H101
MountingHole_Pad
GND

MPU	1W	
WIFI	1W	
LCD	1W	
USB	2.5W	
MODULE	1W	
bat chargering	2A	
max usb current		

LCD

File: LCD.kicad_sch

IO_Perph_Conn

File: IO_Perph_Conn.kicad_sch

MPU_PWR

File: MPU_PWR.kicad_sch

USB

File: USB.kicad_sch

RCC_BOOT_RST_DEBUG

File: RCC_BOOT_RST_DEBUG.kicad_sch

PWR

File: PWR.kicad_sch

WIFI

File: WIFI.kicad_sch

HS_intrf

File: HS_intrf.kicad_sch

DDR

File: DDR.kicad_sch

FLASH_SD

File: FLASH_SD.kicad_sch

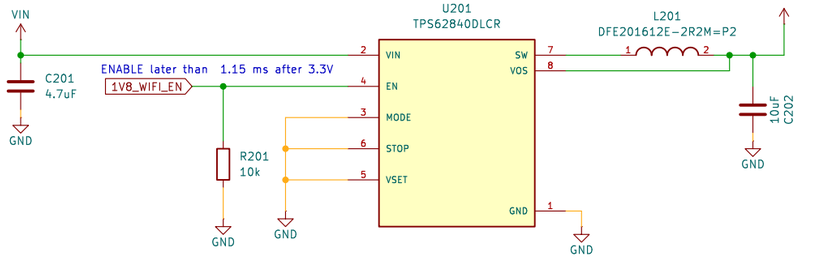
DECKTRIX-LAB

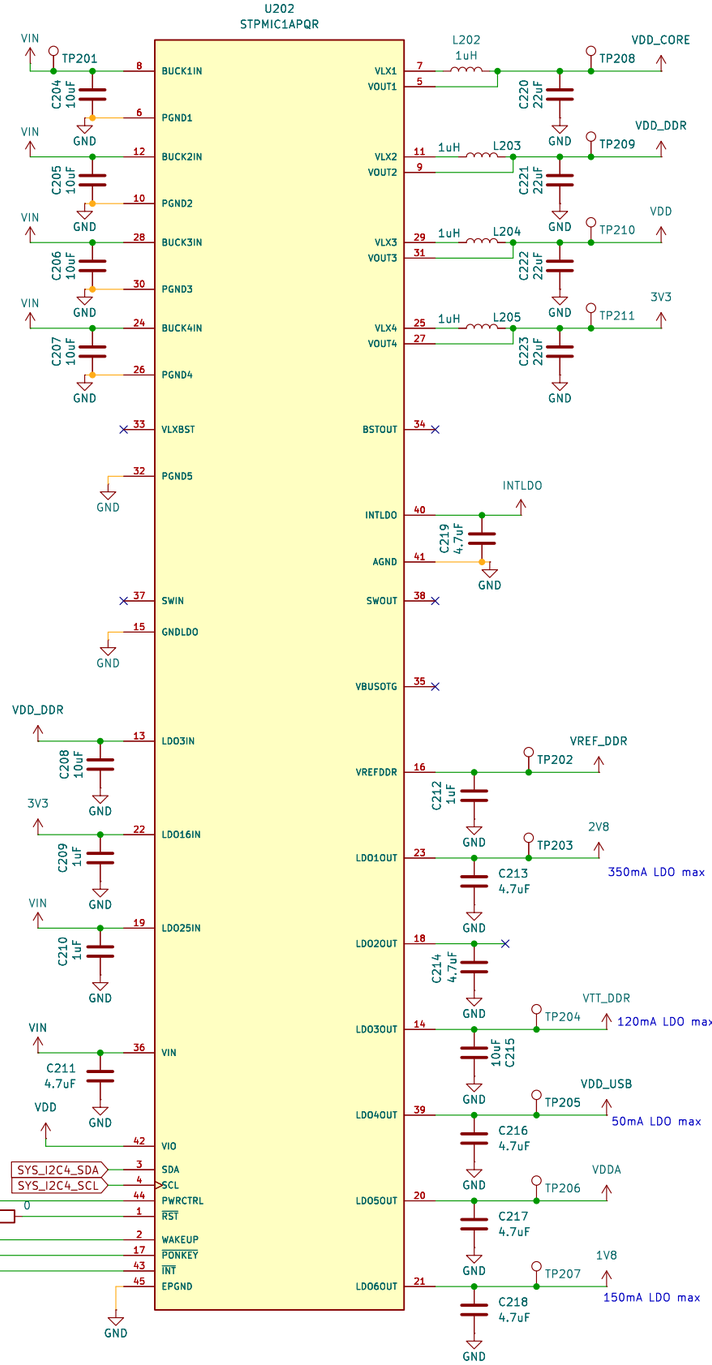
Sheet: /
File: MPU_MOD.kicad_sch

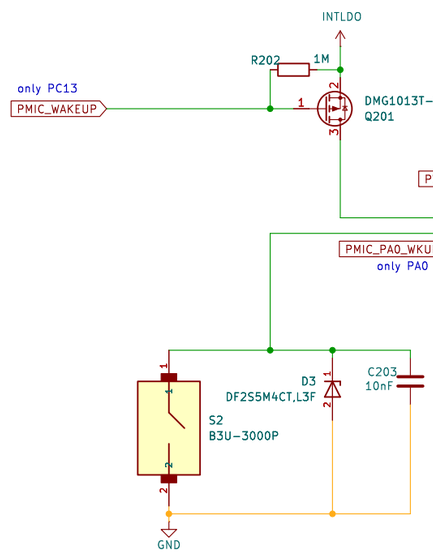
Title: DECKTRIX

Size: A3	Date:	**Rev:**
KiCad E.D.A. 9.0.1		Id: 1/11

PWR







