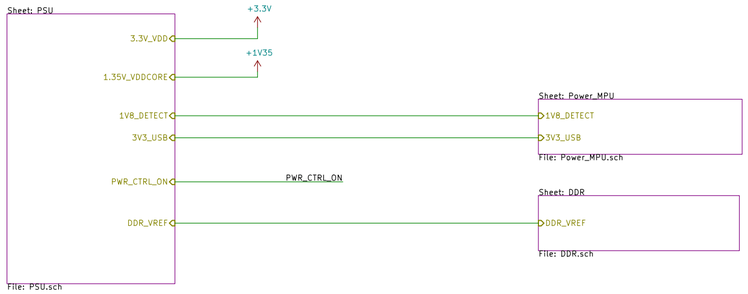
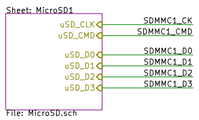
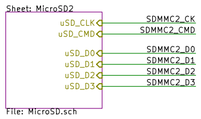
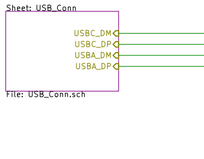
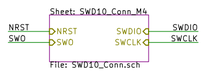
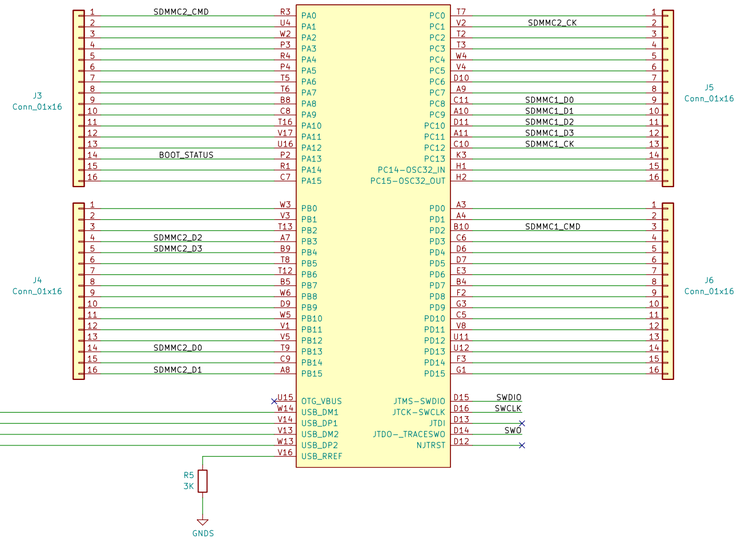


