE

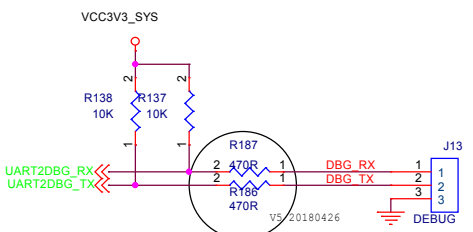


USB TO USART

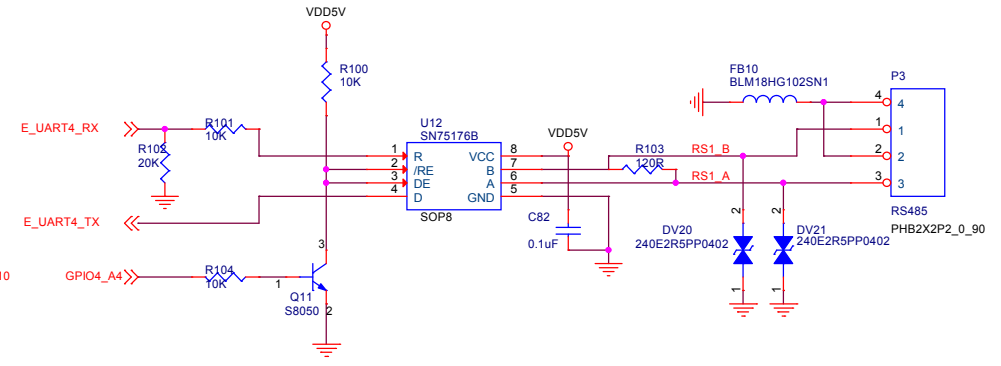


I2C Level Shift

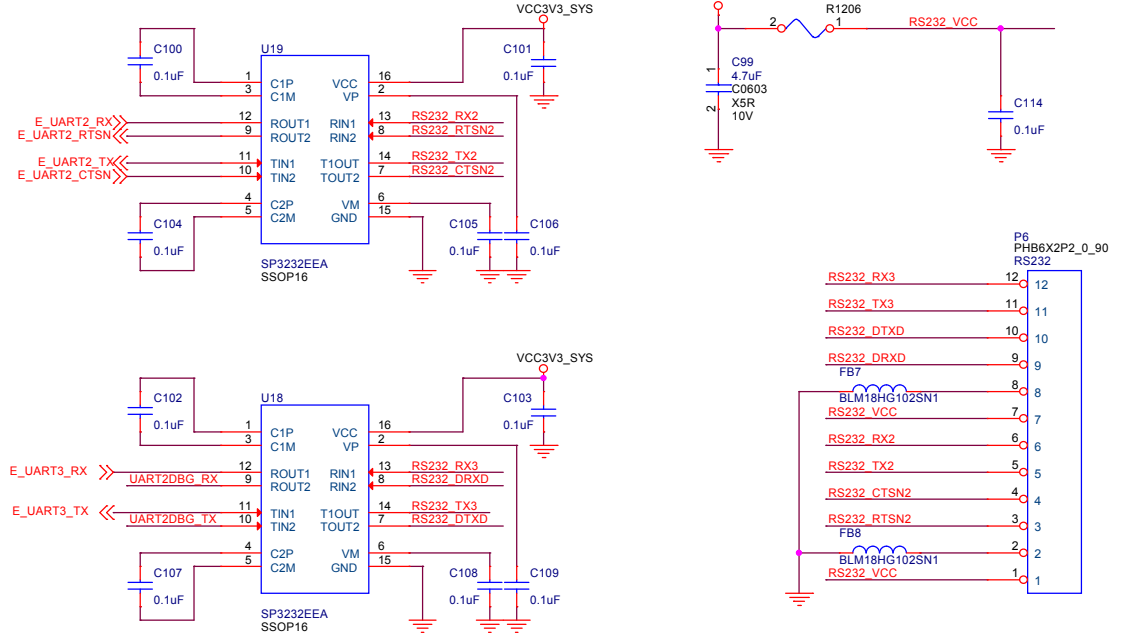
DEBUG

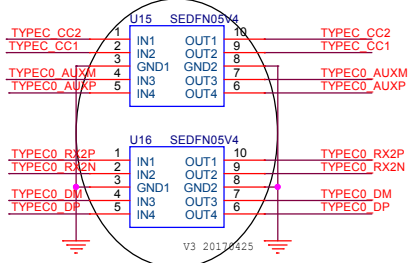
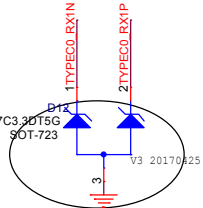