Caution: VDD3V3_USBHS must not be present unless VDDA1V8_REG is present, otherwise permanent STM32MP15x lines damage can occur. It must be ensured by PMIC ranking order or with external component in case of discrete component power-supply implementation.

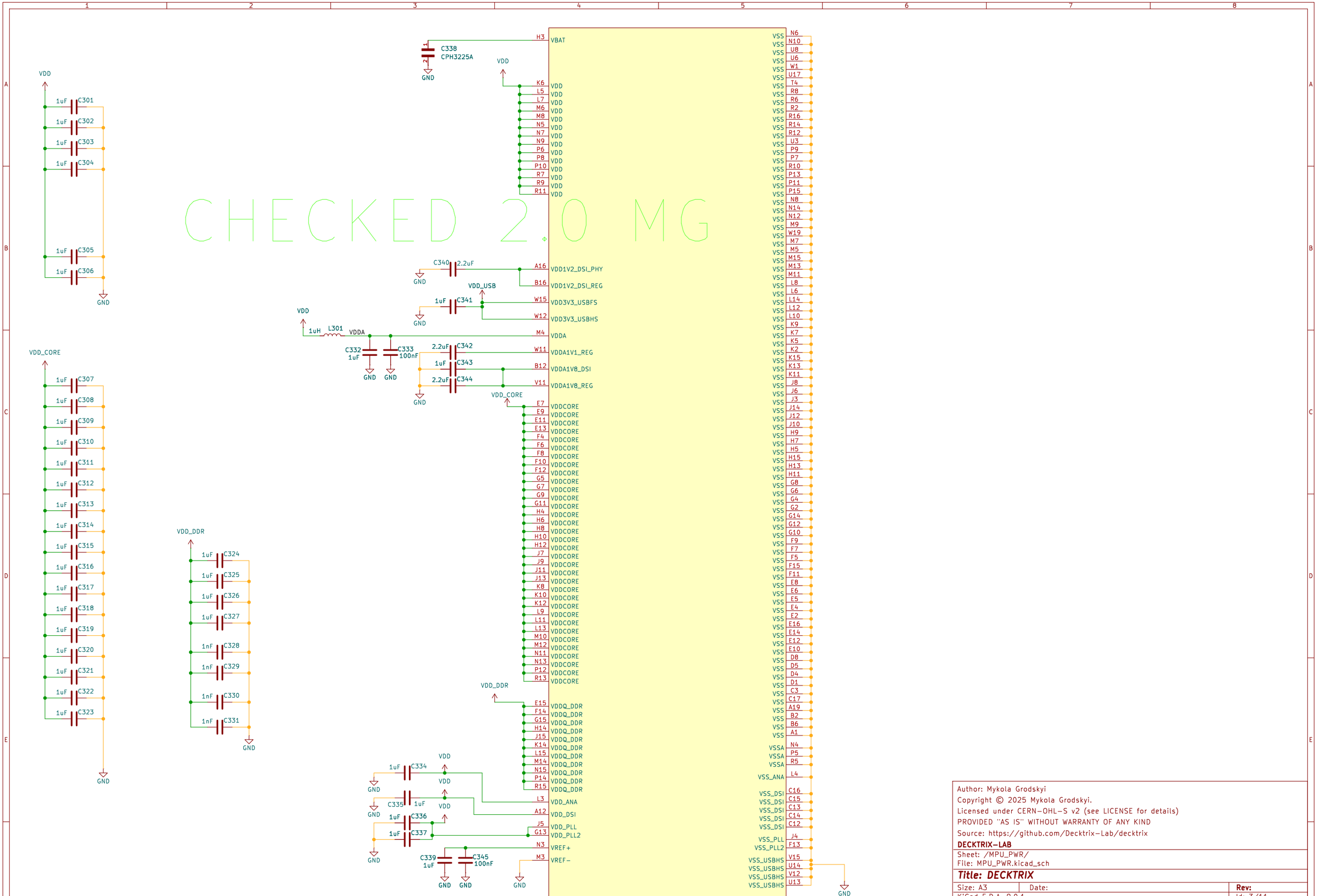
CHECKED 2.0 MG

DECKTRIX-LAB

Sheet: /PWR/
File: PWR.kicad_sch

Title: DECKTRIX

Size: A3	Date:	**Rev:**
KiCad E.D.A. 9.0.1		Id: 2/11



Author: Mykola Grodskyi

Source: https://github.com/Decktrix-Lab/decktrix

DECKTRIX-LAB

Sheet: /MPU_PWR/
File: MPU_PWR.kicad_sch

Title: DECKTRIX

Size: A3	Date:	**Rev:**
KiCad E.D.A. 9.0.1		Id: 3/11

U402
MT41K256M16TW-107_P
P
IPC-7351B
1.20mm

55 Ohm impedance for single-end signals
100 Ohm impedance for differencial signals

Length of DQS_N/DQS_P must be from 0 to 590 mils (14.986 mm) shorter than CLK_N / CLK_P length (CLK_N/CLK_P must be the longest traces).