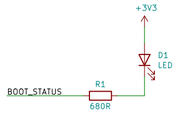


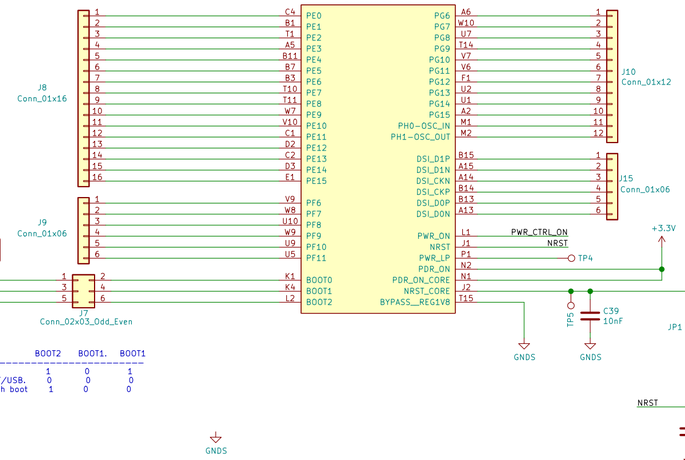




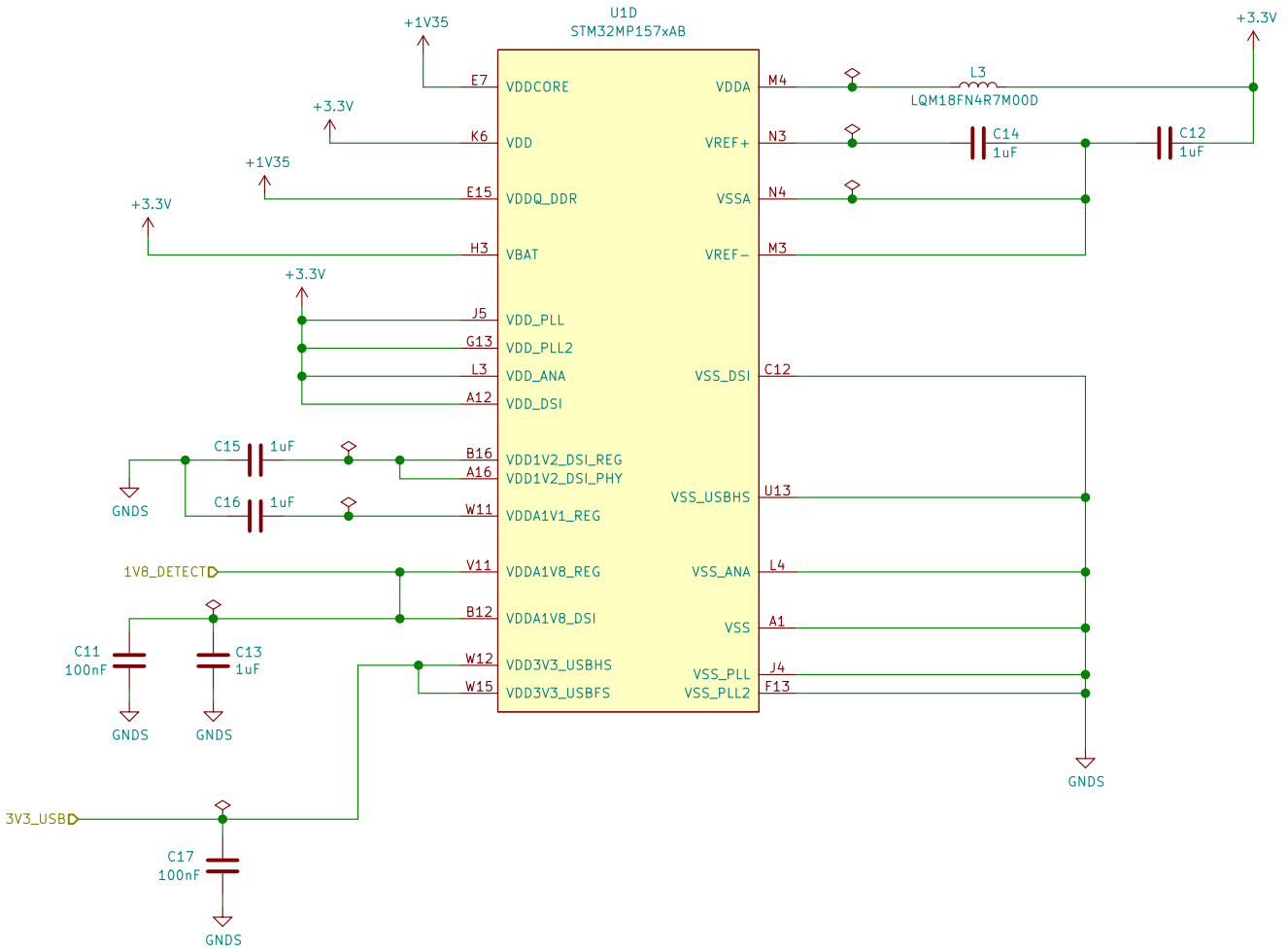


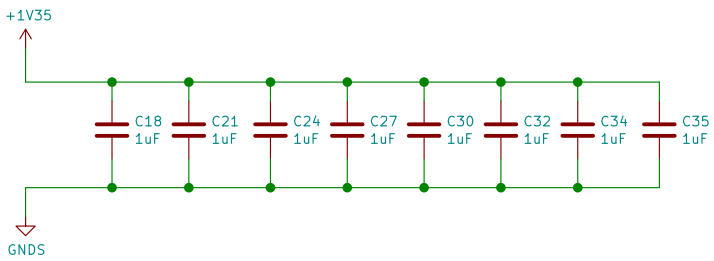


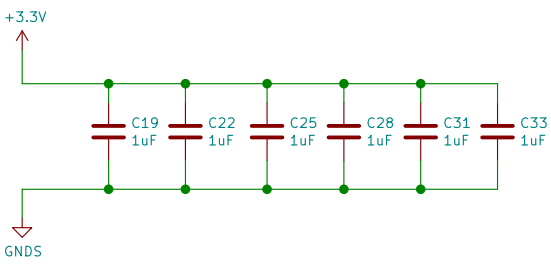


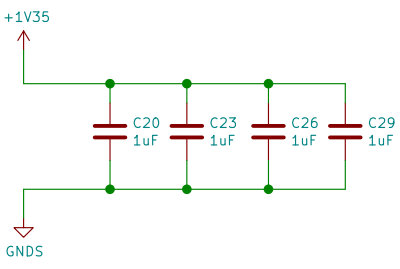


Sheet: /		
File: STM32MP1_TestBoard.sch		
Title:		
Size: A2	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.7-0-10_14)		Id: 1/9





