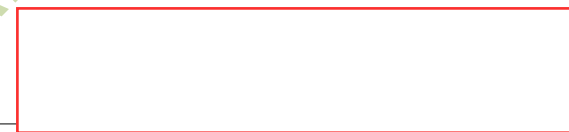


BPI_F3_LP4XP200_32X1

Revision	Date	Change Description
V1.0	20231207	Initial version
V2.0	20240131	Update based on test results
V3.0	20240401	Update based on test results



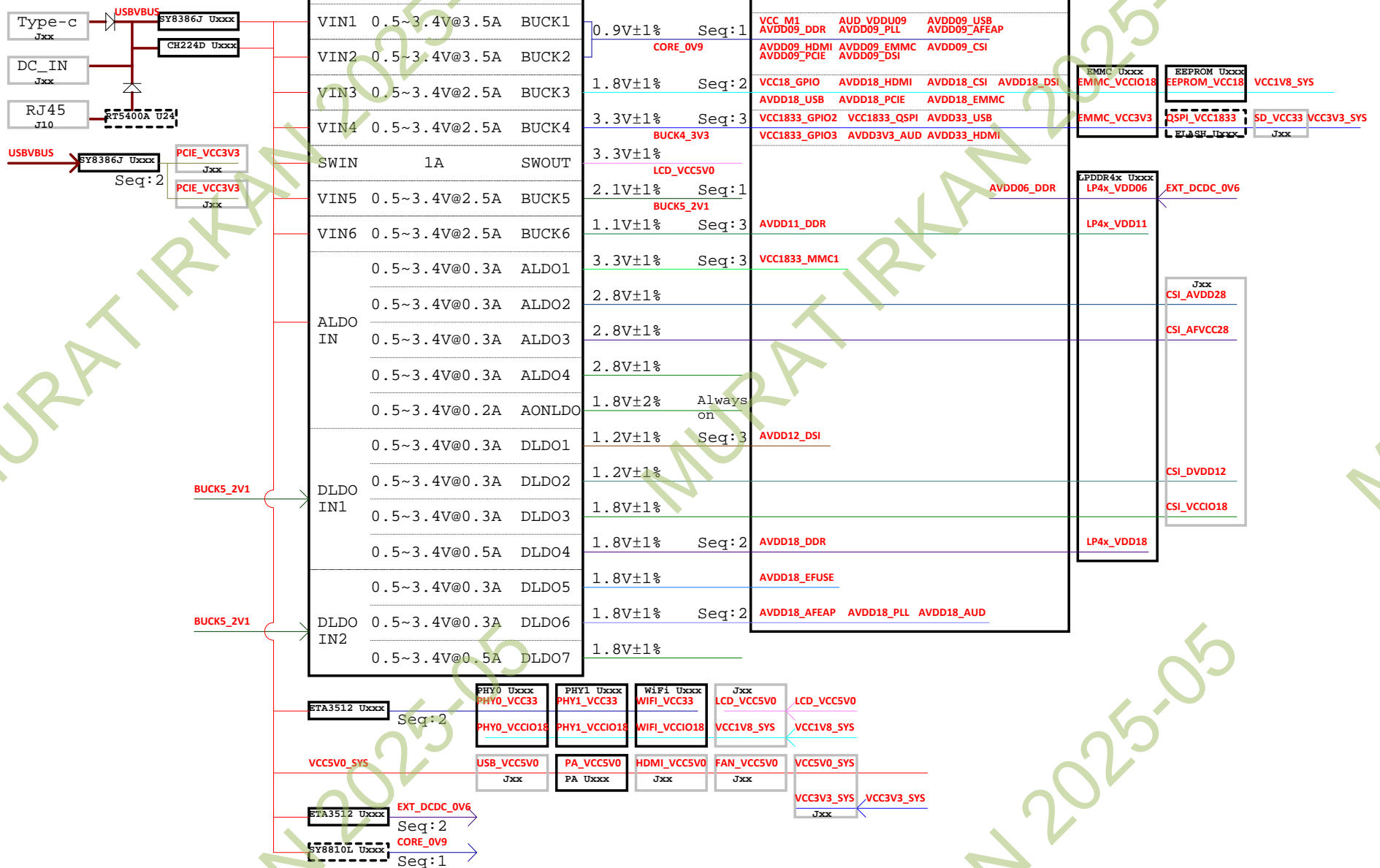
INDEX/NOTES

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Page28 28 26pin GPIO/KEY/LED