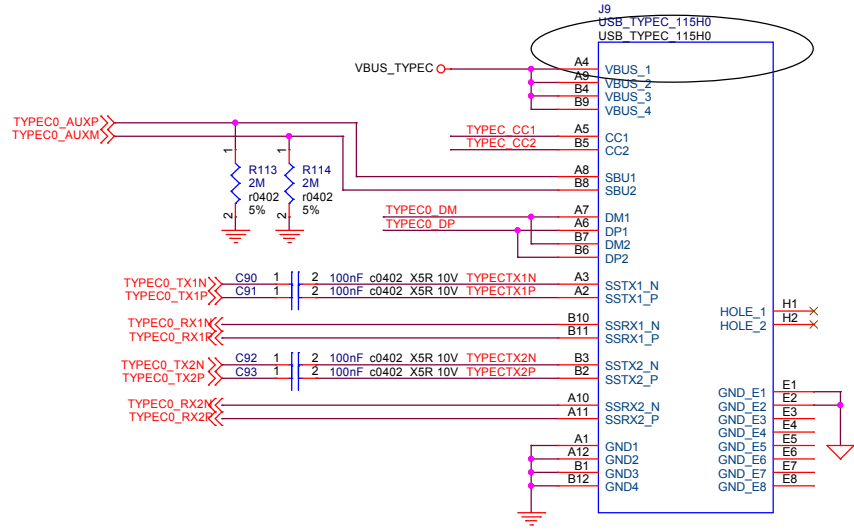
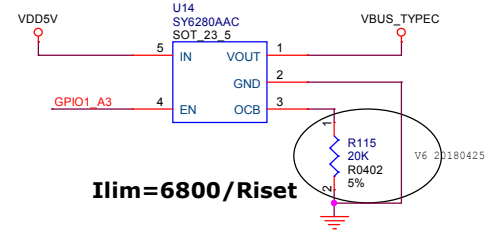
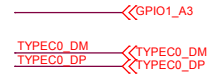
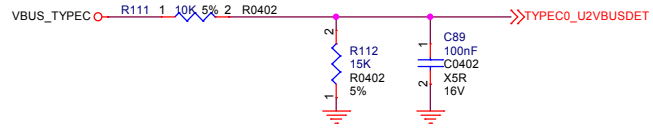
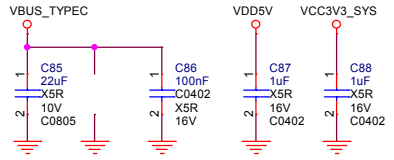
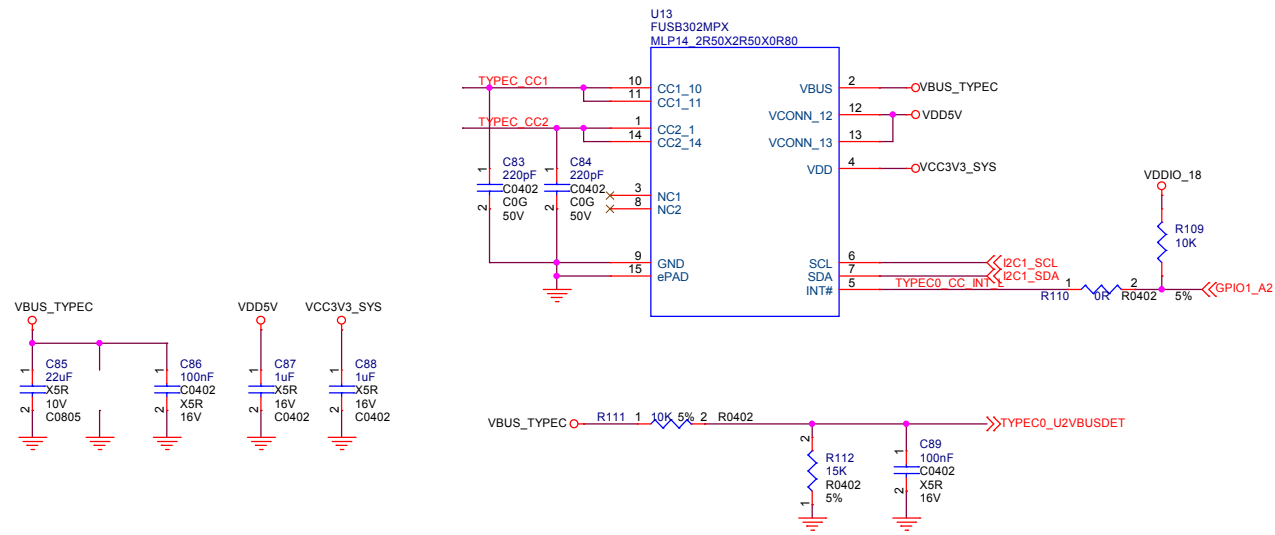


