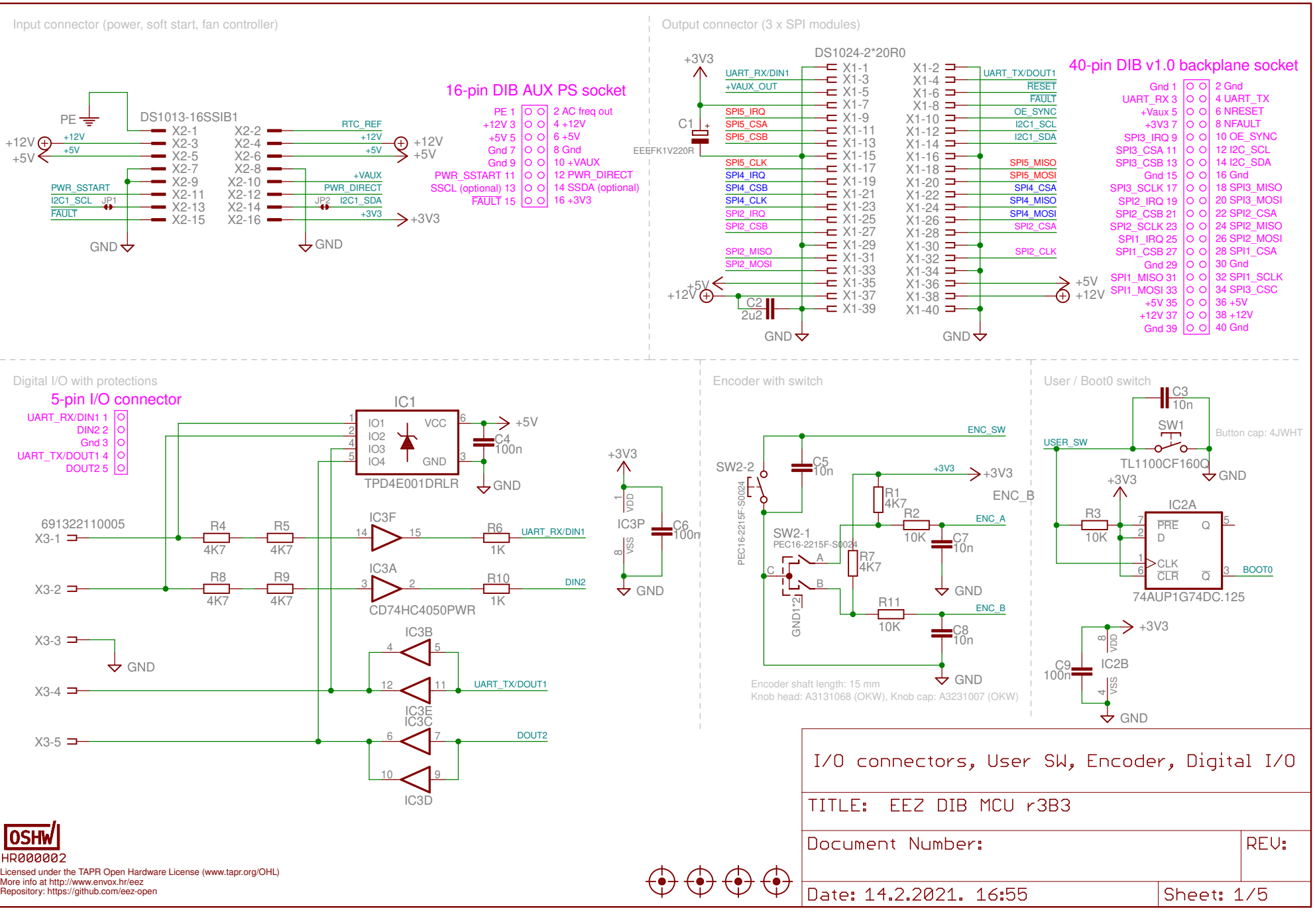
Input connector (power, soft start, fan controller)
DS1013-16SSIB1
PE
+12V
+5V
PWR_SSTART
I2C1_SCL
FAULT
JP1
JP2
RTC_REF
+VAUX
PWR_DIRECT
I2C1_SDA
+3V3
GND
16-pin DIB AUX PS socket
PE 1
2 AC freq out
+12V 3
4 +12V
+5V 5
6 +5V
Gnd 7
8 Gnd
Gnd 9
10 +VAUX
PWR_SSTART 11
12 PWR_DIRECT
SSCL (optional) 13
14 SSDA (optional)
FAULT 15
16 +3V3
Output connector (3 x SPI modules)
DS1024-2*20R0
C1
EEEFK1V220R
C2
2u2
UART_RX/DIN1
+VAUX_OUT
SPI5_IRQ
SPI5_CSA
SPI5_CSB
SPI5_CLK
SPI4_IRQ
SPI4_CSB
SPI4_CLK
SPI2_IRQ
SPI2_CSB
SPI2_MISO
SPI2_MOSI
UART_TX/DOUT1
RESET
FAULT
OE_SYNC
I2C1_SCL
I2C1_SDA
SPI5_MISO
SPI5_MOSI
SPI4_CSA
SPI4_MISO
SPI4_MOSI
SPI2_CSA
SPI2_CLK
40-pin DIB v1.0 backplane socket
Gnd 1
2 Gnd
UART_RX 3
4 UART_TX
+Vaux 5
6 NRESET
+3V3 7
8 NFAULT
SPI3_IRQ 9
10 OE_SYNC
SPI3_CSA 11
12 I2C_SCL
SPI3_CSB 13
14 I2C_SDA
Gnd 15
16 Gnd
SPI3_SCLK 17
18 SPI3_MISO