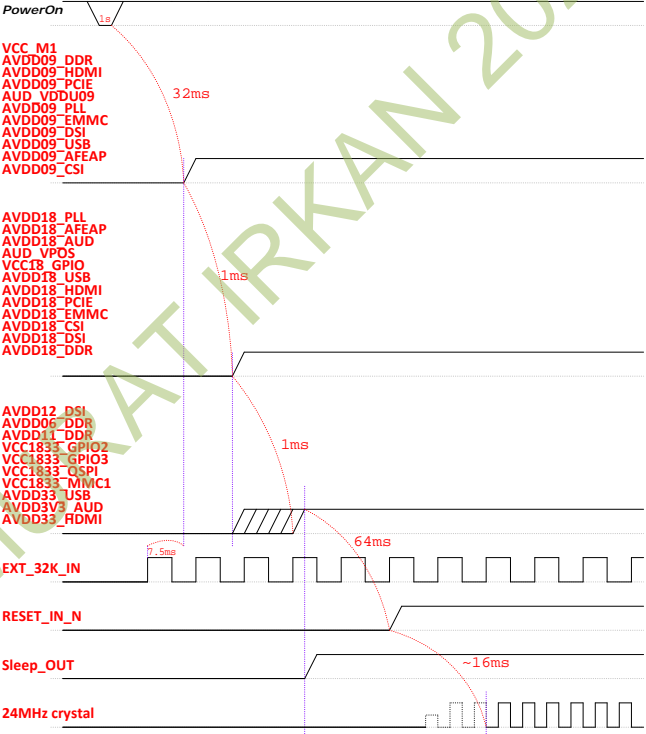
YAPAY ZEKA NOTEBOOK LINUX-SPACEMIT K1 RISC-V CPU

POWER TREE



POWER SEQUENCE

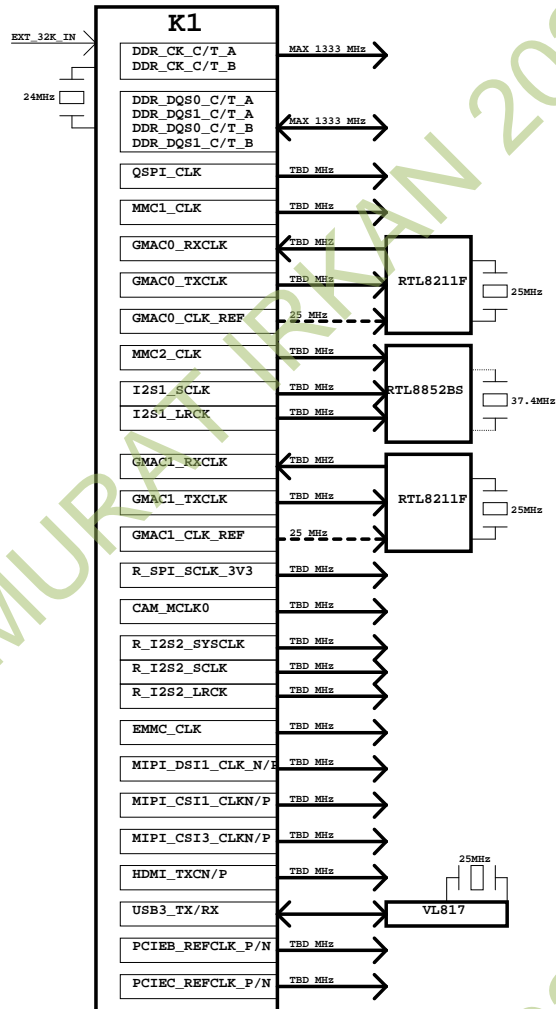
Control by PMIC
冷起自动上电，后续长按关机，短按开机



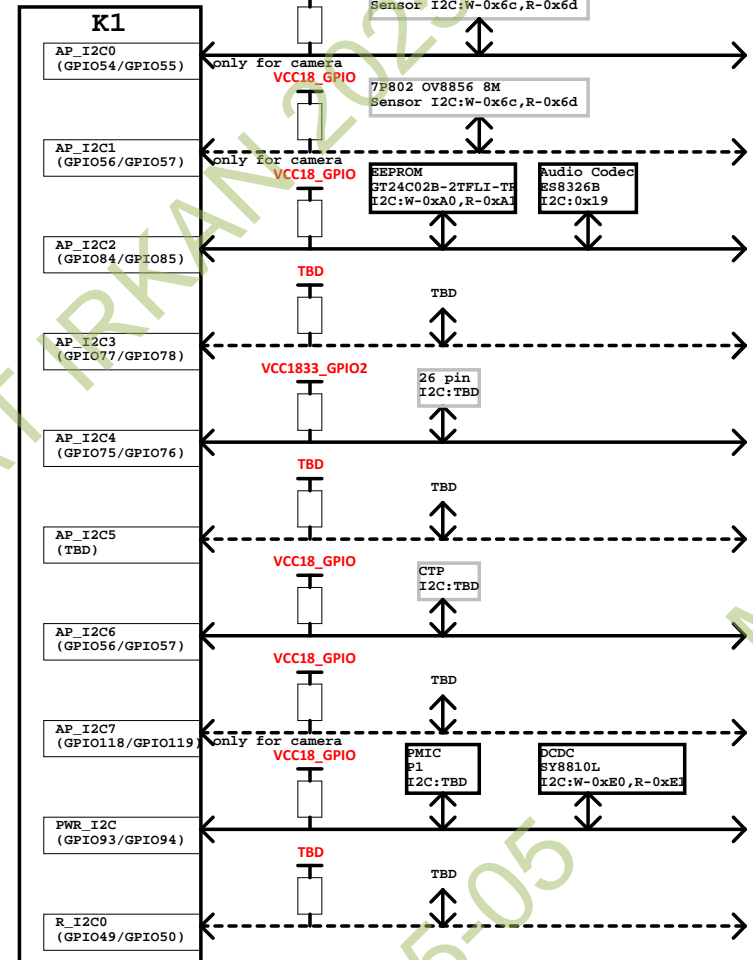
P1



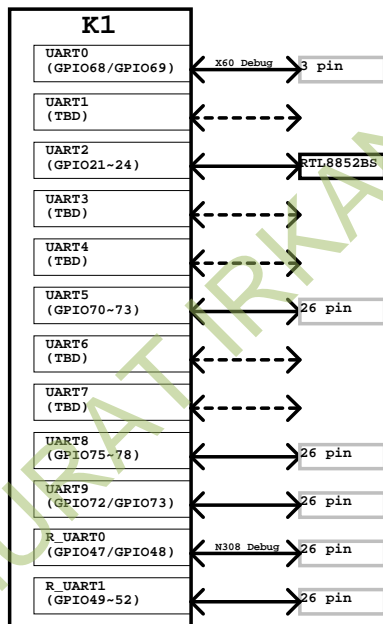
CLOCK MAP



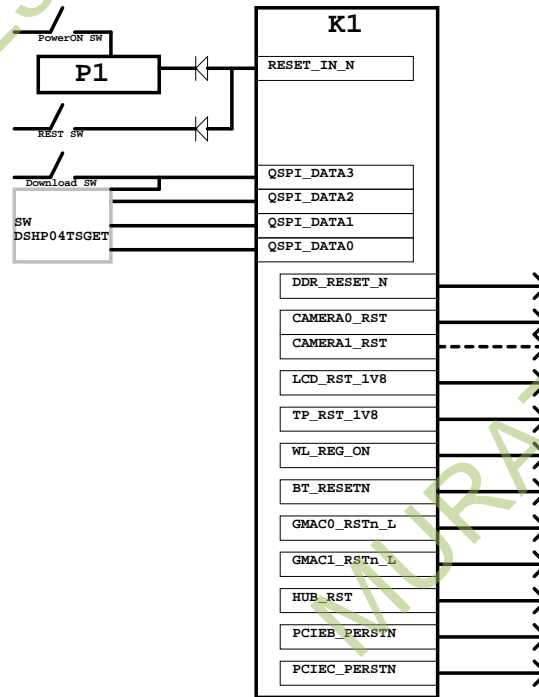
I2C MAP



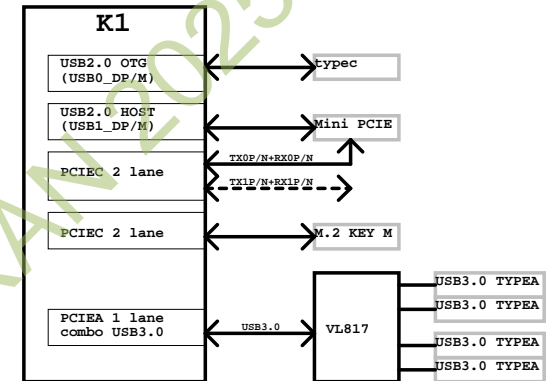
UART MAP



SW&RESET MAP



PCIE/USB MAP



GPIO ASSIGNMENT

PIN	Define	CFG	Function
GPIO0	GMAC0_RXDV	1	Ethernet -GMAC0
GPIO1	GMAC0_RXD0	1	
GPIO2	GMAC0_RXD1	1	
GPIO3	GMAC0_RXCLK	1	
GPIO4	GMAC0_RXD2	1	
GPIO5	GMAC0_RXD3	1	
GPIO6	GMAC0_TXD0	1	
GPIO7	GMAC0_TXD1	1	
GPIO8	GMAC0_TXCLK	1	
GPIO9	GMAC0_TXD2	1	
GPIO10	GMAC0_TXD3	1	
GPIO11	GMAC0_TXEN	1	
GPIO12	GMAC0_MDC	1	
GPIO13	GMAC0_MDIO	1	
GPIO14	GMAC0_INT_N	1	WiFi/BT
GPIO15	MMC2_DATA3	1	
GPIO16	MMC2_DATA2	1	
GPIO17	MMC2_DATA1	1	
GPIO18	MMC2_DATA0	1	
GPIO19	MMC2_CMD	1	
GPIO20	MMC2_CLK	1	
GPIO21	UART2_TXD	1	
GPIO22	UART2_RXD	1	
GPIO23	UART2_CTS_N	1	
GPIO24	UART2_RTS_N	1	
GPIO25	I2S1_SCLK	1	
GPIO26	I2S1_LRCK	1	
GPIO27	I2S1_TXD	1	Ethernet -GMAC1
GPIO28	I2S1_RXD	1	
GPIO29	GMAC1_RXDV	1	
GPIO30	GMAC1_RXD0	1	
GPIO31	GMAC1_RXD1	1	
GPIO32	GMAC1_RXCLK	1	
GPIO33	GMAC1_RXD2	1	
GPIO34	GMAC1_RXD3	1	
GPIO35	GMAC1_TXD0	1	
GPIO36	GMAC1_TXD1	1	
GPIO37	GMAC1_TXCLK	1	
GPIO38	GMAC1_TXD2	1	
GPIO39	GMAC1_TXD3	1	
GPIO40	GMAC1_TXEN	1	LCD/CTP
GPIO41	GMAC1_MDC	1	
GPIO42	GMAC1_MDIO	1	
GPIO43	GMAC1_INT_N	1	
GPIO44	LCD_BL_PWM_1V8	4	
GPIO45	GMAC0_CLK_REF	1	GMAC0
GPIO46	GMAC1_CLK_REF	1	GMAC1

PIN	Define	CFG	Function
GPIO110	GMAC0_RSTn_L	0	GMAC0
GPIO115	GMAC1_RSTn_L	0	GMAC1
GPIO116	WL_DIS_N	0	WiFi/BT
GPIO117	PCIEC_CLKREQN	4	PCIEC
GPIO118	I2S0_SCLK	3	Audio Codec
GPIO119	I2S0_LRCK	3	
GPIO120	I2S0_OUT	3	
GPIO121	I2S0_IN	3	USB3_HUB
GPIO122	I2S0_SYSCLK	3	
GPIO123	HUB_PWREN	0	
GPIO124	HUB_RST	0	USB2
GPIO125	VBUS_ON0	1	
GPIO126	CODEC_IRQ	0	
GPIO127	PA_SHUTDOWN	0	Audio Codec

PIN	Define	CFG	Function
GPIO53	CAM_MCLK0	1	CAMERA0
GPIO54	CAM_I2C0_SCL	1	
GPIO55	CAM_I2C0_SDA	1	
GPIO56	AP_I2C6_SCL	5	LCD/CTP
GPIO57	AP_I2C6_SDA	5	
GPIO58	TP_INT_1V8	0	
GPIO111	CAMERA0_RST	1	CAMERA0
GPIO112	PCIEC_WAKEN	3	PCIEC
GPIO113	CAMERA0_PDN	1	CAMERA0
GPIO114	TP_RST_1V8	0	LCD/CTP
GPIO63	BT_RESETN	0	WiFi/BT
GPIO64	AP_WAKE_BT	0	
GPIO65	BT_WAKE_AP	0	
GPIO66	WL_WAKE_AP	0	X60 Debug
GPIO67	WL_REG_ON	0	
GPIO68	UART0_TXD	2	
GPIO69	UART0_RXD	2	

PIN	Define	CFG	Function
GPIO59	PCIEB_PERSTN	4	PCIEB
GPIO60	PCIEB_WAKEN	4	
GPIO61	PCIEB_CLKREQN	4	
GPIO62	PCIEC_PERSTN	4	PCIEC
GPIO70	GPIO70	1	26 pin
GPIO71	GPIO71	1	
GPIO72	GPIO72	1	
GPIO73	GPIO73	1	
GPIO74	GPIO74	0	

红色字体GPIO表示默认、持续上拉，等效上拉电阻约60K。需要软件修改才能解除默认上拉状态

GENEL KULLANIM PIN TANIMLAMA TABLOSU

PIN	Define	CFG	Function
GPIO93	PI2C_SCL	0	PMIC
GPIO94	PI2C_SDA	0	
GPIO95	SLEEP_OUT	0	LED
GPIO96	GPIO96	1	
GPIO97	USB3_PWREN	1	USB3_HUB
GPIO81	LCD_RST_1V8	0	LCD/CTP
GPIO82	LCD_BL_EN_1V8	0	
GPIO83	LCD_PWR_EN_1V8	0	EEPROM Audio
GPIO84	AP_I2C2_SCL	4	
GPIO85	AP_I2C2_SDA	4	HDMI_OUT
GPIO86	HDMI_SCL	1	
GPIO87	HDMI_SDA	1	
GPIO88	HDMI_CEC	1	26 pin
GPIO89	HDMI_HPD	1	
GPIO90	GPIO90	0	
GPIO91	GPIO91	0	
GPIO92	GPIO92	0	

PIN	Define	CFG	Function
GPIO98	QSPI_DATA3	0	SPI FLASH
GPIO99	QSPI_DATA2	0	
GPIO100	QSPI_DATA1	0	
GPIO101	QSPI_DATA0	0	
GPIO102	QSPI_CLK	0	
GPIO103	QSPI_CS1	0	

PIN	Define	CFG	Function
GPIO104	MMC1_DATA3	0	TF CARD
GPIO105	MMC1_DATA2	0	
GPIO106	MMC1_DATA1	0	
GPIO107	MMC1_DATA0	0	
GPIO108	MMC1_CMD	0	
GPIO109	MMC1_CLK	0	

PIN	Define	CFG	Function
GPIO75	SPI3_SCLK_3V3	2	26 pin
GPIO76	SPI3_CS_3V3	2	
GPIO77	SPI3_MOSI_3V3	2	
GPIO78	SPI3_MISO_3V3	2	
GPIO79	FAN_PWM	2	FAN
GPIO80	SD_CD_3V3	1	TF CARD