• The PCB bottom layer must be used for A/C distribution to memory devices. The top layer is reserved for connections to the memory chip (stubs) and A/C bus crossing.

Length of A/C must be from 0 to 40 mils (1.016 mm) shorter than CLK_N / CLK_P length

CLK_N / CLK_P maximum length 4.72 inch (12 cm)

CHECKED 2.0 MG

To connect to VDD_DDR power plane

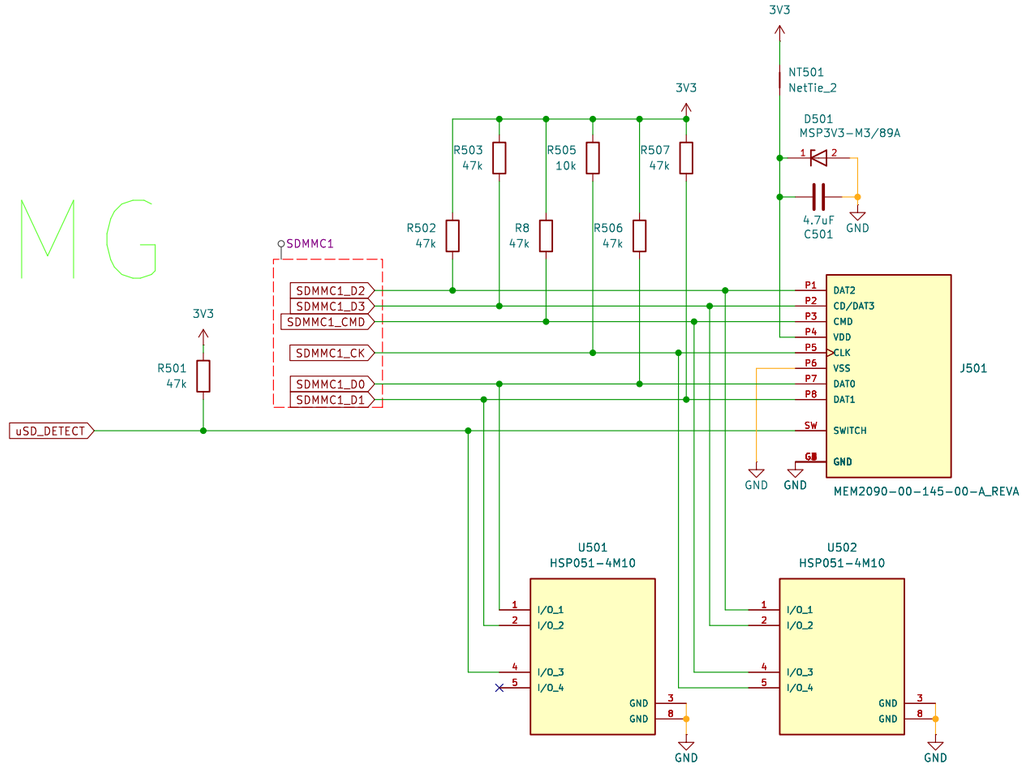
DECKTRIX-LAB

Sheet: /DDR/
File: DDR.kicad_sch

Title: DECKTRIX

Size: A3	Date:	**Rev:**
KiCad E.D.A. 9.0.1		Id: 4/11

CHECKED 2.0 MG



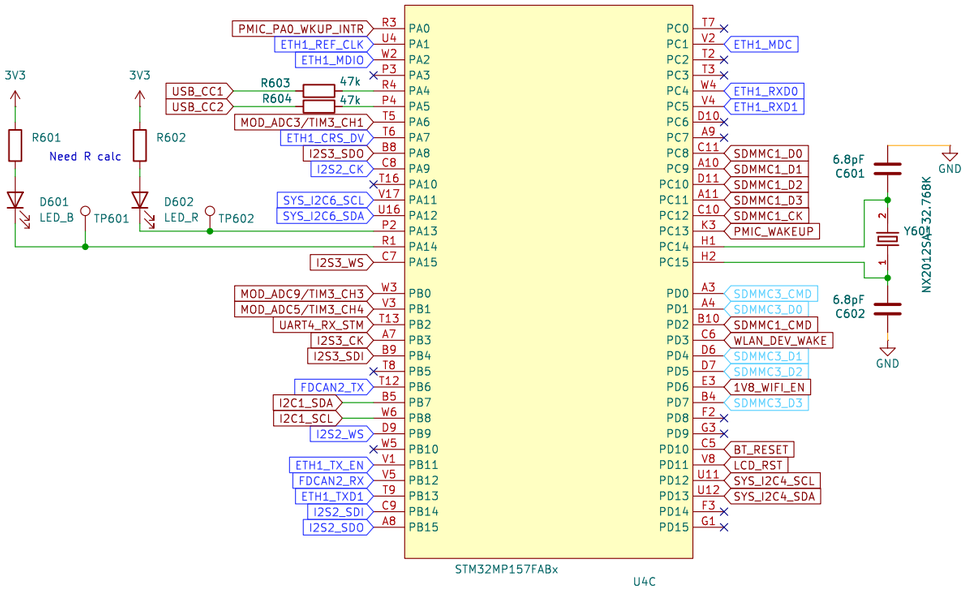
DECKTRIX-LAB

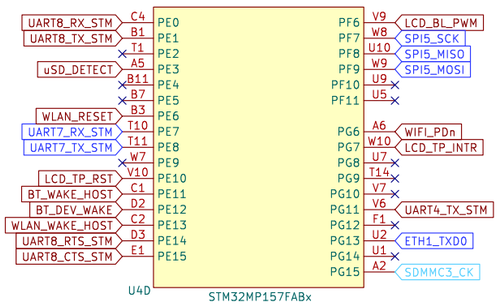
Sheet: /FLASH_SD/
File: FLASH_SD.kicad_sch

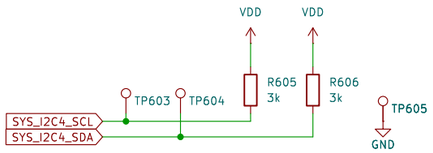
Title: DECKTRIX

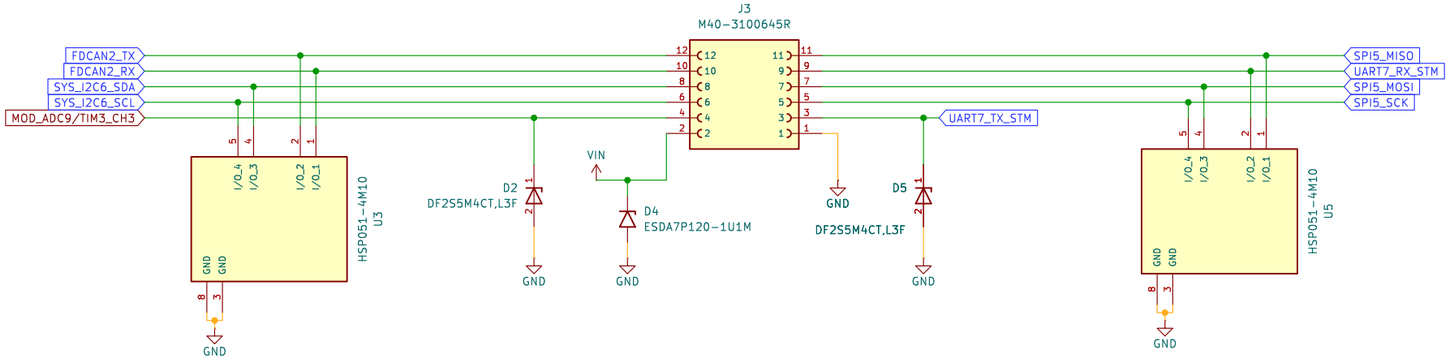
Size: A3	Date:	**Rev:**
KiCad E.D.A. 9.0.1		Id: 5/11