SPI2_IRQ 19
20 SPI3_MOSI
SPI2_CSB 21
22 SPI2_CSA
SPI2_SCLK 23
24 SPI2_MISO
SPI1_IRQ 25
26 SPI2_MOSI
SPI1_CSB 27
28 SPI1_CSA
Gnd 29
30 Gnd
SPI1_MISO 31
32 SPI1_SCLK
SPI1_MOSI 33
34 SPI3_CSC
+5V 35
36 +5V
+12V 37
38 +12V
Gnd 39
40 Gnd
Digital I/O with protections
5-pin I/O connector
UART_RX/DIN1 1
DIN2 2
Gnd 3
UART_TX/DOUT1 4
DOUT2 5
IC1
TPD4E001DRLR
IO1
IO2
IO3
IO4
VCC
GND
C4
100n
691322110005
X3-1
X3-2
X3-3
X3-4
X3-5
R4
R5
R8
R9
4K7
IC3F
IC3A
IC3B
IC3E
IC3C
IC3D
CD74HC4050PWR
R6
R10
1K
UART_RX/DIN1
DIN2
UART_TX/DOUT1
DOUT2
IC3P
C6
100n
Encoder with switch
SW2-2
PEC16-2215F-S0024
SW2-1
C5
10n
R1
4K7
R2
10K
R7
4K7
R11
10K
C7
10n
C8
10n
ENC_SW
ENC_B
ENC_A
GND1*2
Encoder shaft length: 15 mm
Knob head: A3131068 (OKW), Knob cap: A3231007 (OKW)
User / Boot0 switch
C3
10n
SW1
USER_SW
TL1100CF160Q
Button cap: 4JWHT
R3
10K
IC2A
74AUP1G74DC.125
PRE
D
CLK
CLR
Q
BOOT0
C9
100n
IC2B
OSHW