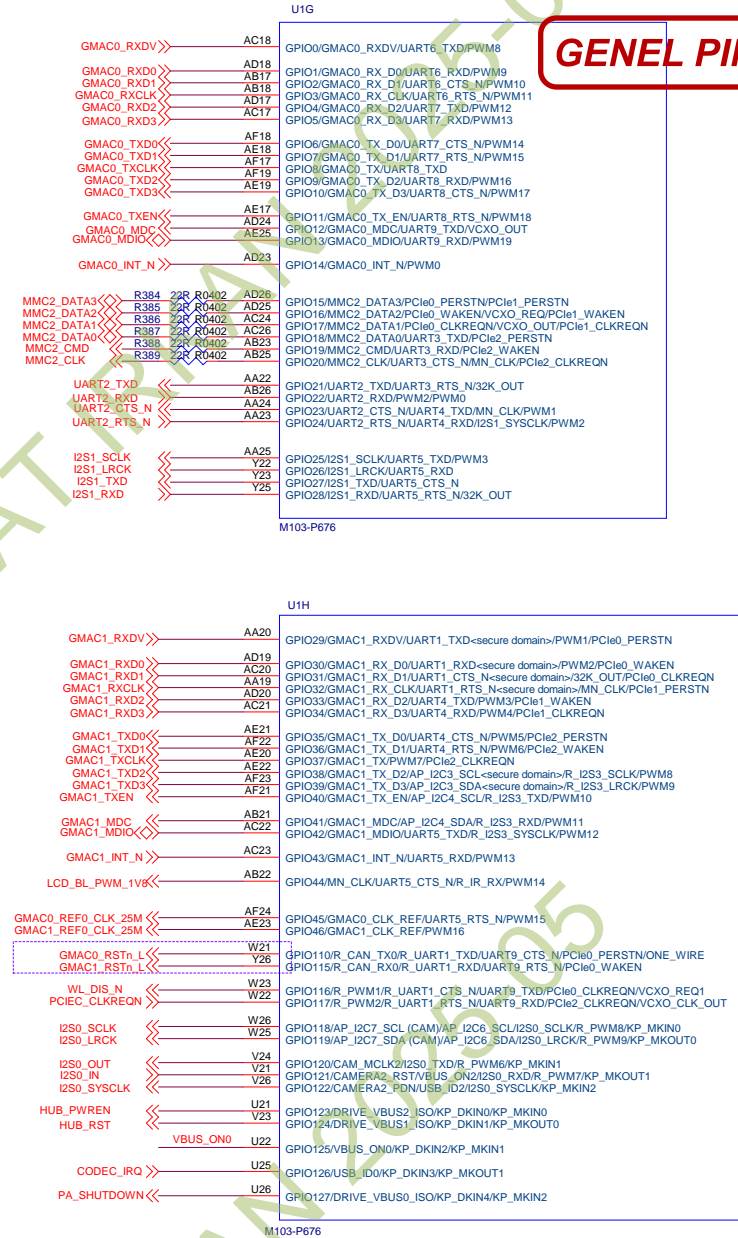
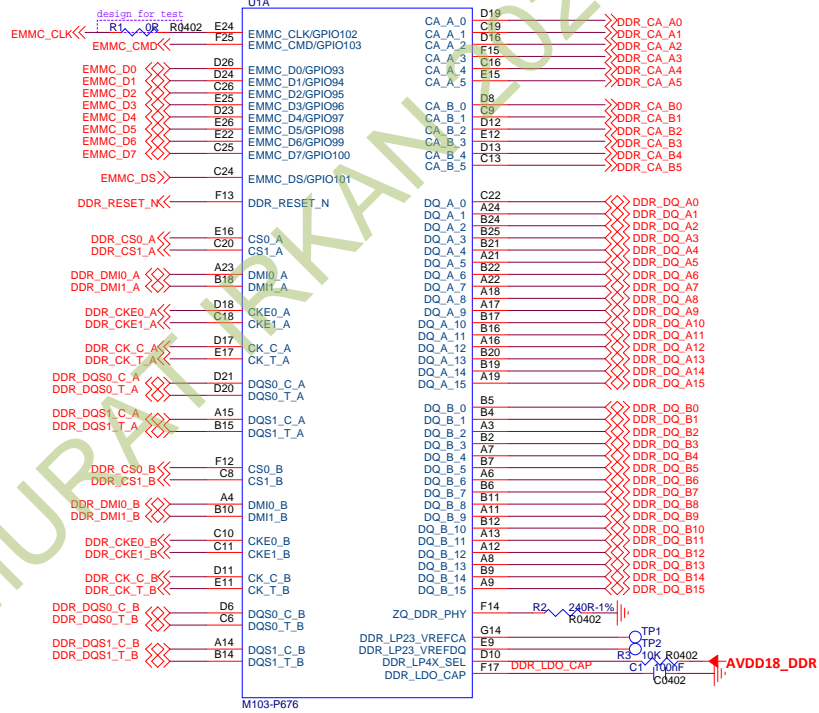
PIN	Define	CFG	Function
GPIO47	R_UART0_TXD_3V3	1	26 pin
GPIO48	R_UART0_RXD_3V3	1	
GPIO49	GPIO_49_3V3	0	
GPIO50	GPIO_50_3V3	0	
GPIO51	AP_I2C4_SCL_3V3	4	
GPIO52	AP_I2C4_SDA_3V3	4	

eMMC+DDR

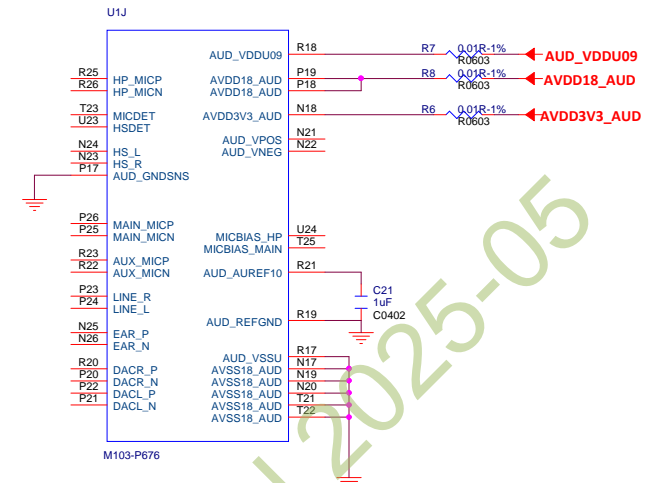
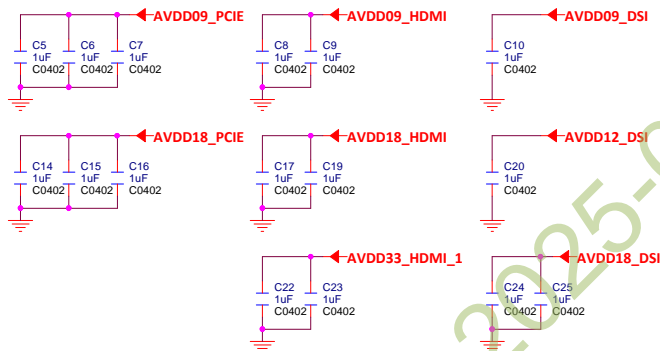
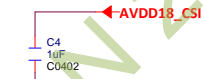
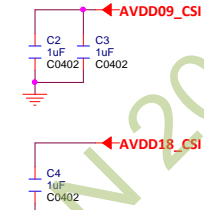
MULTIMEDIA KART + DDR BELLEK BAGLANTILARI