CHECKED 2.0 MG









SYS_I2C4_SDA	PD13	U12
SYS_I2C4_SCL	PB6	T12
SDMMC1_D0	PC8	C11
SDMMC1_D1	PC9	A10
SDMMC1_D2	PC10	D11
SDMMC1_D3	PC11	A11
SDMMC1_CK	PC12	C10
SDMMC1_CMD	PD2	B10
SDMMC2_D0	PB14	C9
SDMMC2_D1	PB15	A8
SDMMC2_D2	PB3	A7
SDMMC2_D3	PB4	B9
SDMMC2_D4	PA8	B8
SDMMC2_D5	PA9	C8
SDMMC2_D6	PE5	B7
SDMMC2_D7	PD3	C6
SDMMC2_CK	PE3	A5
SDMMC2_CMD	PG6	A6
SDMMC3_D0	PD1	A4
SDMMC3_D1	PD4	D6
SDMMC3_D2	PD5	D7
SDMMC3_D3	PD7	B4
SDMMC3_CK	PG15	A2
SDMMC3_CMD	PD0	A3
UART4_TX_STM	PG11	V6
UART4_RX_STM	PB2	T13
UART8_TX_STM	PE1	B1
UART8_RX_STM	PE0	C4
UART8_CTS_STM	PE15	E1
UART8_RTS_STM	PE14	D3
I2S2_SDI	PB14	T5
I2S2_CK	PA9	P4
I2S2_WS	PB9	R4
I2S2_SDO	PB15	T6
I2S3_SDI	PB4	T2
I2S3_CK	PB3	W5
I2S3_WS	PA15	V5
I2S3_SDO	PA8	B8
UART7_RX_STM	PE7	T10
UART7_TX_STM	PE8	T11
SYS_I2C6_SDA	PA12	U16
SYS_I2C6_SCL	PA11	V17
FDCAN2_RX	PB12	V5
FDCAN2_TX	PB6	T12