HR000002
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More info at http://www.envox.hr/eez
Repository: https://github.com/eez-open
I/O connectors, User SW, Encoder, Digital I/O
TITLE: EEZ DIB MCU r3B3
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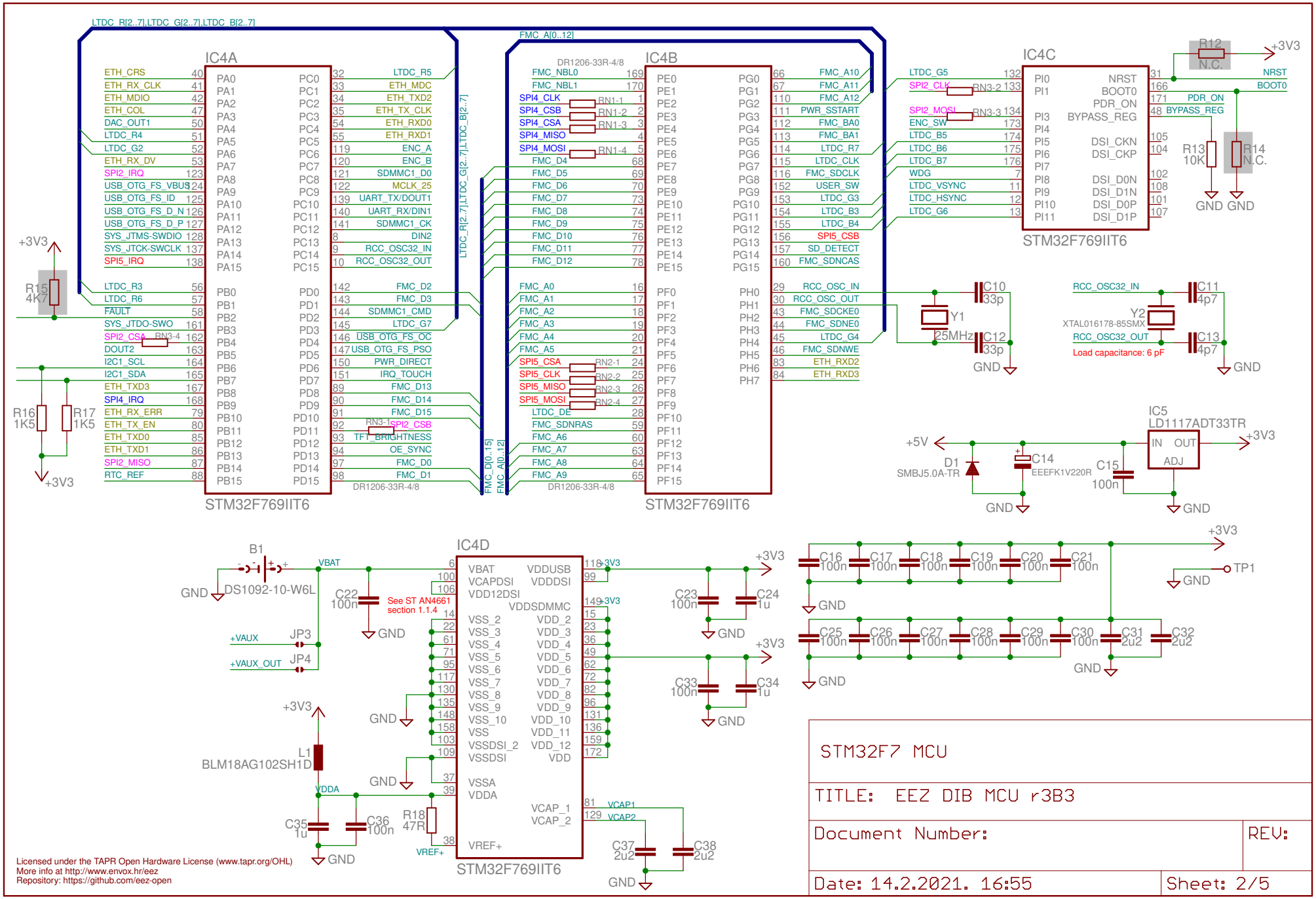
Sheet: 1/5


LTDC_R[2..7],LTDC_G[2..7],LTDC_B[2..7]
FMC_A[0..12]
IC4A
IC4B
IC4C
IC4D
STM32F769IIT6
DR1206-33R-4/8
+3V3
GND
+5V
IC5
LD1117ADT33TR
SMBJ5.0A-TR
EEEFK1V220R
Y1
25MHz
Y2
XTAL016178-85SMX
Load capacitance: 6 pF
B1
DS1092-10-W6L
BLM18AG102SH1D
See ST AN4661 section 1.1.4
TP1
STM32F7 MCU
TITLE: EEZ DIB MCU r3B3
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Sheet: 2/5
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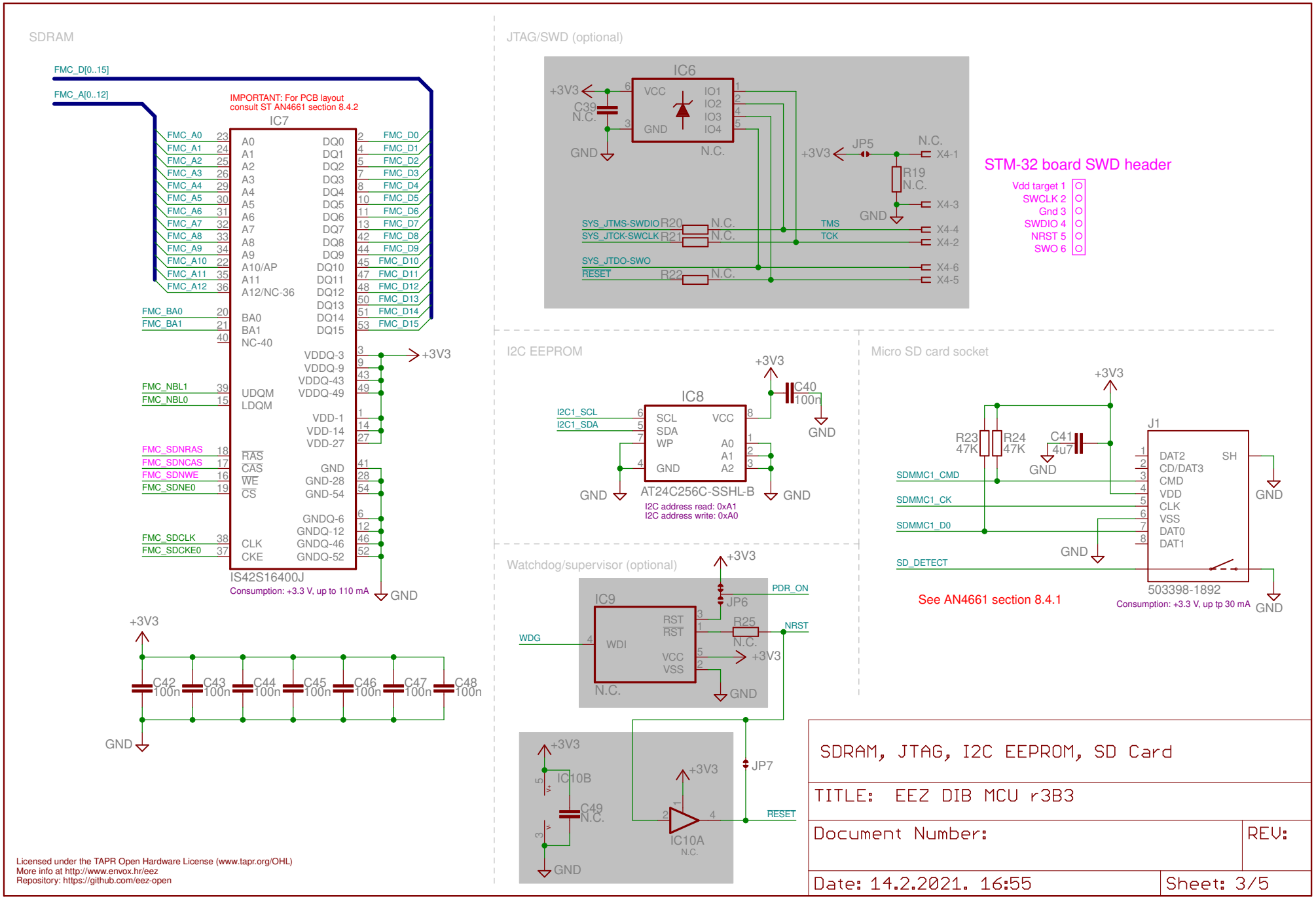
Repository: https://github.com/eez-open


SDRAM
FMC_D[0..15]
FMC_A[0..12]
IMPORTANT: For PCB layout