GPIO

GENEL PINLER

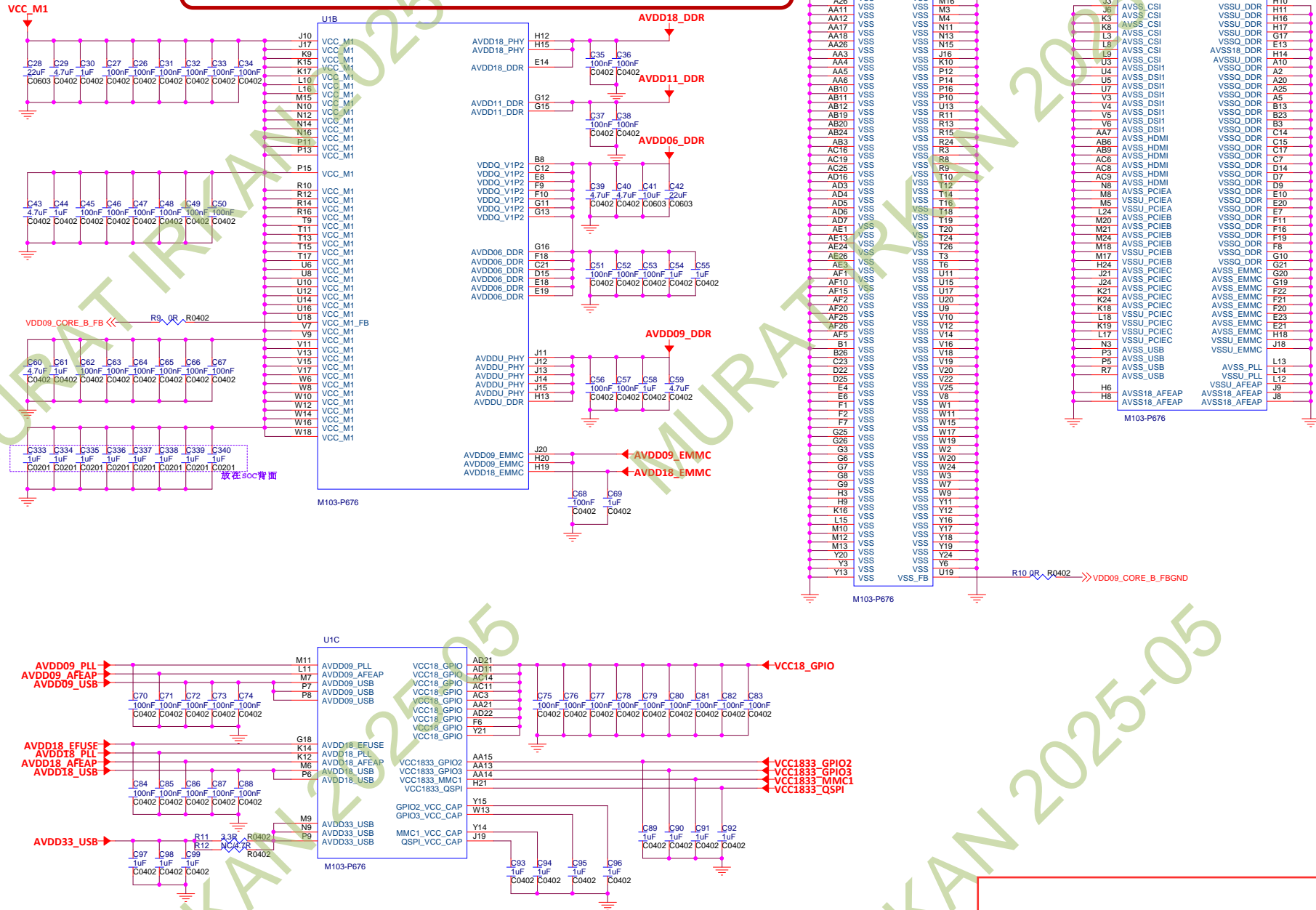


VIDEO BAĞLANTILARI



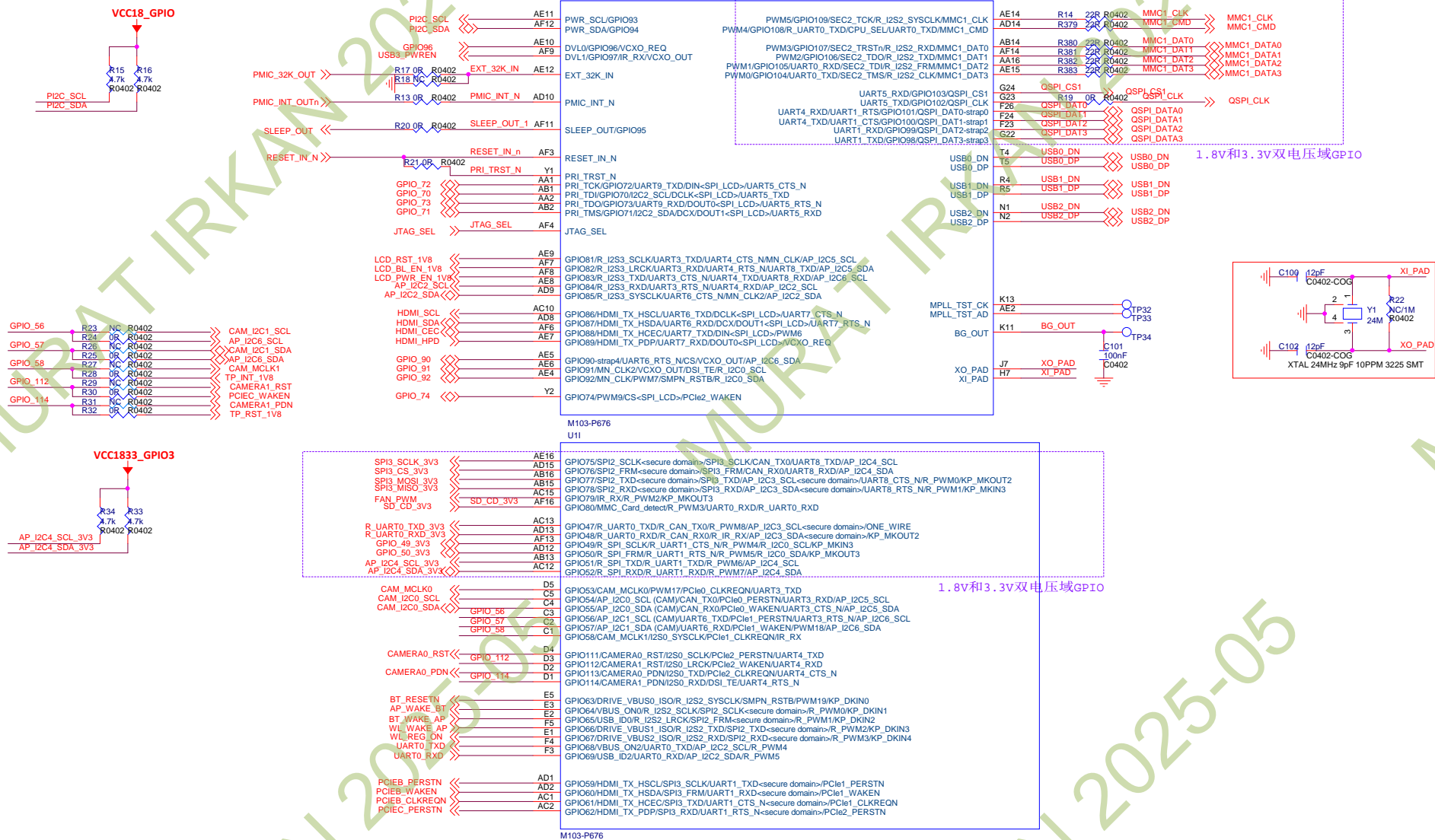
CPU-PWR

RISC-V K1 CPU GÜÇ BAĞLANTILARI



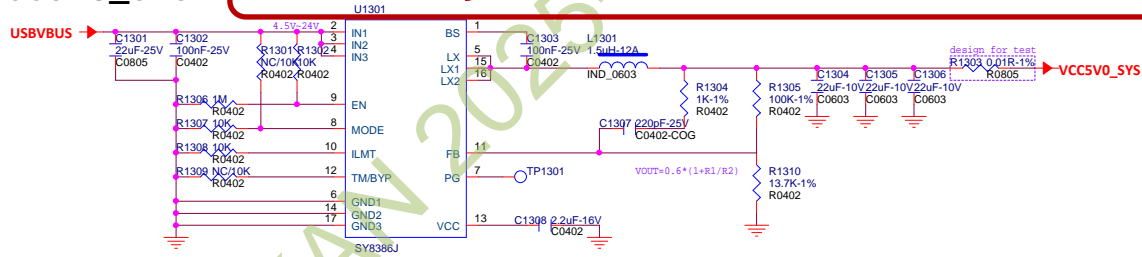
SYS-GPIO

GENEL-GIRIS/CIKIS PINLERI

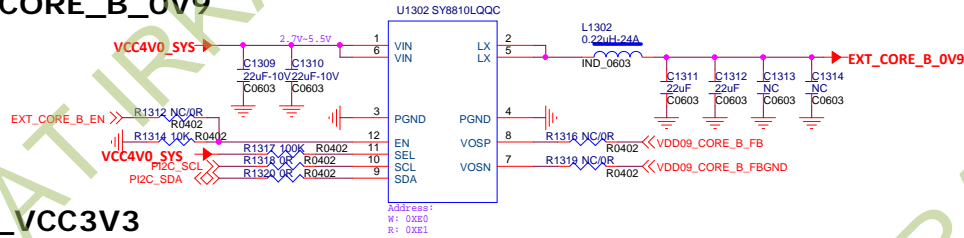


VCC5V0_SYS

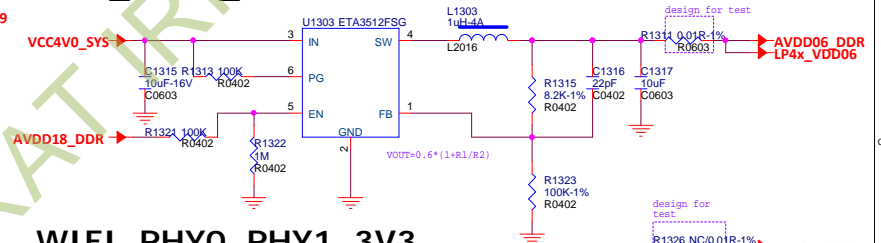
GÜÇ IC 5volt + 4volt + 0.9v+ 0.6volt + 3.3volt



