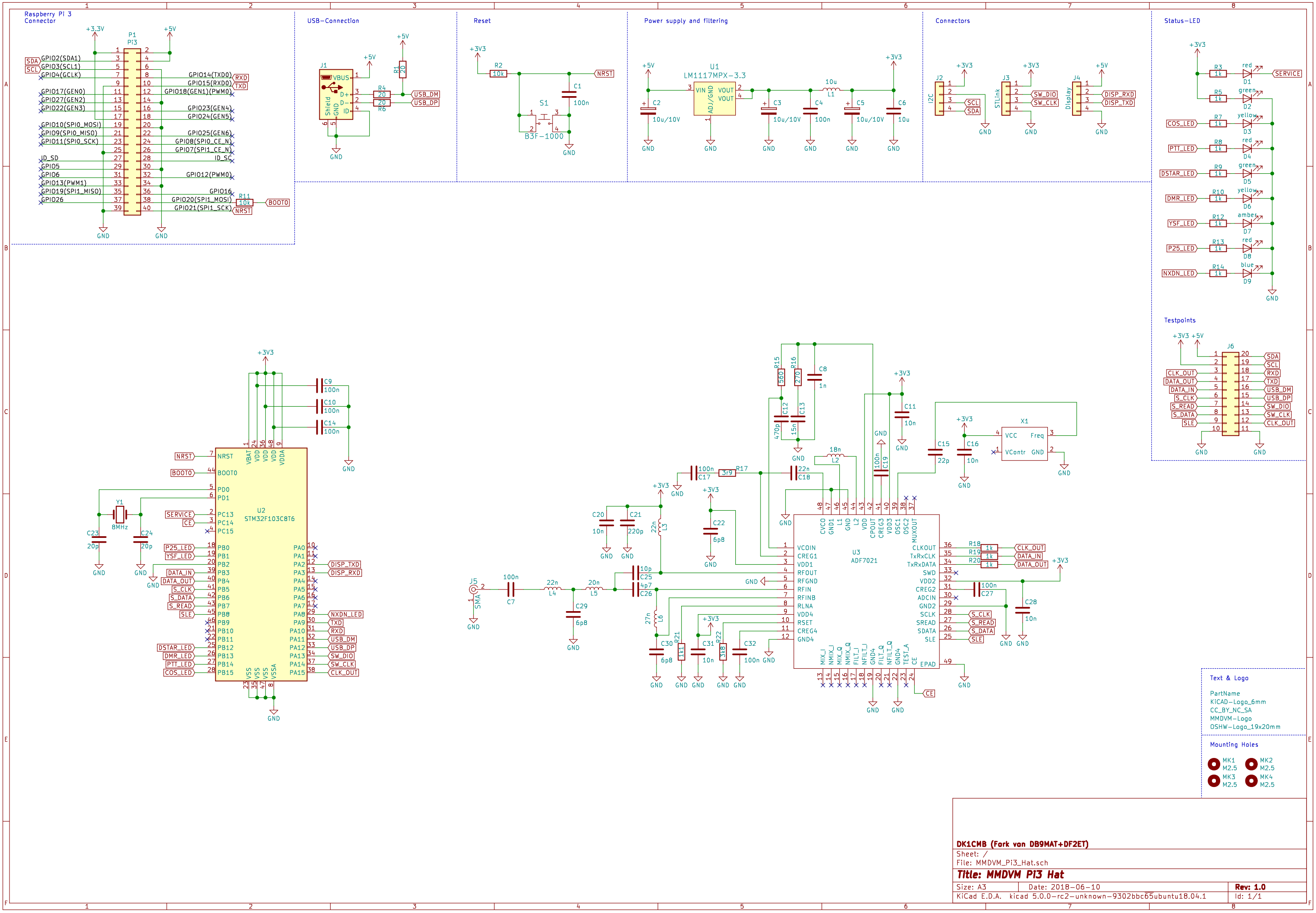
Raspberry Pi 3 Connector
P1
PI3
+3.3V
+5V
SDA
SCL
GPIO2(SDA1)
GPIO3(SCL1)
GPIO4(GCLK)
GPIO14(TXD0)
GPIO15(RXD0)
RXD
TXD
GPIO17(GEN0)
GPIO27(GEN2)
GPIO22(GEN3)
GPIO18(GEN1)(PWM0)
GPIO23(GEN4)
GPIO24(GEN5)
GPIO10(SPI0_MOSI)
GPIO9(SPI0_MISO)
GPIO11(SPI0_SCK)
GPIO25(GEN6)
GPIO8(SPI0_CE_N)
GPIO7(SPI1_CE_N)
ID_SD
ID_SC
GPIO5
GPIO6
GPIO12(PWM0)
GPIO13(PWM1)
GPIO19(SPI1_MISO)
GPIO16
GPIO26
GPIO20(SPI1_MOSI)
GPIO21(SPI1_SCK)
R11
10k
BOOT0
NRST
GND
USB-Connection
J1
VBUS
D+
D-
ID
Shield
GND
R1
20
R4
20
R6
20
USB_DM
USB_DP
Reset
R2
10k
C1
100n
S1
B3F-1000
Power supply and filtering
U1
LM1117MPX-3.3
VIN
VOUT
ADJ/GND
C2
10u/10V
C3
10u/10V
C4
100n
L1
10u
C5
10u/10V
C6
10u
Connectors
J2
I2C
SCL
SDA
J3
STLink
SW_DIO
SW_CLK
J4
Display
DISP_RXD
DISP_TXD
Status-LED
R3
1k
red
D1
SERVICE
R5
1k
green
D2
COS_LED
R7
1k
yellow
D3
PTT_LED
R8
1k
red
D4
DSTAR_LED
R9
1k
green
D5
DMR_LED
R10
1k
yellow
D6
YSF_LED
R12
1k
amber
D7
P25_LED
R13
1k
red
D8
NXDN_LED
R14
1k
blue
D9
Testpoints
J6
SDA
SCL
RXD
TXD
USB_DM
USB_DP
SW_DIO
SW_CLK
CLK_OUT
DATA_OUT
DATA_IN
S_CLK