RS485

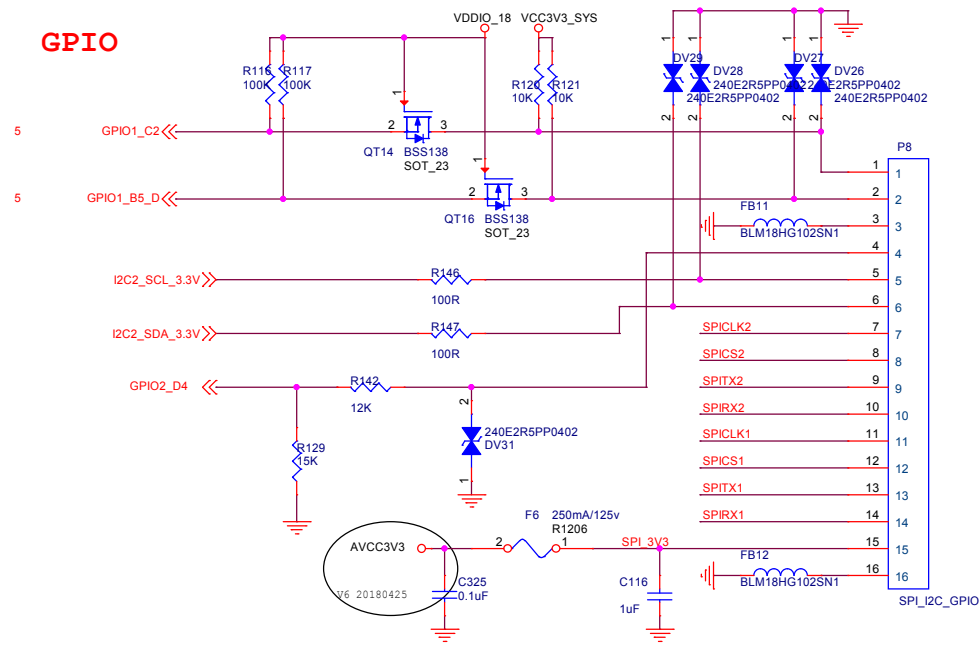


UART