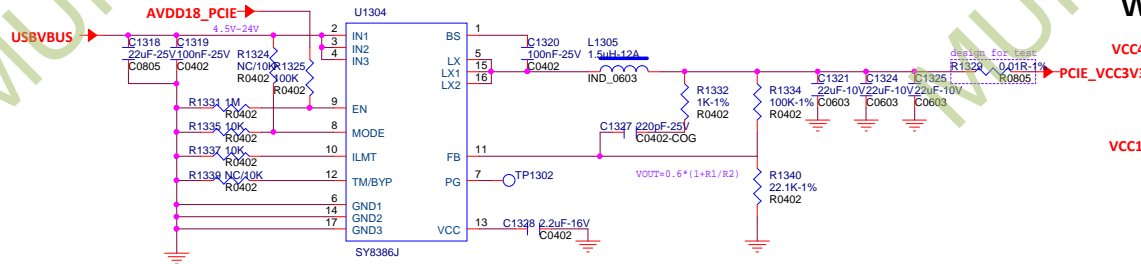
EXT_CORE_B_OV9



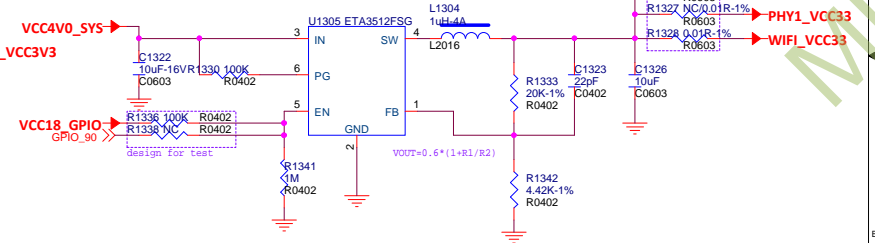
EXT_DCDC_OV6



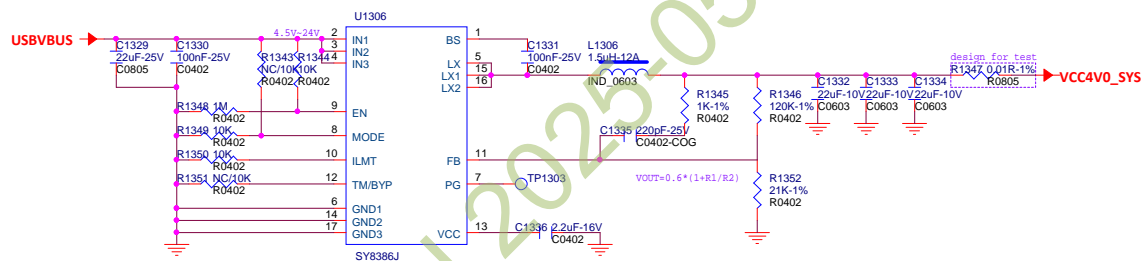
PCIE_VCC3V3



WIFI_PHY0_PHY1_3V3

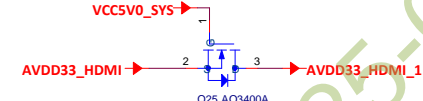
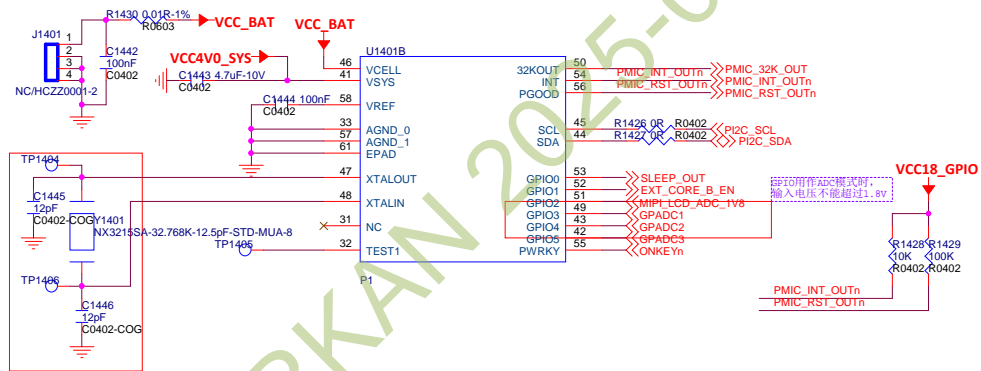
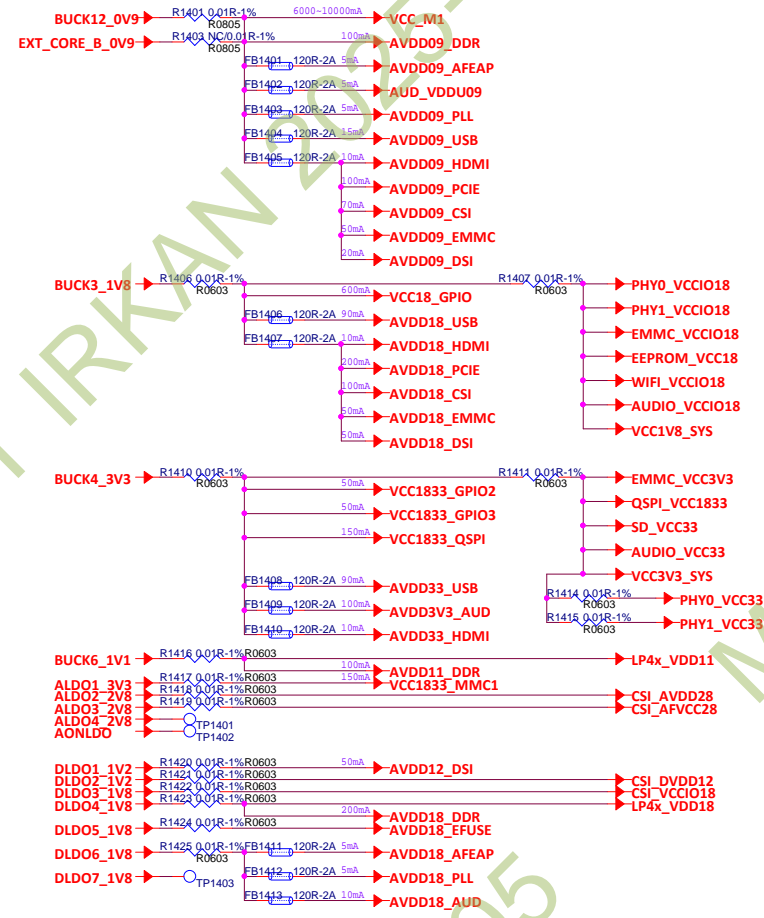
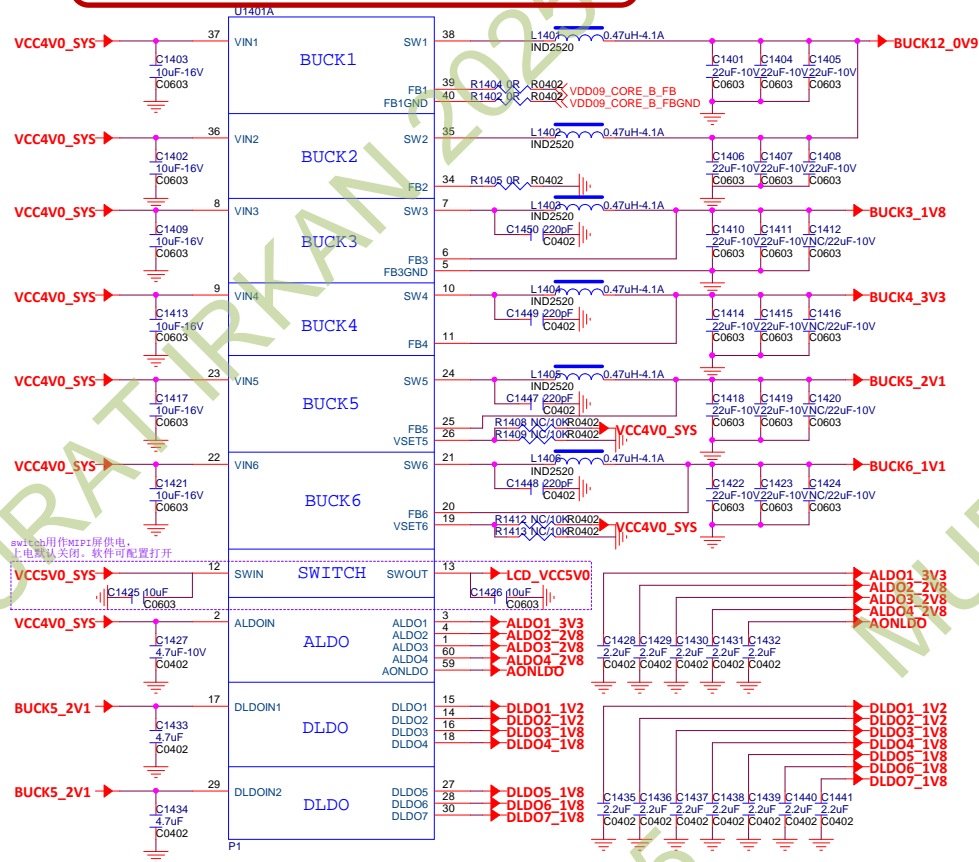


VCC4V0_SYS



P1

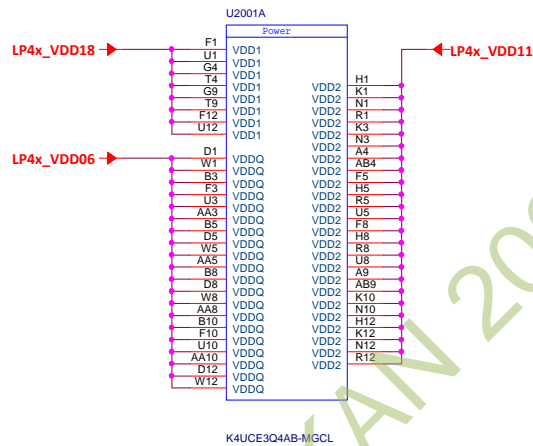
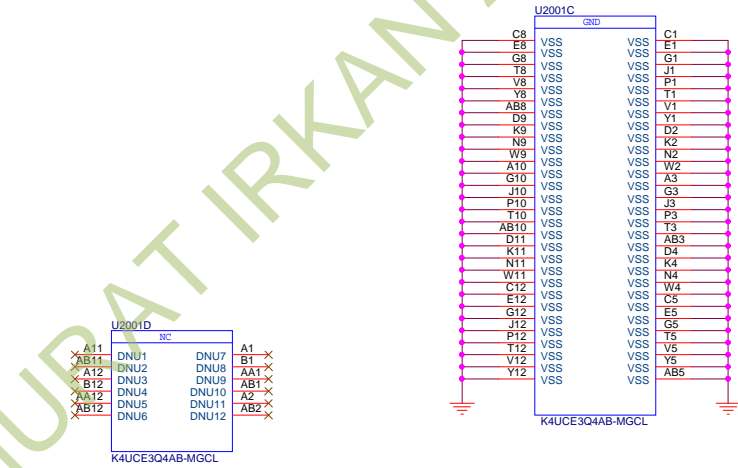
GÜÇ DAĞILIMI ŞEMASI



LPDDR4X

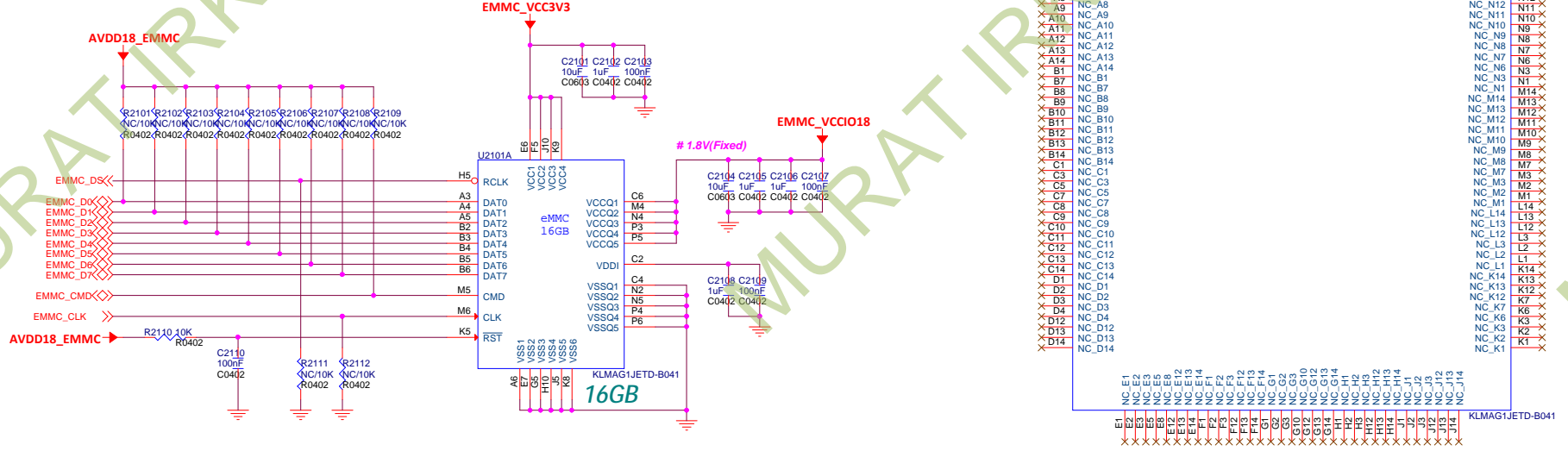
LPDDR4 HAFIZA MODÜLÜ-KINGSTON VEYA SAMSUNG

NOTE:CKE2/CS2/ZQ2 NC IN SAMSUNG



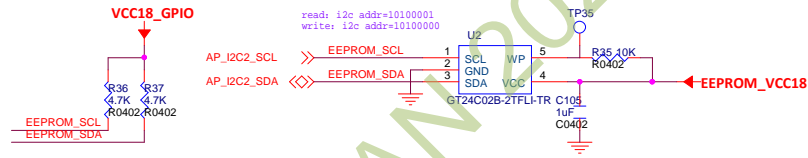
EMMC

MULTİ MEDYA KART SİSTEMİ

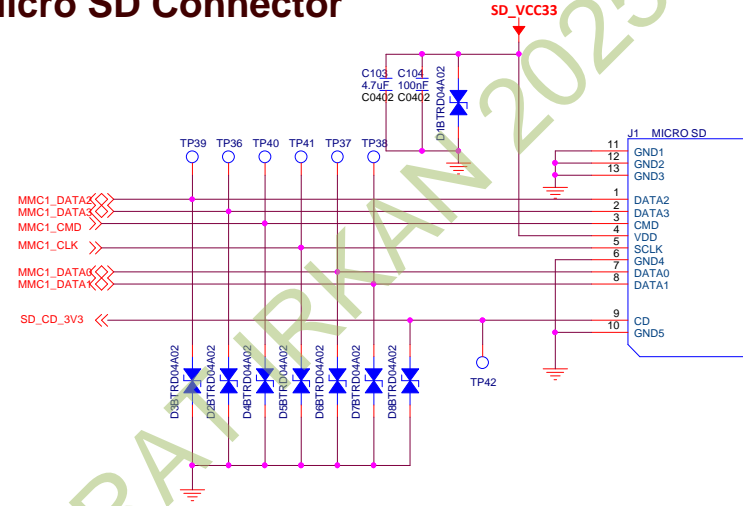


MİKRO -SD VE FLASH BELLEK + EEPROM HAFIZA KART

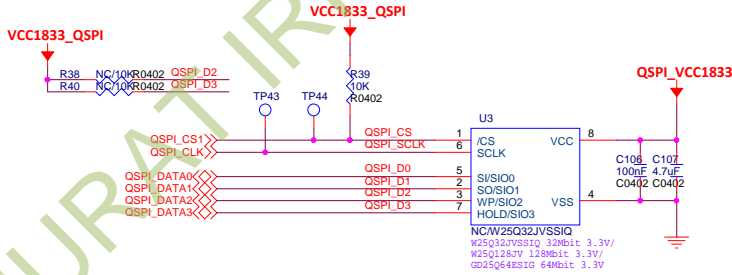
EEPROM



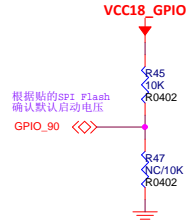
Micro SD Connector



SPI FLASH



Flash Boot voltage sel



GPIO 90	Function
0	1V8
1	3V3

boot download sel

QSPI_DATA3	Function
0	启动
1	下载

download sel

QSPI_DATA2	Function
0	USB
1	UART

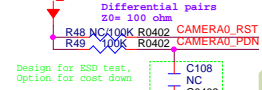
Boot SEL

QSPI_DATA1	QSPI_DATA0	Function
0	0	TF Card -> EMMC
0	1	TF Card -> SPI NOR
1	0	TF Card -> SPI NAND
1	1	TF Card -> SD