consult ST AN4661 section 8.4.2
IC7
FMC_A0 23
FMC_A1 24
FMC_A2 25
FMC_A3 26
FMC_A4 29
FMC_A5 30
FMC_A6 31
FMC_A7 32
FMC_A8 33
FMC_A9 34
FMC_A10 22
FMC_A11 35
FMC_A12 36
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10/AP
A11
A12/NC-36
DQ0 2 FMC_D0
DQ1 4 FMC_D1
DQ2 5 FMC_D2
DQ3 7 FMC_D3
DQ4 8 FMC_D4
DQ5 10 FMC_D5
DQ6 11 FMC_D6
DQ7 13 FMC_D7
DQ8 42 FMC_D8
DQ9 44 FMC_D9
DQ10 45 FMC_D10
DQ11 47 FMC_D11
DQ12 48 FMC_D12
DQ13 50 FMC_D13
DQ14 51 FMC_D14
DQ15 53 FMC_D15
FMC_BA0 20
FMC_BA1 21
40
BA0
BA1
NC-40
VDDQ-3 3
VDDQ-9 9
VDDQ-43 43
VDDQ-49 49
+3V3
FMC_NBL1 39
FMC_NBL0 15
UDQM
LDQM
VDD-1 1
VDD-14 14
VDD-27 27
FMC_SDNRAS 18
FMC_SDNCAS 17
FMC_SDNWE 16
FMC_SDNE0 19
RAS
CAS
WE
CS
GND 41
GND-28 28
GND-54 54
GNDQ-6 6
GNDQ-12 12
GNDQ-46 46
GNDQ-52 52
FMC_SDCLK 38
FMC_SDCKE0 37
CLK
CKE
IS42S16400J
Consumption: +3.3 V, up to 110 mA
GND
+3V3
C42 100n
C43 100n
C44 100n
C45 100n
C46 100n
C47 100n