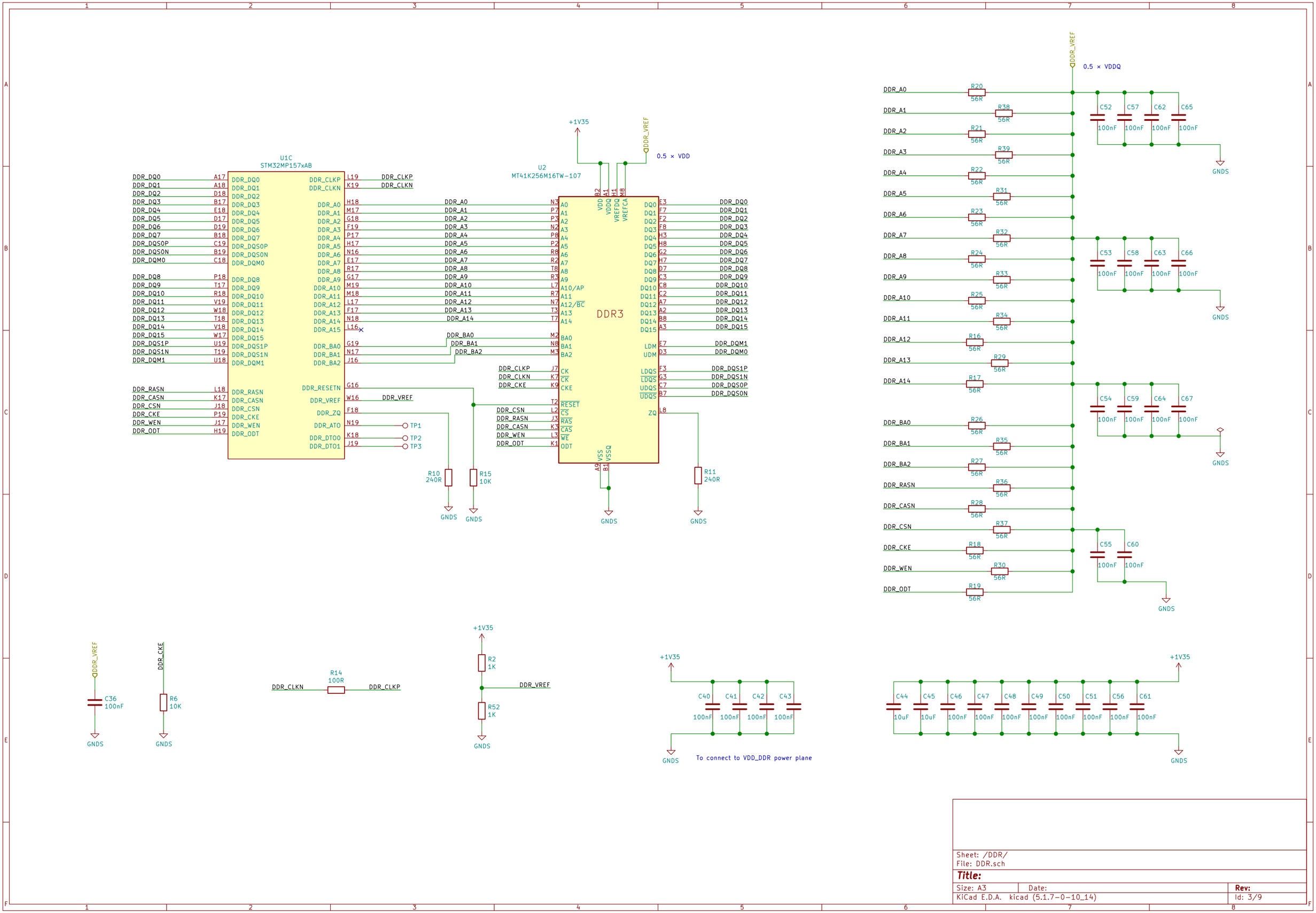


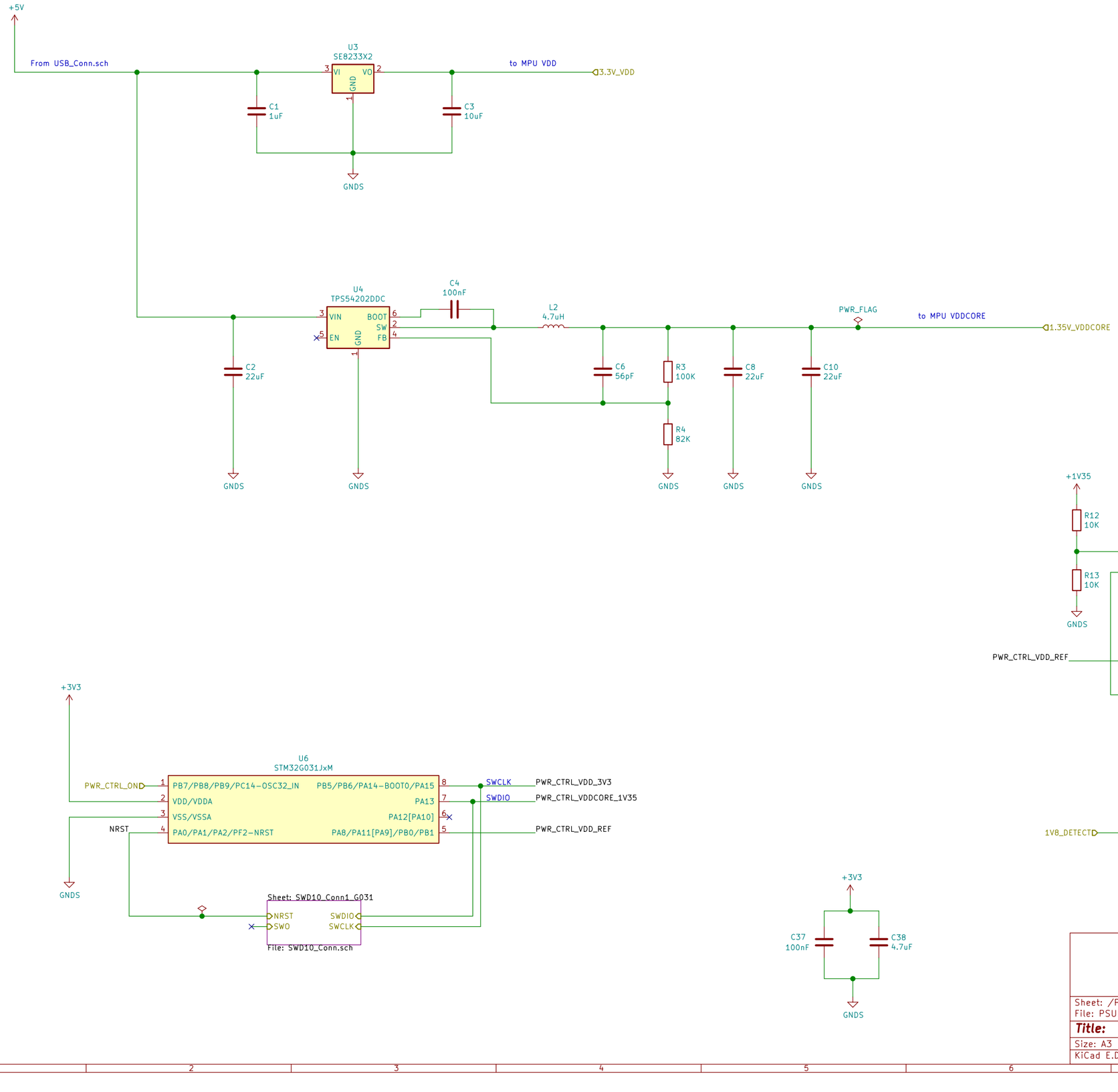


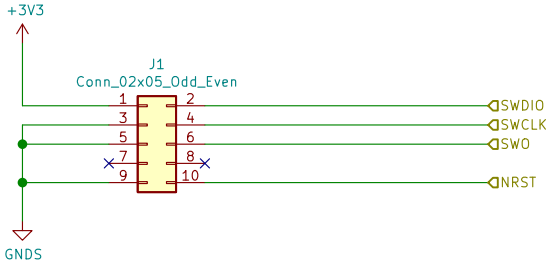
Sheet: /Power_MPU/
File: Power_MPU.sch

Title:

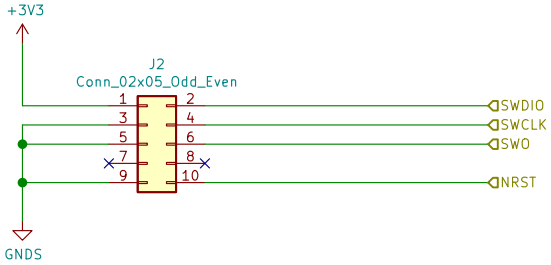
Size: A3	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.7-0-10_14)		Id: 2/9