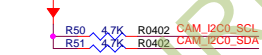
CAMERA

KAMERA SİSTEMİ

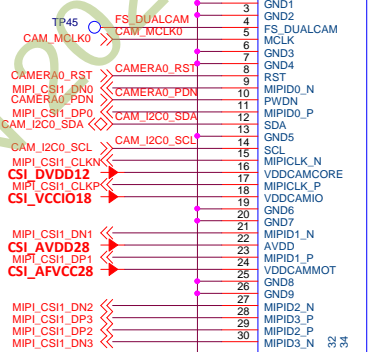
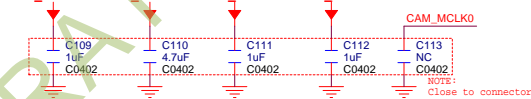
VCC18_GPIO



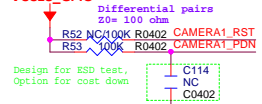
VCC18_GPIO



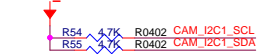
CSI_AFVCC28 CSI_AVDD28 CSI_VCCIO18 CSI_DVDD12



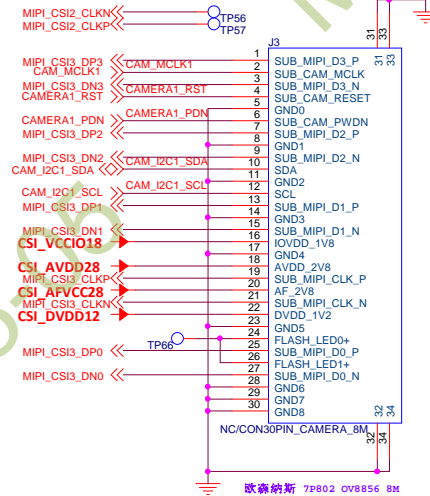
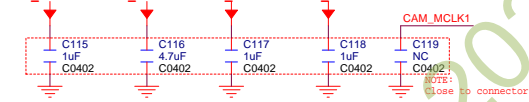
VCC18_GPIO



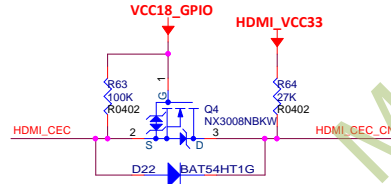
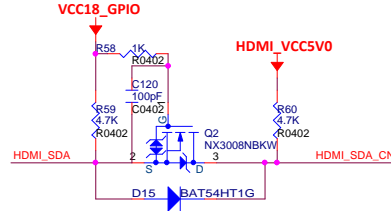
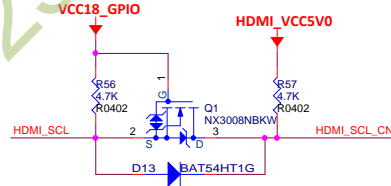
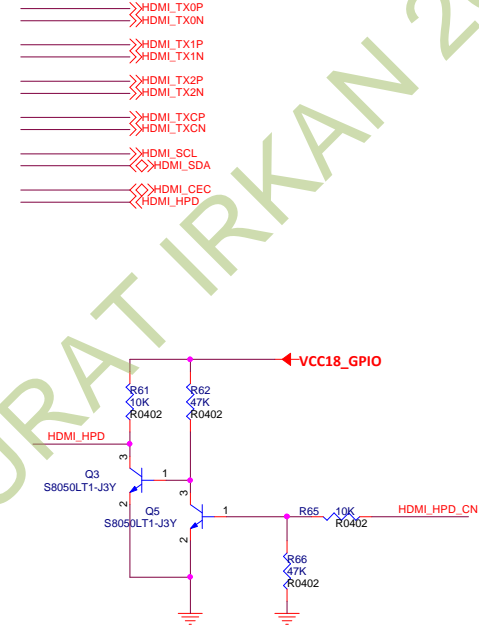
VCC18_GPIO



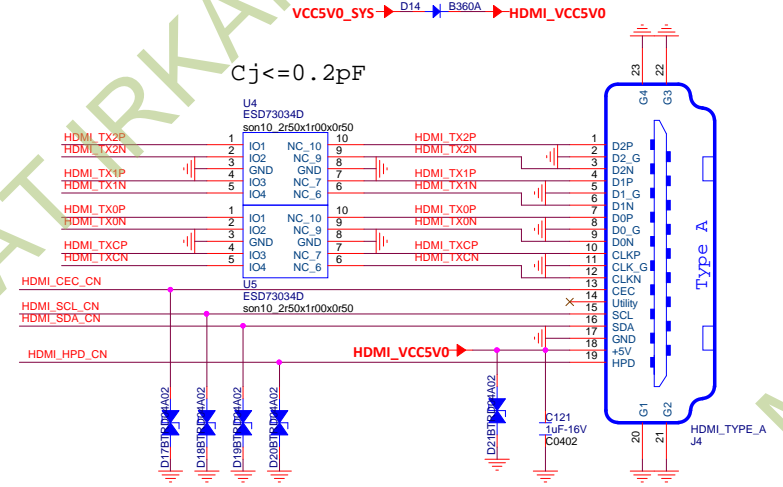
CSI_AFVCC28 CSI_AVDD28 CSI_VCCIO18 CSI_DVDD12



