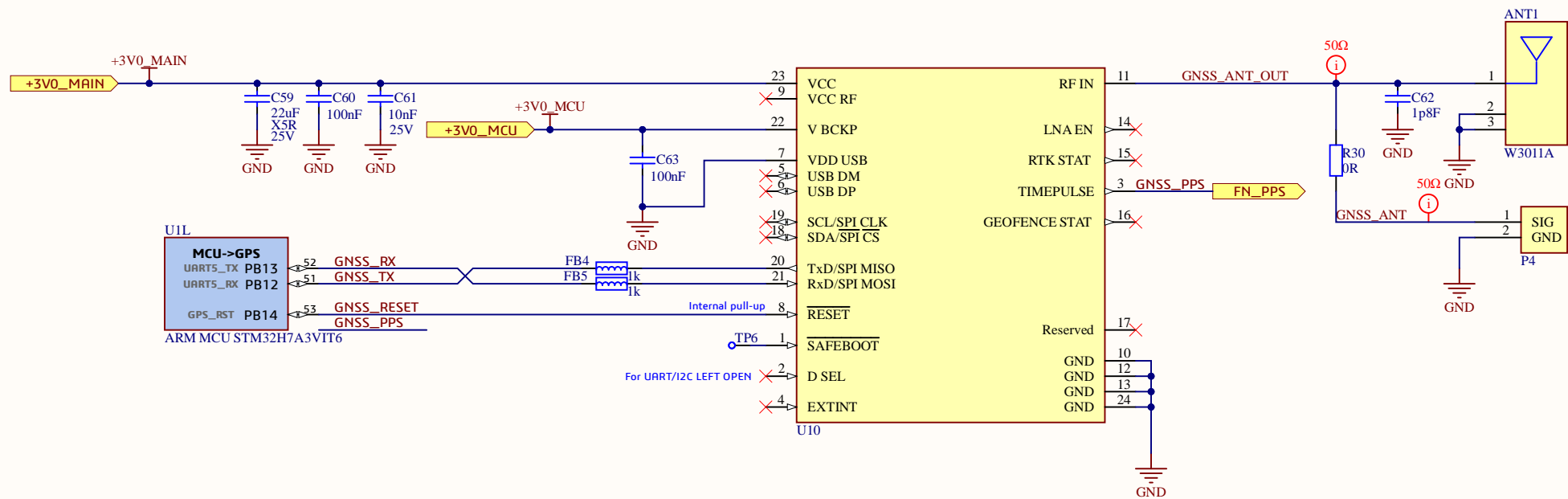
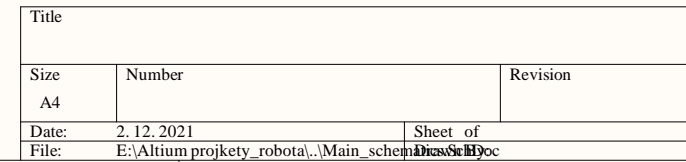
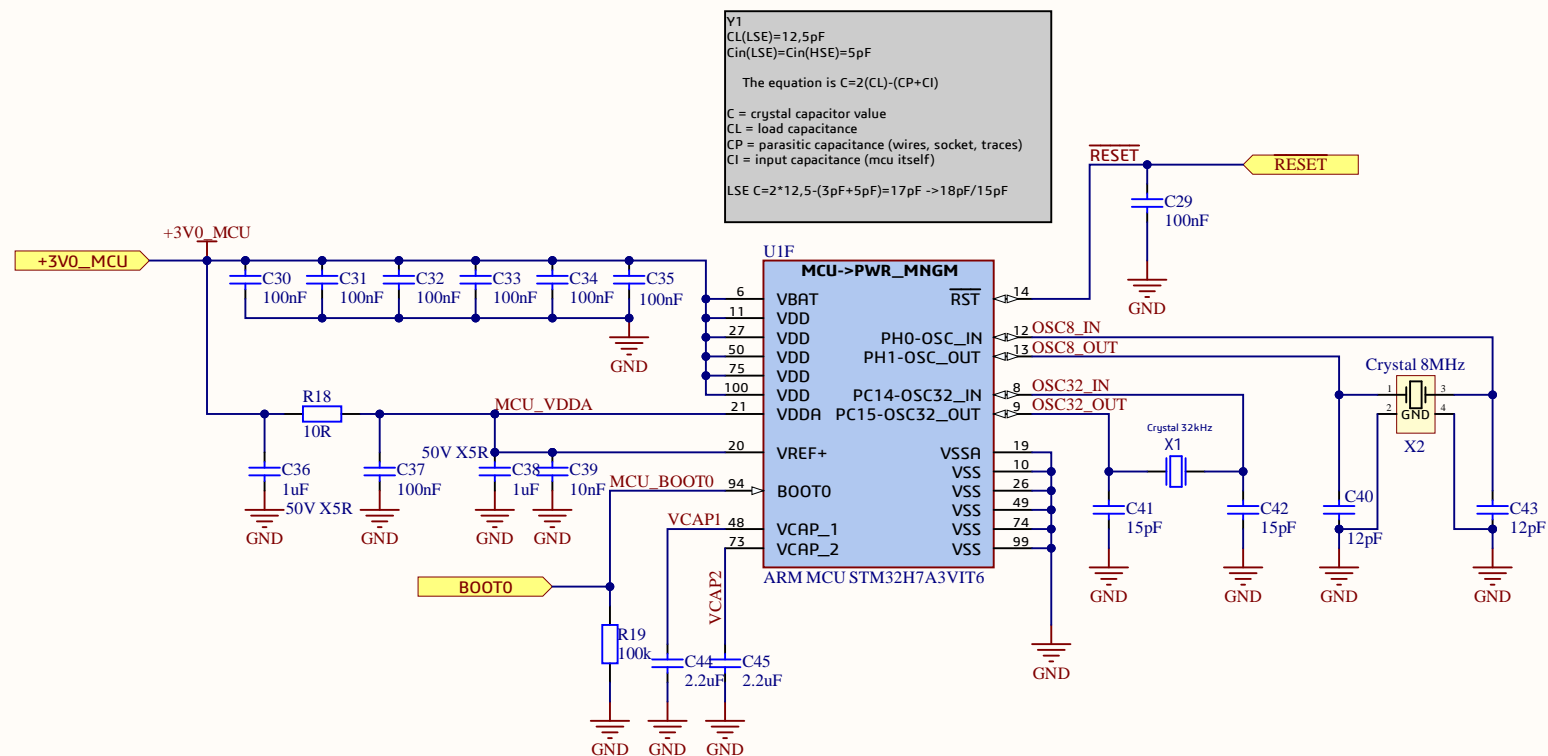