U1C
STM32MP157xAB
DDR_DQ0 A17
DDR_DQ1 A18
DDR_DQ2 D18
DDR_DQ3 B17
DDR_DQ4 E18
DDR_DQ5 D17
DDR_DQ6 D19
DDR_DQ7 B18
DDR_DQS0P C19
DDR_DQS0N B19
DDR_DQM0 C18
DDR_DQ8 P18
DDR_DQ9 T17
DDR_DQ10 R18
DDR_DQ11 V19
DDR_DQ12 W18
DDR_DQ13 T18
DDR_DQ14 V18
DDR_DQ15 W17
DDR_DQS1P U19
DDR_DQS1N T19
DDR_DQM1 U18
DDR_RASN L18
DDR_CASN K17
DDR_CSN J18
DDR_CKE P19
DDR_WEN J17
DDR_ODT H19
DDR_CLKP L19
DDR_CLKN K19
DDR_A0 H18
DDR_A1 M17
DDR_A2 G18
DDR_A3 F19
DDR_A4 P17
DDR_A5 H17
DDR_A6 N16
DDR_A7 E17
DDR_A8 R17
DDR_A9 G17
DDR_A10 M19
DDR_A11 M18
DDR_A12 L17
DDR_A13 F17
DDR_A14 N18
L16
DDR_BA0 G19
DDR_BA1 N17
DDR_BA2 J16
DDR_RESETN G16
DDR_VREF W16
DDR_ZQ F18
DDR_ATO N19
DDR_DTO0 K18
DDR_DTO1 J19
TP1
TP2
TP3
U2
MT41K256M16TW-107
+1V35
DDR_VREF
0.5 × VDD
VDD B2
VDDQ A1
VREFDQ H1
VREFCA M8
A0 N3
A1 P7
A2 P3
A3 N2
A4 P8
A5 P2
A6 R8
A7 R2
A8 T8
A9 R3
A10/AP L7
A11 R7
A12/BC N7
A13 T3
A14 T7
BA0 M2
BA1 N8
BA2 M3
CK J7
CK K7
CKE K9
RESET T2
CS L2
RAS J3
CAS K3
WE L3
ODT K1
DDR3
DQ0 E3
DQ1 F7
DQ2 F2
DQ3 F8
DQ4 H3
DQ5 H8
DQ6 G2
DQ7 H7
DQ8 D7
DQ9 C3
DQ10 C8
DQ11 C2
DQ12 A7
DQ13 A2
DQ14 B8
DQ15 A3
LDM E7
UDM D3
LDQS F3
LDQS G3
UDQS C7
UDQS B7
ZQ L8
VSS A9
VSS B1
VSSQ
DDR_A0
DDR_A1
DDR_A2
DDR_A3
DDR_A4
DDR_A5
DDR_A6
DDR_A7
DDR_A8
DDR_A9
DDR_A10
DDR_A11
DDR_A12
DDR_A13
DDR_A14
DDR_BA0
DDR_BA1
DDR_BA2
DDR_CLKP
DDR_CLKN
DDR_CKE
DDR_CSN
DDR_RASN
DDR_CASN
DDR_WEN
DDR_ODT
DDR_DQ0
DDR_DQ1
DDR_DQ2
DDR_DQ3
DDR_DQ4
DDR_DQ5
DDR_DQ6
DDR_DQ7
DDR_DQ8
DDR_DQ9
DDR_DQ10
DDR_DQ11
DDR_DQ12
DDR_DQ13
DDR_DQ14
DDR_DQ15
DDR_DQM1
DDR_DQM0
DDR_DQS1P
DDR_DQS1N
DDR_DQS0P
DDR_DQS0N
R10 240R
R15 10K
R11 240R
GNDS
DDR_VREF
0.5 × VDDQ
DDR_A0
DDR_A1
DDR_A2
DDR_A3
DDR_A4
DDR_A5
DDR_A6
DDR_A7
DDR_A8
DDR_A9
DDR_A10
DDR_A11
DDR_A12
DDR_A13
DDR_A14
DDR_BA0
DDR_BA1
DDR_BA2
DDR_RASN
DDR_CASN
DDR_CSN
DDR_CKE
DDR_WEN
DDR_ODT
R20 56R
R38 56R
R21 56R
R39 56R
R22 56R
R31 56R
R23 56R
R32 56R
R24 56R
R33 56R
R25 56R
R34 56R
R16 56R
R29 56R
R17 56R
R26 56R
R35 56R
R27 56R
R36 56R
R28 56R
R37 56R
R18 56R
R30 56R
R19 56R
C52 C57 C62 C65
C53 C58 C63 C66
C54 C59 C64 C67
C55 C60
100nF
GNDS
C36 100nF
R6 10K
R14 100R
R2 1K
R52 1K
C40 C41 C42 C43
C44 C45 C46 C47 C48 C49 C50 C51 C56 C61
10uF
To connect to VDD_DDR power plane
Sheet: /DDR/
File: DDR.sch
Title:
Size: A3
Date:
Rev:
KiCad E.D.A. kicad (5.1.7-0-10_14)
Id: 3/9