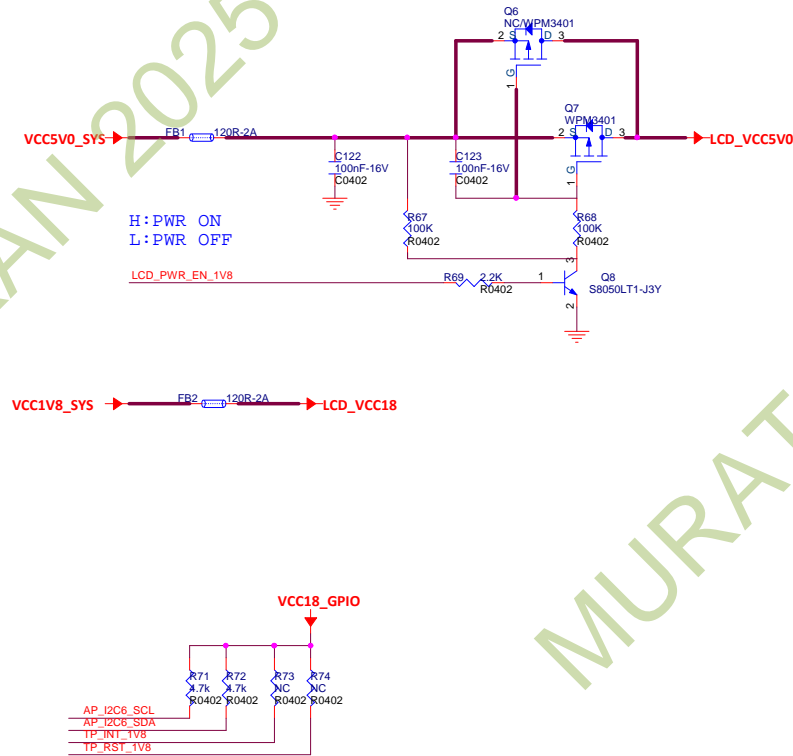
HDMI



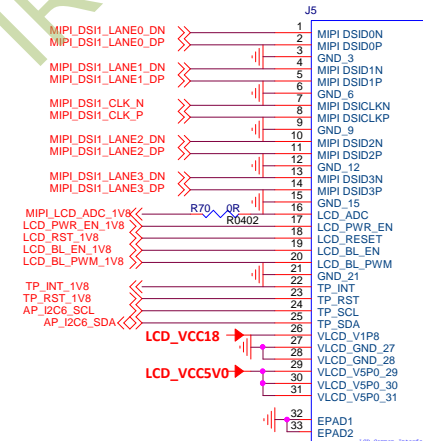
HDMI GÖRÜNTÜ PORTU



MIPI-DSI

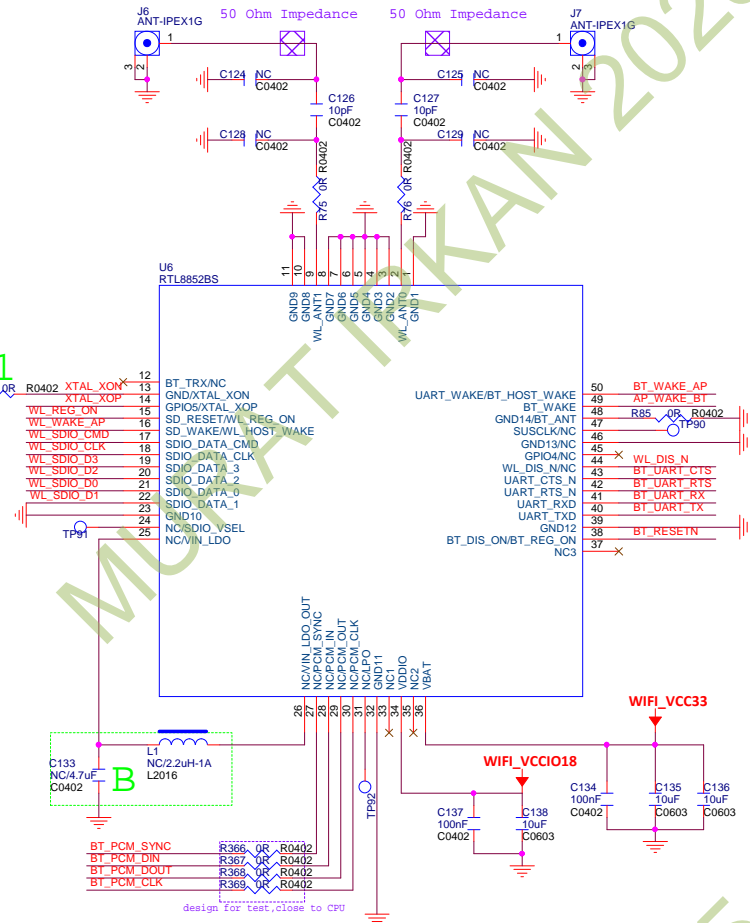


MIPI-SES



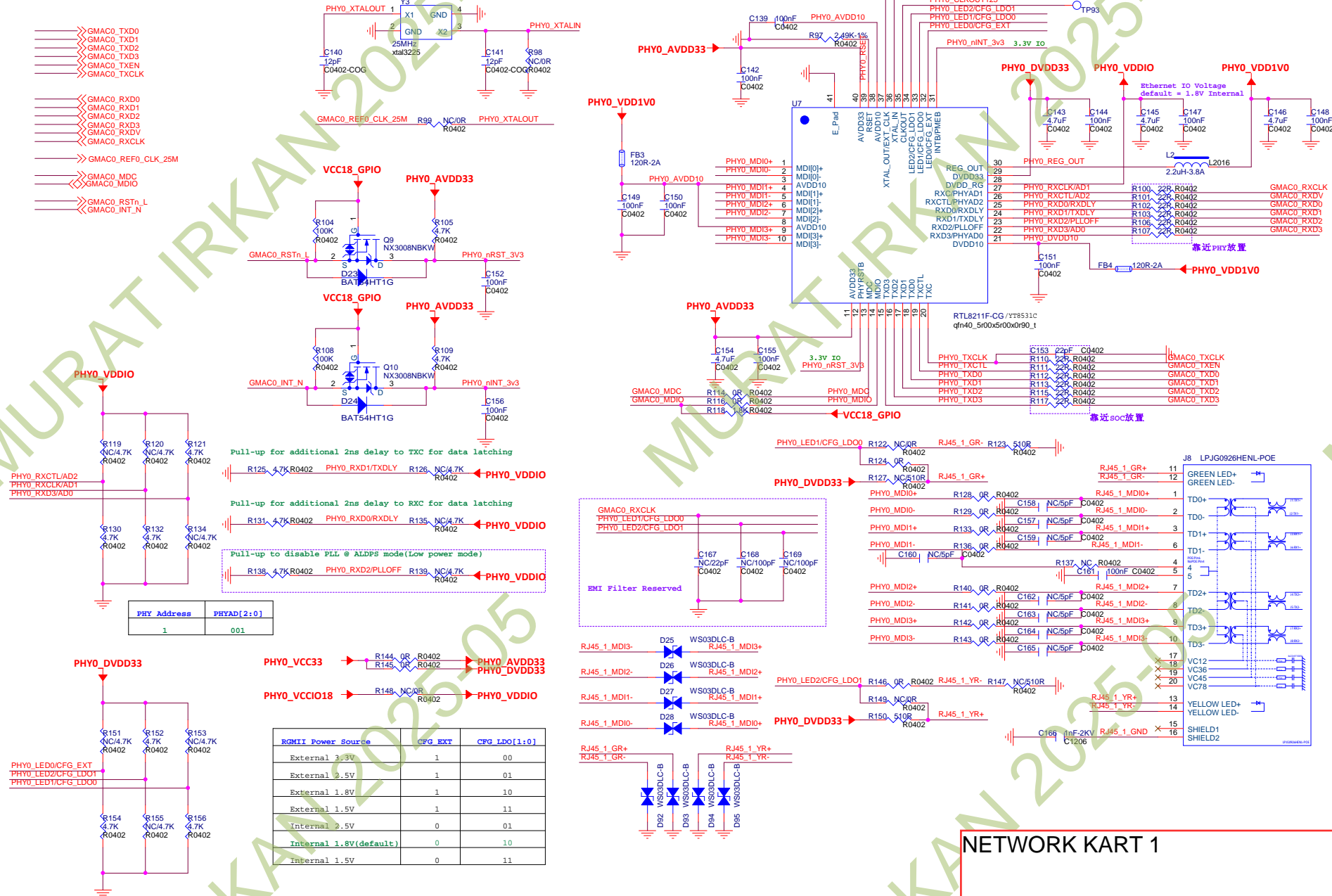
FH35C-31S-0.3SHW

REALTEK RTL8852BS WIFI KONTROL DEVRESİ (IC)



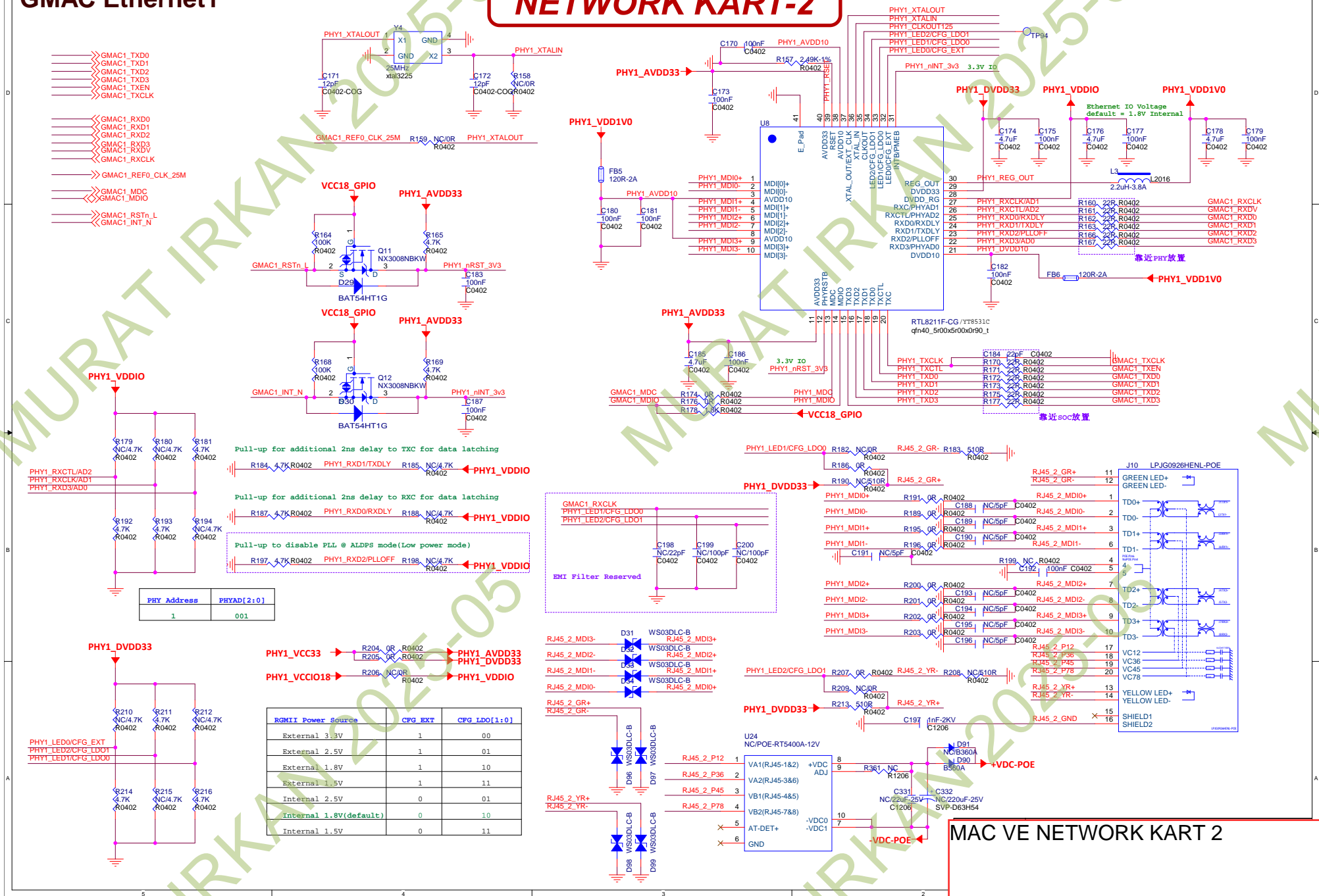
NETWORK KART- 1

GMAC Ethernet0



NETWORK KART 1

NETWORK KART-2

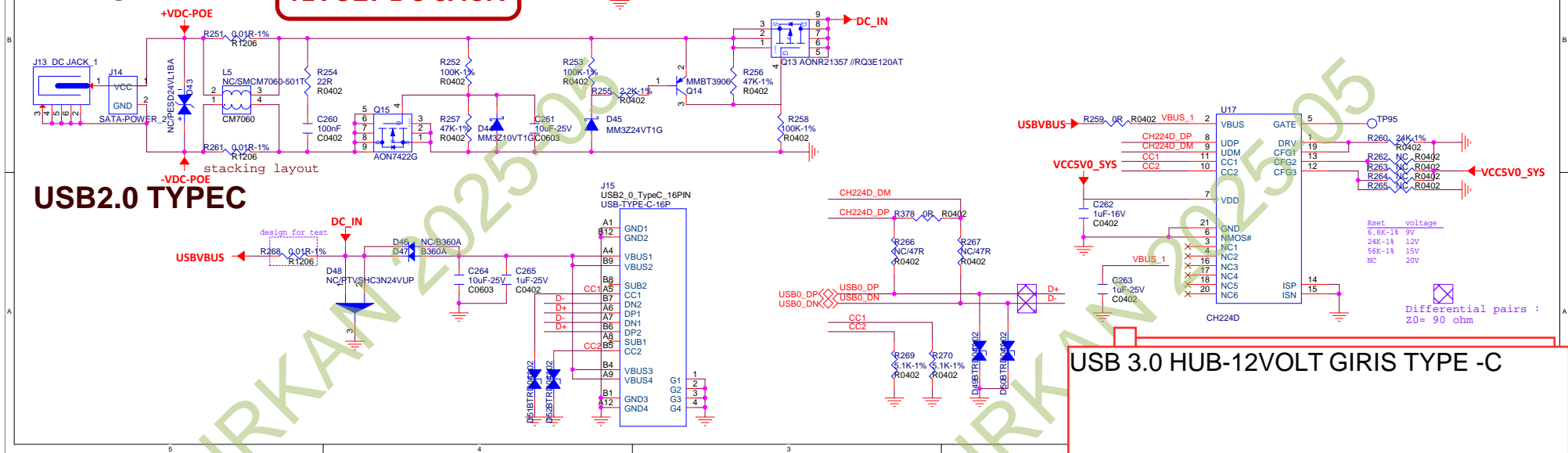


MAC VE NETWORK KART 2

USB 3 PORT-HUB



12VOLT DC JACK

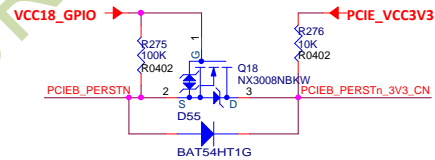
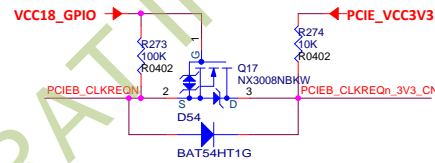
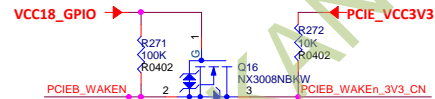