C48 100n
GND
JTAG/SWD (optional)
IC6
+3V3
C39 N.C.
VCC
GND
IO1
IO2
IO3
IO4
N.C.
JP5
+3V3
N.C.
X4-1
R19 N.C.
X4-3
GND
SYS_JTMS-SWDIO R20 N.C.
SYS_JTCK-SWCLK R21 N.C.
TMS
TCK
X4-4
X4-2
SYS_JTDO-SWO
RESET R22 N.C.
X4-6
X4-5
STM-32 board SWD header
Vdd target 1
SWCLK 2
Gnd 3
SWDIO 4
NRST 5
SWO 6
I2C EEPROM
+3V3
IC8
I2C1_SCL
I2C1_SDA
SCL
SDA
WP
GND
VCC
A0
A1
A2
C40 100n
GND
GND
AT24C256C-SSHL-B
I2C address read: 0xA1
I2C address write: 0xA0
Micro SD card socket
+3V3
R23 47K
R24 47K
C41 4u7
GND
J1
SDMMC1_CMD
SDMMC1_CK
SDMMC1_D0
SD_DETECT
DAT2
CD/DAT3
CMD
VDD
CLK
VSS
DAT0
DAT1
SH
GND
503398-1892
Consumption: +3.3 V, up tp 30 mA
See AN4661 section 8.4.1
Watchdog/supervisor (optional)
+3V3
IC9
PDR_ON
JP6
WDG
WDI
RST
RST
R25 N.C.
NRST
VCC
VSS
+3V3
GND
N.C.
+3V3
IC10B
C49 N.C.
GND
+3V3
JP7
IC10A
N.C.
RESET
SDRAM, JTAG, I2C EEPROM, SD Card
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