ETH1_REF_CLK	PA1	U4
ETH1_MDIO	PA2	W2
ETH1_CRS_DV	PA7	T6
ETH1_TX_EN	PB11	V1
ETH1_TXD1	PB13	T9
ETH1_MDC	PC1	V2
ETH1_RXD0	PC4	W4
ETH1_RXD1	PC5	V4
ETH1_TXD0	PG13	U2
SPI5_SCK	PF7	W8
SPI5_MISO	PF8	U10
SPI5_MOSI	PF9	W9
I2C1_SDA	PB7	B5
I2C1_SCL	PB8	W6
LCD_BL_PWM	PF6	V9

DECKTRIX-LAB

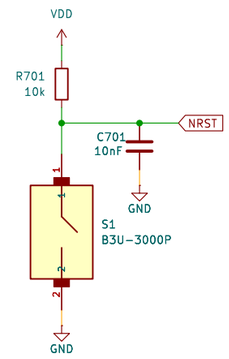
Sheet: /IO_Perph_Conn/
File: IO_Perph_Conn.kicad_sch

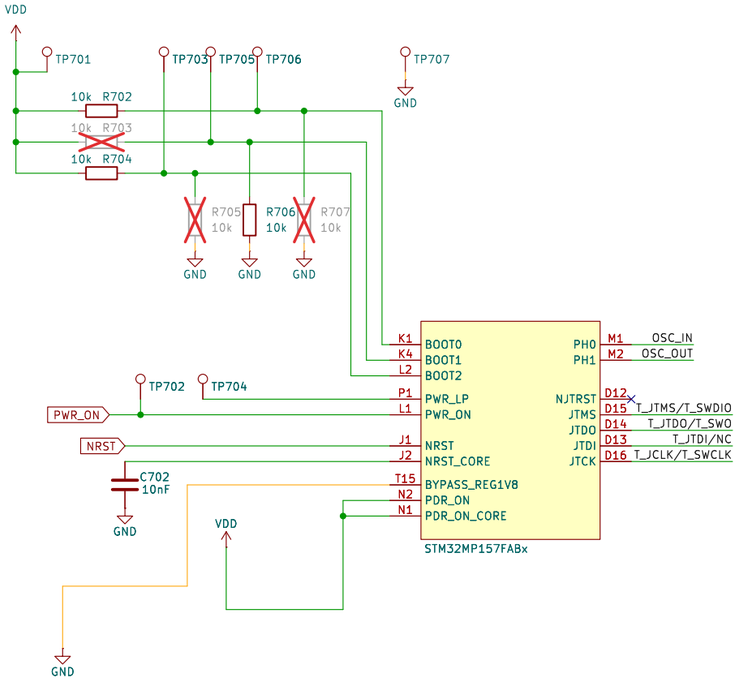
Title: DECKTRIX

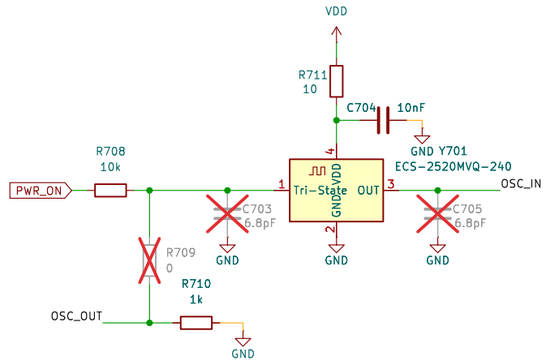
Size: A3	Date:	**Rev:**
KiCad E.D.A. 9.0.1		Id: 6/11