PCIEB

M.2 DISK PCI EXTERNAL PORT

PCIEB_REFCLK_P
PCIEB_REFCLK_N
PCIEB_TX0P
PCIEB_TX0N
PCIEB_RX0P
PCIEB_RX0N

PCIEB_TX1P
PCIEB_TX1N
PCIEB_RX1P
PCIEB_RX1N
PCIEB_PERSTN
PCIEB_WAKEN
PCIEB_CLKREQN



PCIEB_REFCLK_P
PCIEB_REFCLK_N

PCIEB_TX0P C266 220nF C0402
PCIEB_TX0N C267 220nF C0402

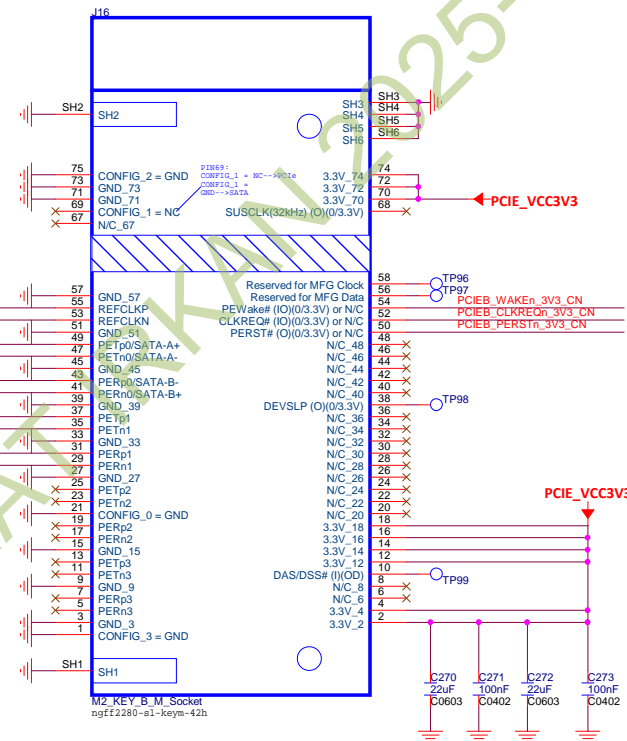
PCIEB_RX0P
PCIEB_RX0N

PCIEB_TX1P C268 220nF C0402
PCIEB_TX1N C269 220nF C0402

PCIEB_RX1P
PCIEB_RX1N

PCIEB_PERSTN
PCIEB_WAKEN

PCIEB_CLKREQN

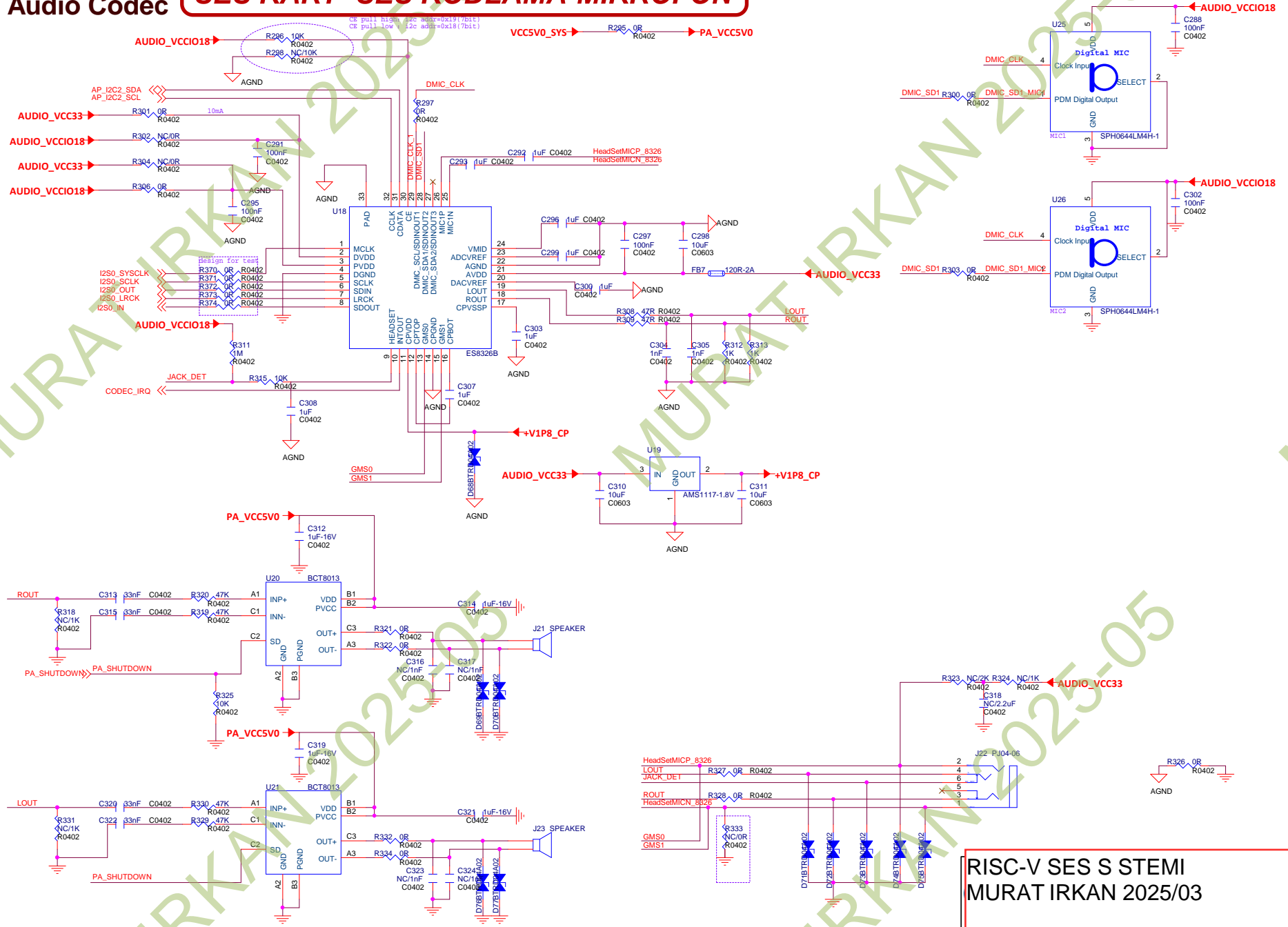


MIKRO SIM KART

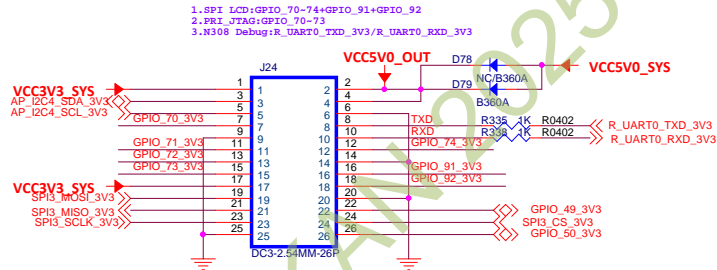


Audio Codec

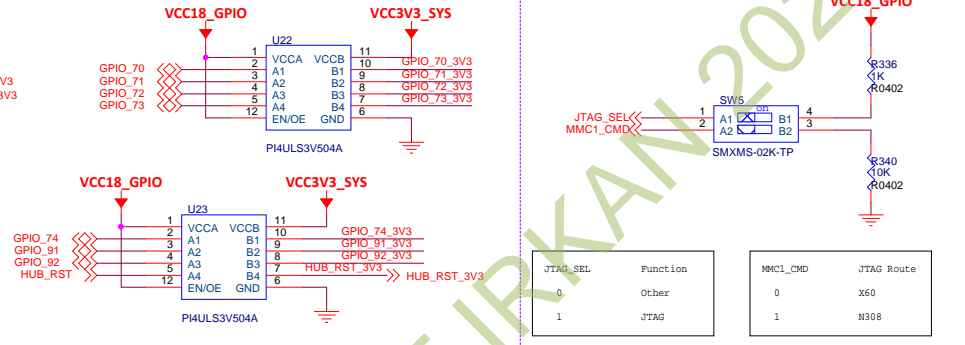
SES KART- SES KODLAMA-MIKROFON



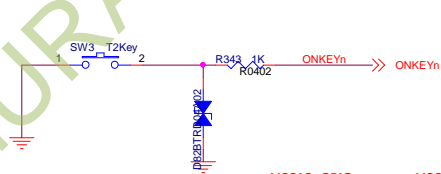
26 pin GPIO



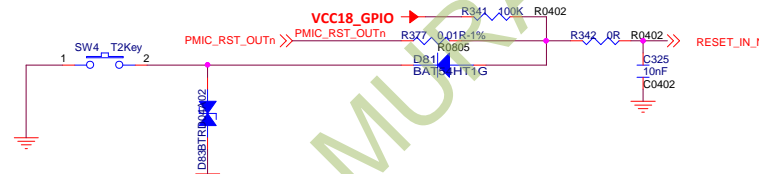
JTAG SEL



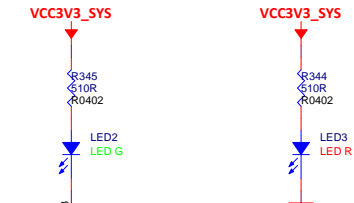
PowerON



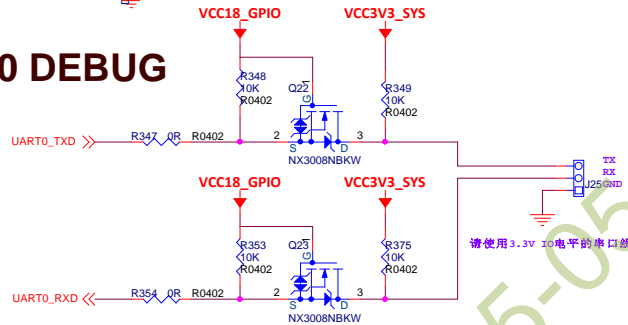
REST



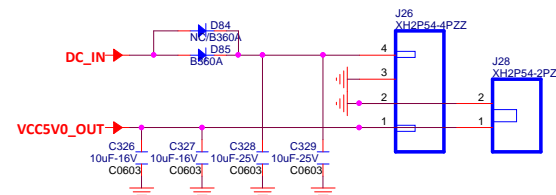
LED



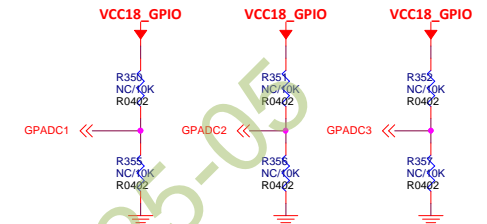
X60 DEBUG



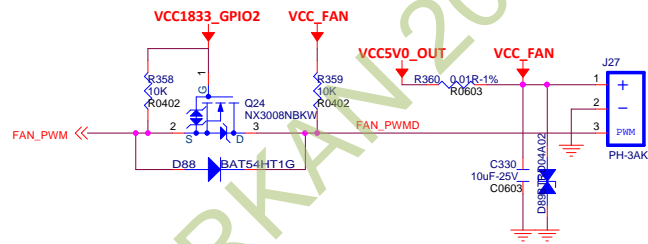
SATA HDD



ADC



FAN



Mark Port