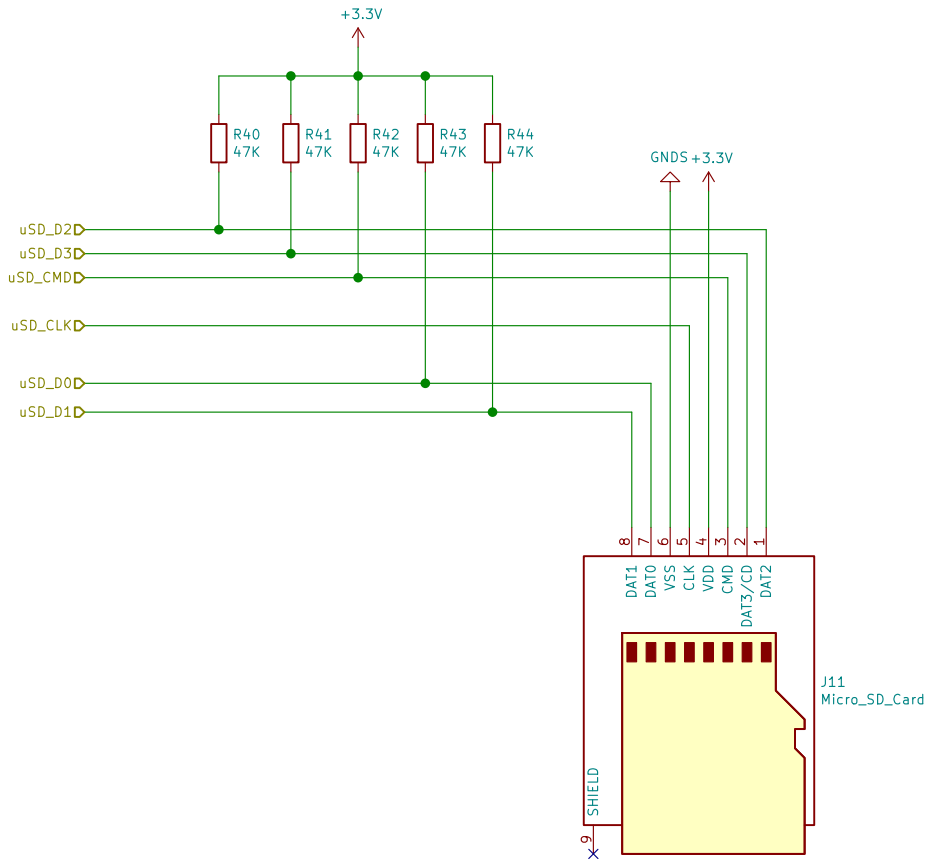

+5V
From USB_Conn.sch
U3
SE8233X2
VI
GND
VO
to MPU VDD
3.3V_VDD
C1
1uF
C3
10uF
GNDS
U4
TPS54202DDC
VIN
EN
GND
BOOT
SW
FB
C4
100nF
L2
4.7uH
PWR_FLAG
to MPU VDDCORE
1.35V_VDDCORE
C2
22uF
C6
56pF
R3
100K
R4
82K
C8
22uF
C10
22uF
+1V35
+1V35
R12
10K
R13
10K
U7
MCP603-xCH
DDR_VREF
PWR_CTRL_VDD_REF
+3V3
U6
STM32G031JxM
PWR_CTRL_ON
NRST
PB7/PB8/PB9/PC14-OSC32_IN
VDD/VDDA
VSS/VSSA
PA0/PA1/PA2/PF2-NRST
PB5/PB6/PA14-BOOT0/PA15
PA13
PA12[PA10]
PA8/PA11[PA9]/PB0/PB1
SWCLK
SWDIO
PWR_CTRL_VDD_3V3
PWR_CTRL_VDDCORE_1V35
PWR_CTRL_VDD_REF
Sheet: SWD10_Conn1_G031
NRST
SWO
SWDIO
SWCLK
File: SWD10_Conn.sch
+3.3V
1V8_DETECT
Q1
DMG2302U
3V3_USB
+3V3
C37
100nF
C38
4.7uF
Sheet: /PSU/
File: PSU.sch
Title:
Size: A3
Date:
Rev:
KiCad E.D.A. kicad (5.1.7-0-10_14)
Id: 4/9