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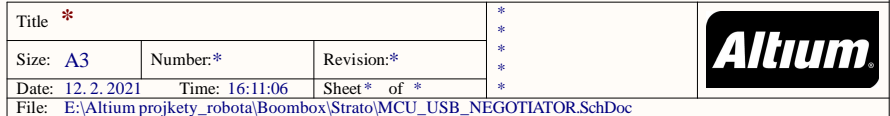


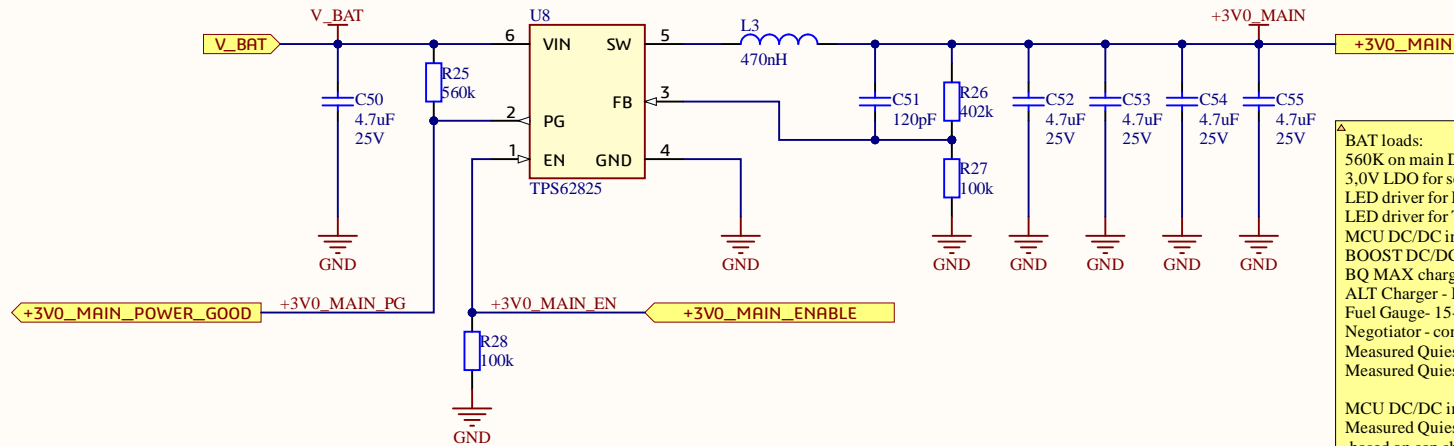


Y1
 $CL(LSE)=12,5pF$
 $Cin(LSE)=Cin(HSE)=5pF$
 The equation is $C=2(CL)-(CP+CI)$
 C = crystal capacitor value
 CL = load capacitance
 CP = parasitic capacitance (wires, socket, traces)
 CI = input capacitance (mcu itself)
 $LSE\ C=2*12,5-(3pF+5pF)=17pF \rightarrow 18pF/15pF$