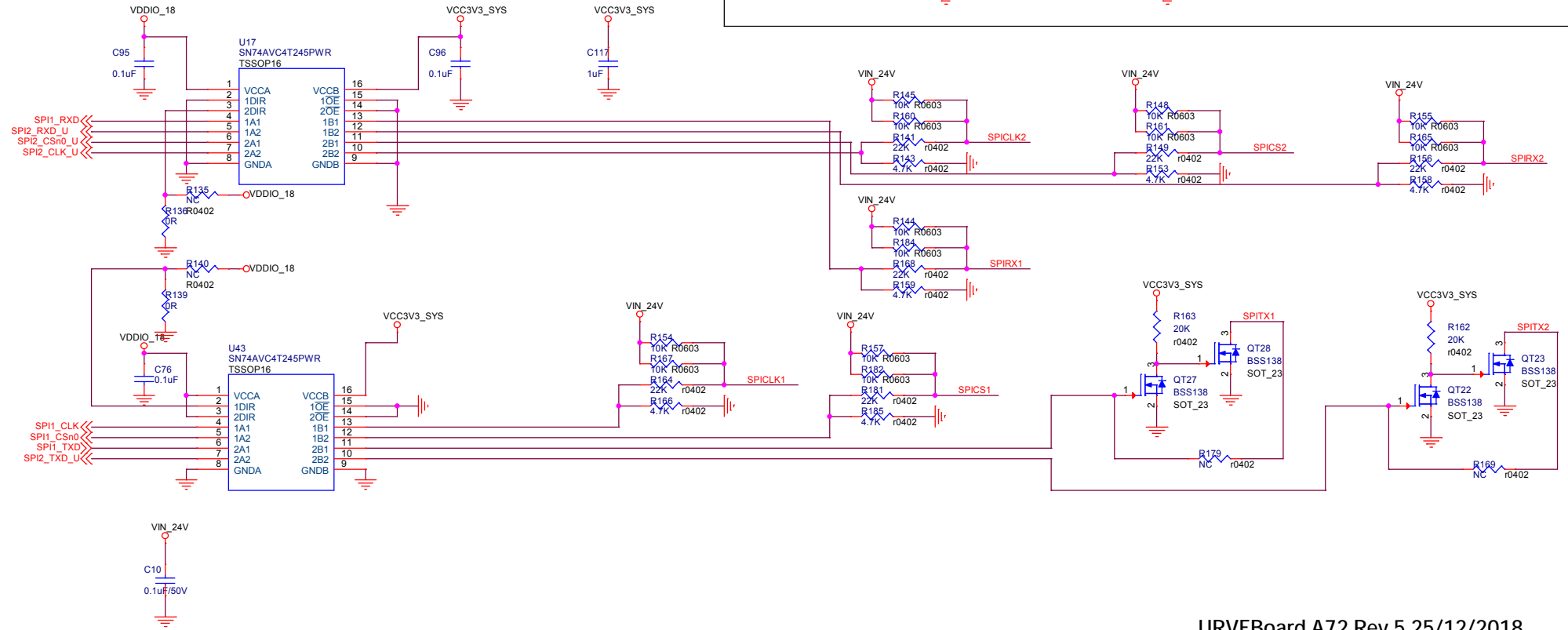
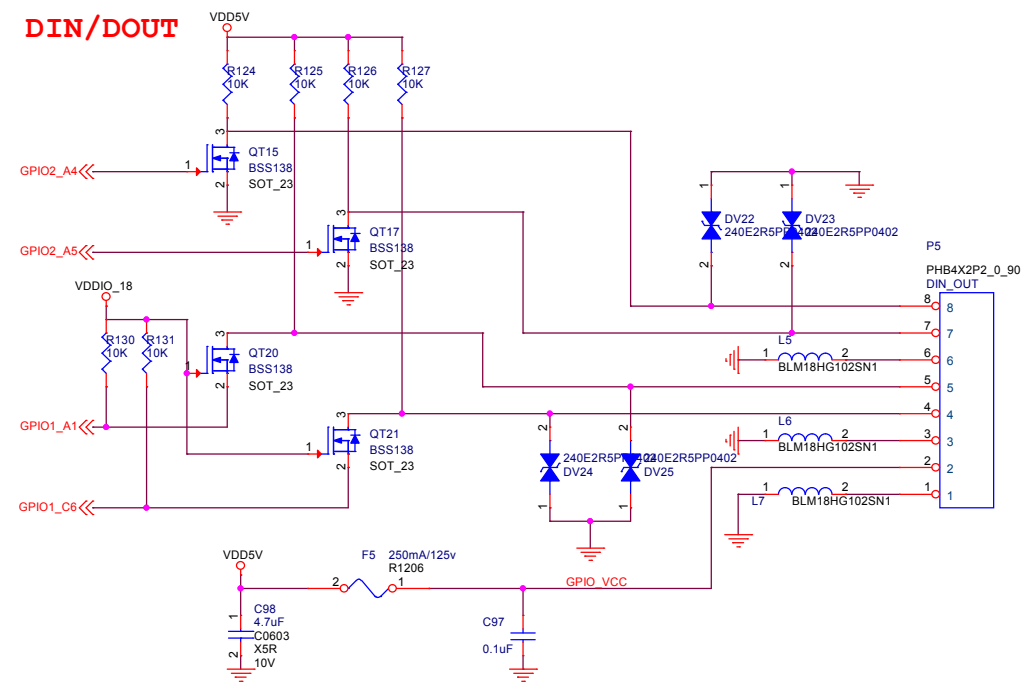