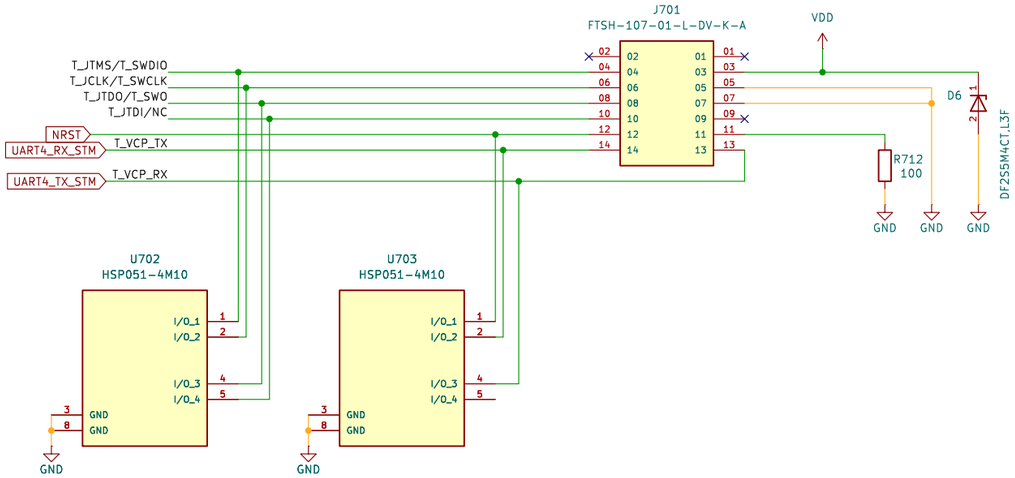
RCC_BOOT_RST_DEBUG

CHECKED 2.0 MG









U4E

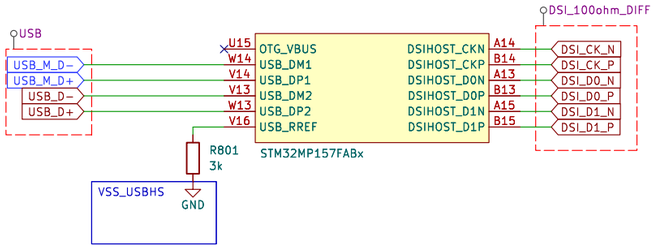
DECKTRIX-LAB

Sheet: /RCC_BOOT_RST_DEBUG/
File: RCC_BOOT_RST_DEBUG.kicad_sch

Title: DECKTRIX

Size: A3	Date:	**Rev:**
KiCad E.D.A. 9.0.1		Id: 7/11

CHECKED 2.0 MG



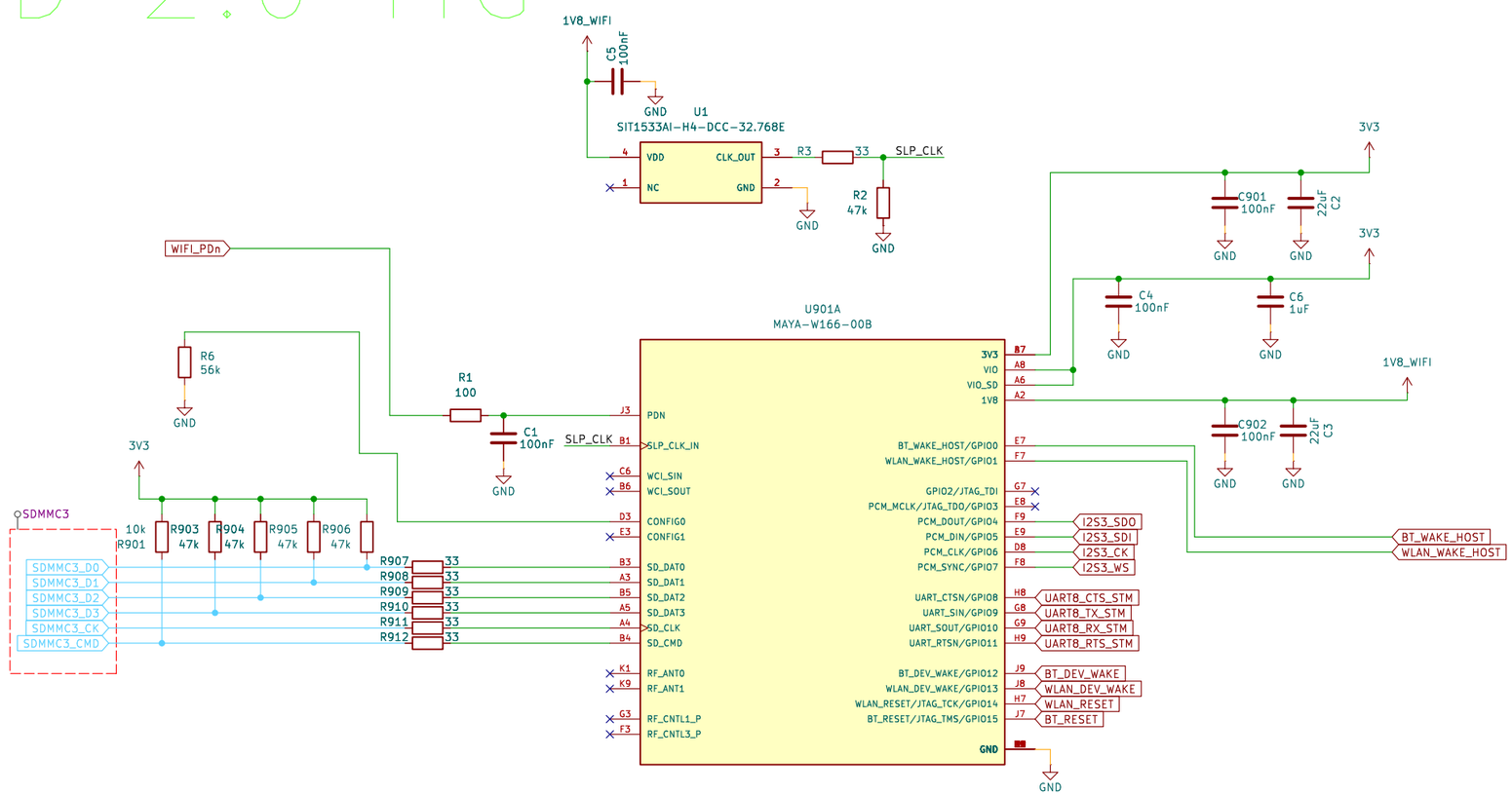
DECKTRIX-LAB

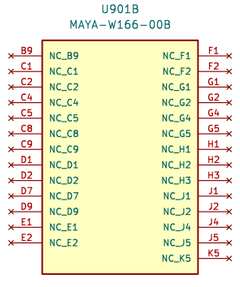
Sheet: /HS_intrf/
File: HS_intrf.kicad_sch