S_READ
S_DATA
SLE
U2
STM32F103C8T6
NRST
BOOT0
PD0
PD1
PC13
PC14
PC15
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PB8
PB9
PB10
PB11
PB12
PB13
PB14
PB15
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PA8
PA9
PA10
PA11
PA12
PA13
PA14
PA15
VBAT
VDD
VDDA
VSS
VSSA
Y1
8MHz
C23
20p
C24
20p
C9
100n
C10
100n
C14
100n
R15
560
R16
270
C8
1n
C12
470p
C13
15n
C11
10n
C15
22p
C16
10n
X1
VCC
Freq
VContr
GND
R17
3r9
C17
100n
C18
22n
L2
18n
C19
100n
C20
10n
C21
220p
L3
22n
C22
6p8
U3
ADF7021
VCOIN
CREG1
VDD1
RFOUT
RFGND
RFIN
RFINB
RLNA
VDD4
RSET
CREG4
GND4
CLKOUT
TxRxCLK
TxRxDATA
SWD
VDD2
CREG2
ADCIN
GND2
SCLK
SREAD
SDATA
SLE
EPAD
MUXOUT
CE
R18
R19
R20
1k
J5
SMA
C7
100n
L4
22n
L5
20n
C29
6p8
C25
10p
C26
4p7
L6
27n
C30
6p8
R21
1k1
C31
10n
R22
318
C32
100n
C27
100n
C28
10n
Text & Logo
PartName
KiCAD-Logo_6mm
CC_BY_NC_SA
MMDVM-Logo
DSHW-Logo_19x20mm
Mounting Holes
MK1
M2.5
MK2
M2.5
MK3
M2.5
MK4
M2.5
DK1CMB (Fork van DB9MAT+DF2ET)
Sheet: /
File: MMDVM_Pi3_Hat.sch
Title: MMDVM Pi3 Hat
Size: A3
Date: 2018-06-10
Rev: 1.0
KiCad E.D.A. kicad 5.0.0-rc2-unknown-9302bbc65ubuntu18.04.1
Id: 1/1