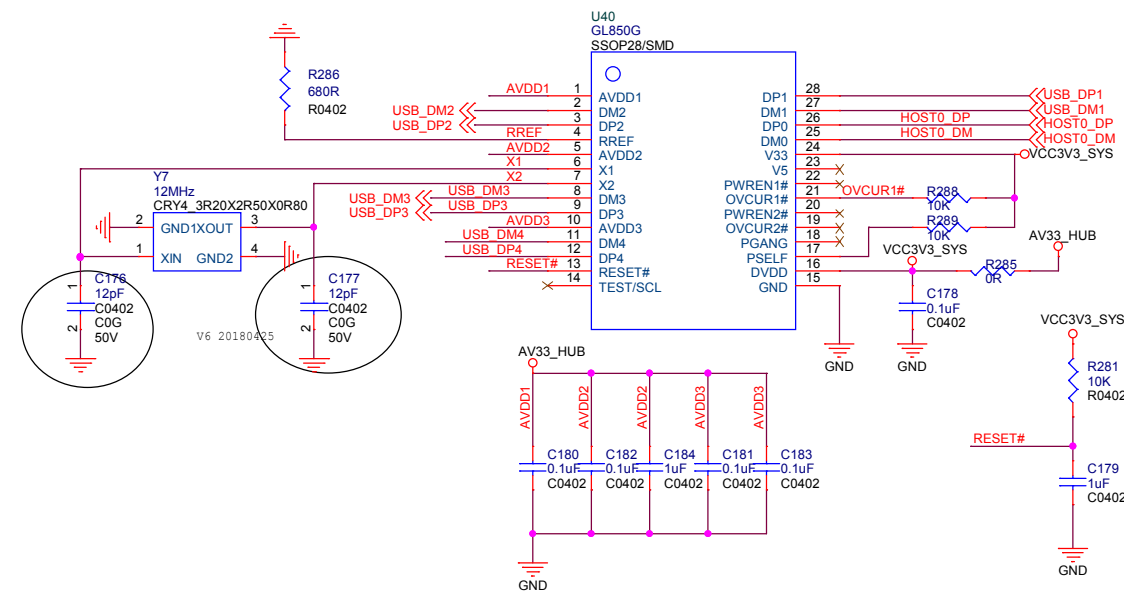
GPIO



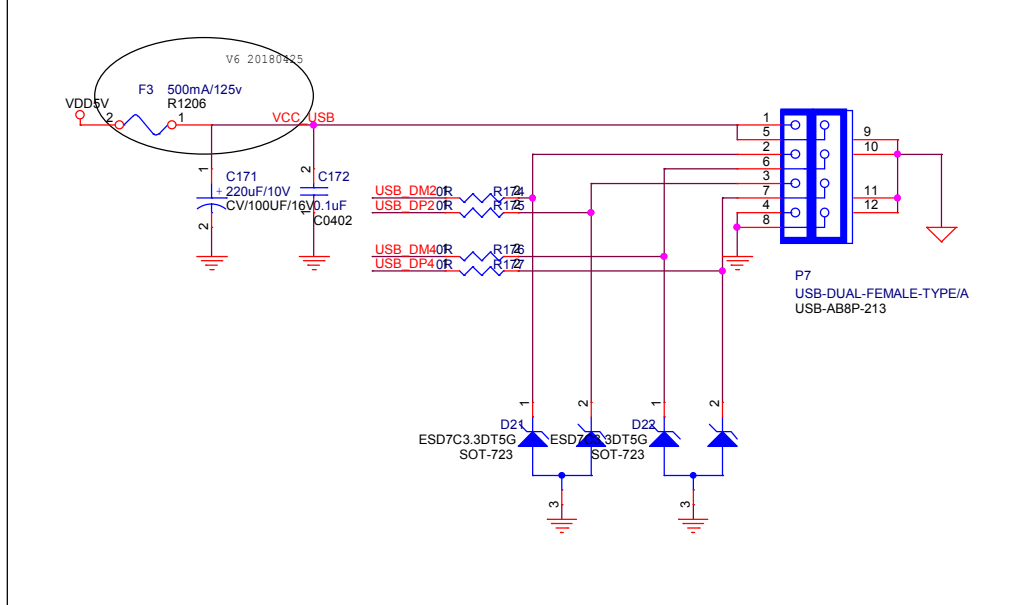
DIN/DOUT