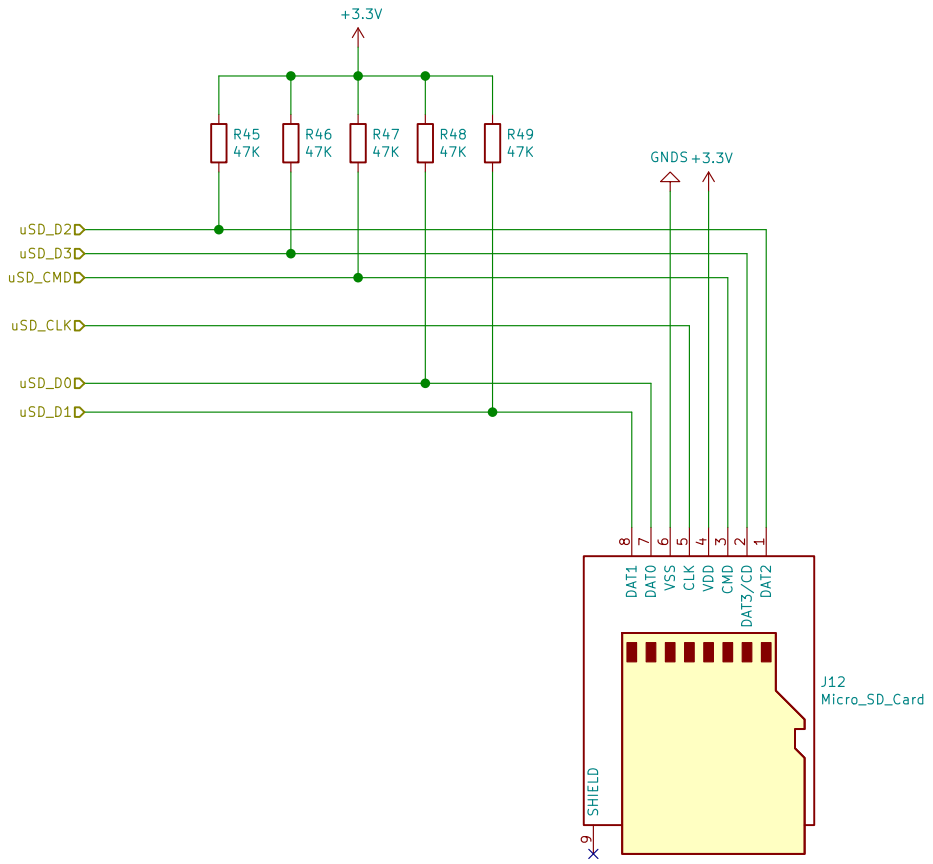
Sheet: /PSU/SWD10_Conn1_G031/		
File: SWD10_Conn.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.7-0-10_14)		Id: 5/9



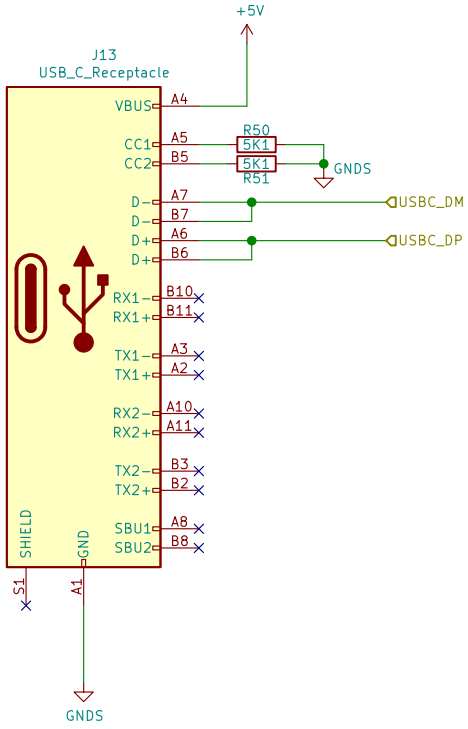
Sheet: /SWD10_Conn_M4/		
File: SWD10_Conn.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.7-0-10_14)		Id: 6/9

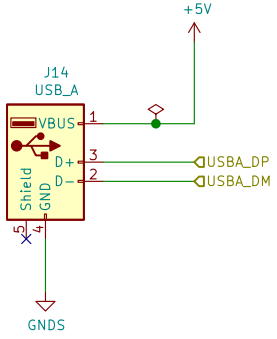


Sheet: /MicroSD1/		
File: MicroSD.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.7-0-10_14)		Id: 7/9



Sheet: /MicroSD2/		
File: MicroSD.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.7-0-10_14)		Id: 8/9





Sheet: /USB_Conn/ File: USB_Conn.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.7-0-10_14)		Id: 9/9