Title: DECKTRIX

Size: A3	Date:	**Rev:**
KiCad E.D.A. 9.0.1		Id: 8/11

CHECKED 2.0 MG





Conf settings during boot. internal pull-up exist.
Don't interfere with it through UART or a pull-down on the input.

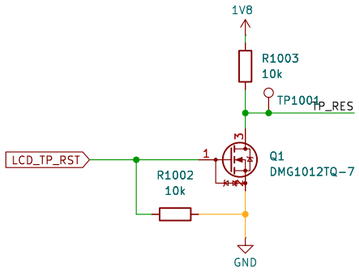
Configuration bits	Pin name	Pin number	Configuration settings		
CON[9]	WLAN_WAKE_HOST	F7	Reserved set to 1		
CON[8]	UART_RTSn	H9	Reserved set to 1		
CON[7]	UART_CTSn	H8	Reserved set to 1		
CON[5]	RF_CNTL3_P	F3	Reserved set to 1		
Firmware boot options					
CON[1:0]	CONFIG[1:0]	CONFIG[1]: E3 CONFIG[0]: D3	**Strap value**	**Wi-Fi**	**Bluetooth**
			10	SDIO	UART
			Others	Reserved	Reserved

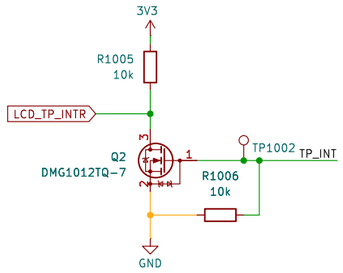
DECKTRIX-LAB

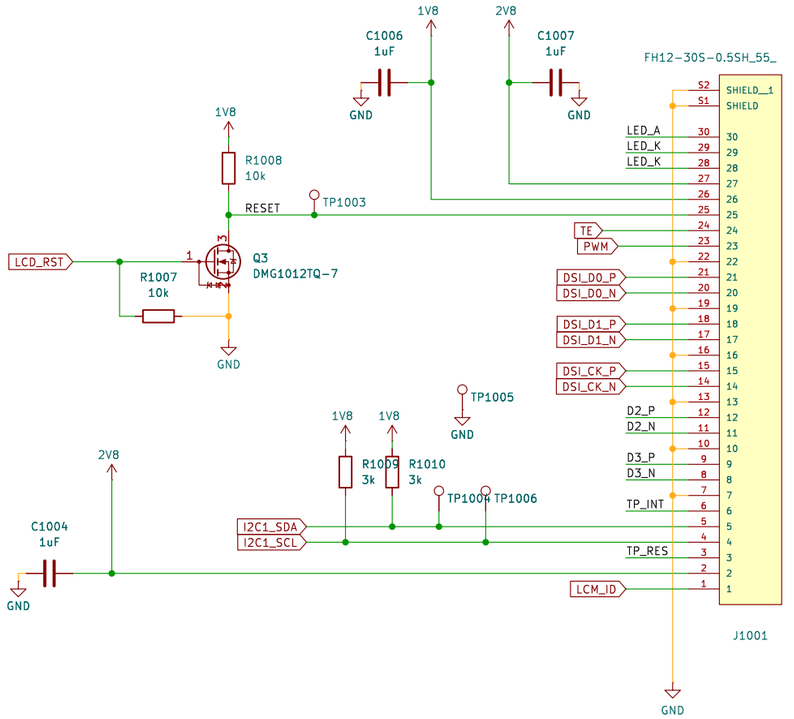
Sheet: /WIFI/
File: WIFI.kicad_sch

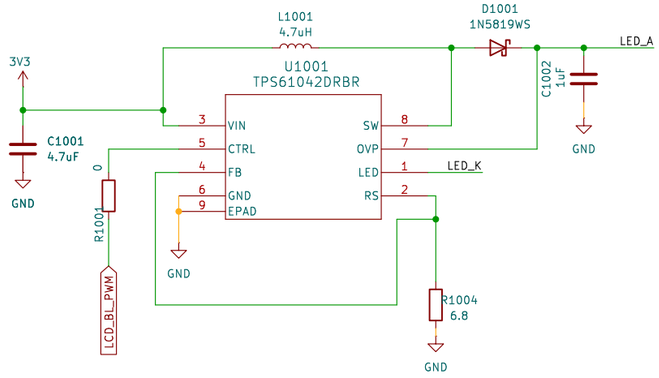
Title: DECKTRIX

Size: A3	Date:	**Rev:**
KiCad E.D.A. 9.0.1		Id: 9/11

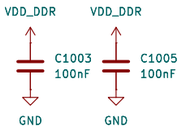








The traces use the **VDD_DDR** reference plane.