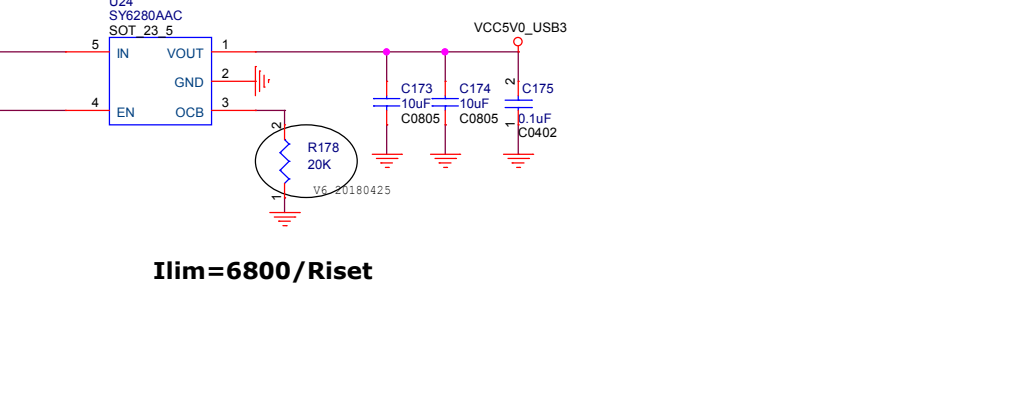
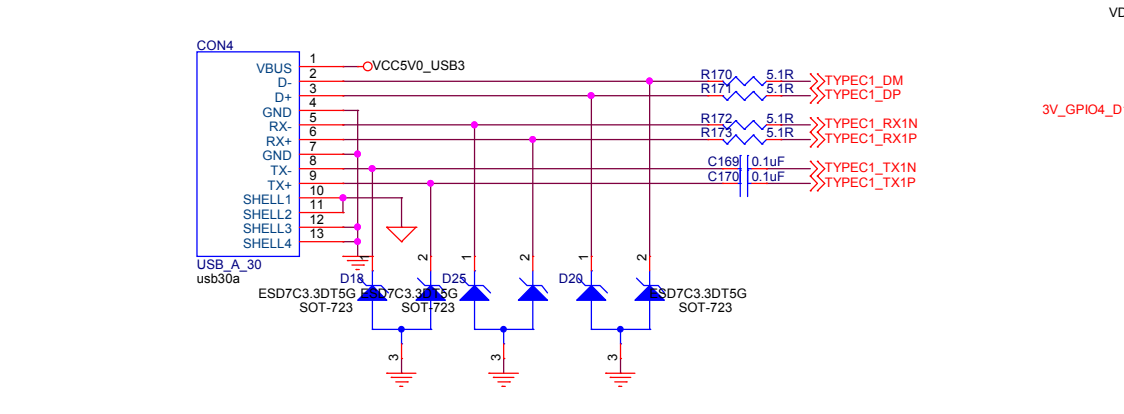
HUB



USB 2.0



USB 3.0



$$I_{lim} = 6800 / R_{iset}$$