CHECKED 2.0 MG

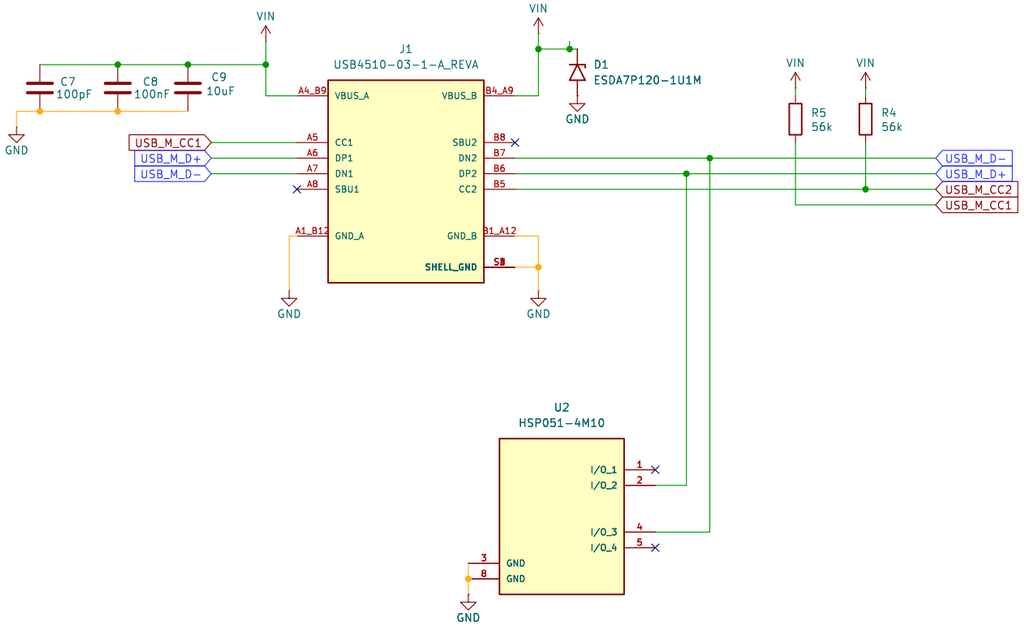
DECKTRIX-LAB

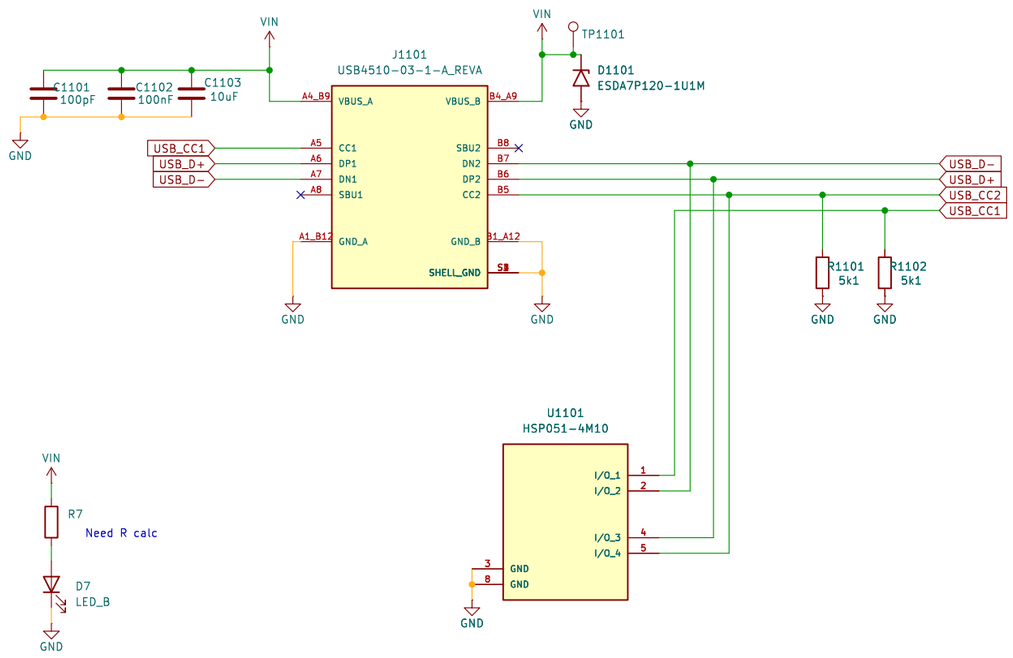
Sheet: /LCD/
File: LCD.kicad_sch

Title: DECKTRIX

Size: A3	Date:	**Rev:**
KiCad E.D.A. 9.0.1		Id: 10/11

CHECKED 2.0 MG





DECKTRIX-LAB

Sheet: /USB/
File: USB.kicad_sch

Title: DECKTRIX

Size: A3	Date:	**Rev:**
KiCad E.D.A. 9.0.1		Id: 11/11