Y2
 $CL(LSE)=10pF$
 $Cin(LSE)=Cin(HSE)=7pF$
 The equation is $C=2(CL)-(CP+CI)$
 C = crystal capacitor value
 CL = load capacitance
 CP = parasitic capacitance (wires, socket, traces)
 CI = input capacitance (mcu itself)
 $LSE\ C=2*10pF-(3pF+5pF)=17pF \rightarrow 12pF/12pF$

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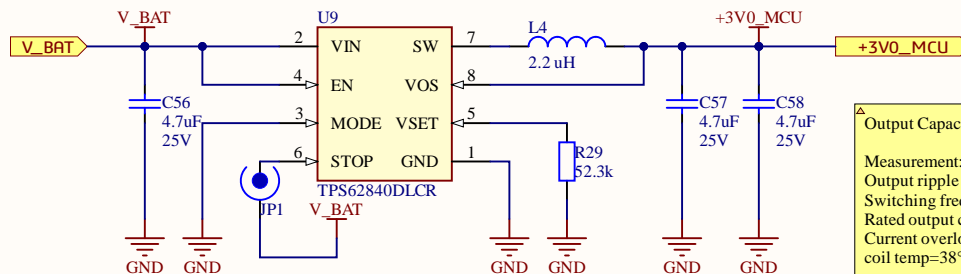
Output Capacitance Min: 22uF
Measurement:

Output ripple from 8,2mV to 14mV
Switching frequency: from 1,3MHz to 602kHz
Rated output current 2A
Current overload up to 2,5A@66kHz, ACripple=50mV, coil temp=29°C, IC temp=31°C

BAT loads:
560K on main DC/DC for PG output (7,1uA)
3,0V LDO for sensors OFF, disabled (1uA)
LED driver for Display Disabled (1uA)
LED driver for Torch Disabled (1uA)
MCU DC/DC in stop mode (100uA-120uA)
BOOST DC/DC for AMP Disabled (1-3uA)
BQ MAX charger - (BATFET EN - 32-60uA) BATFET DIS 12-23uA !!!
ALT Charger - DIS state 2-5uA
Fuel Gauge- 15-30uA
Negotiator - connected trough BQ Max CH - 700-990uA
Measured Quiescent current without NG- 270uA
Measured Quiescent current with NG - 1145uA

MCU DC/DC in RUN mode - without GNSS V_BCKP
Measured Quiescent current without NG- 680uA to peak 1366uA f= 1Hz
based on cap charging
Average current =830uA

MCU DC/DC in RUN mode - GNSS V_BCKP from 3V0_MCU
Measured Quiescent current without NG- 693uA to peak 1347uA f= 1Hz
Average current =838uA
GNSS V_BCKP current consumption from DS =15uA

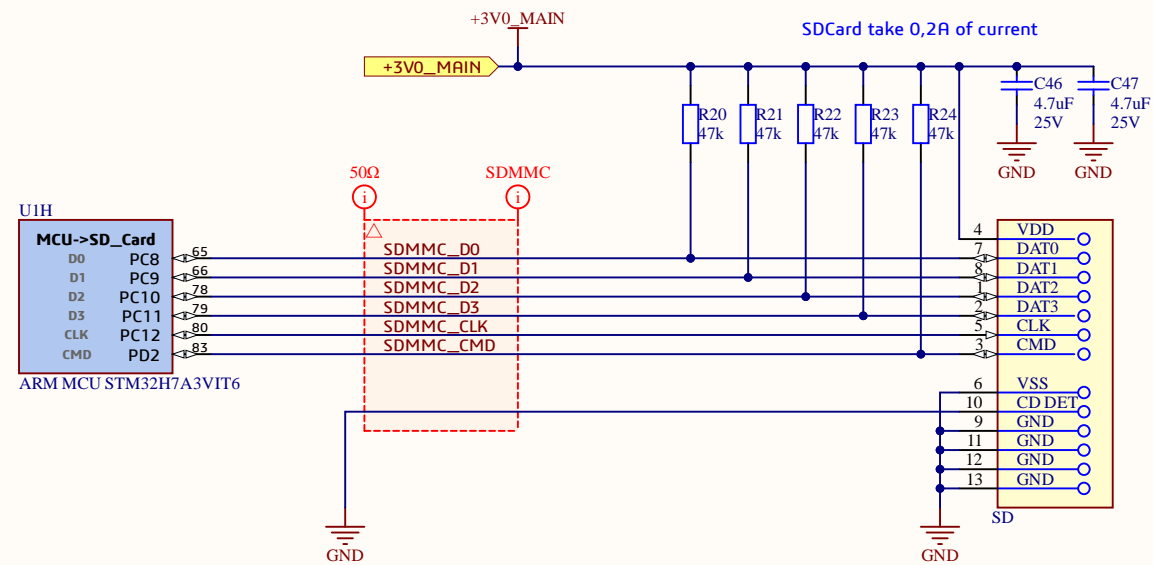


MODE - Direct to GND
-automatic PWM and power-save mode operation
STOP - Solder JP1
-temporarily stop the switching of the regulator.

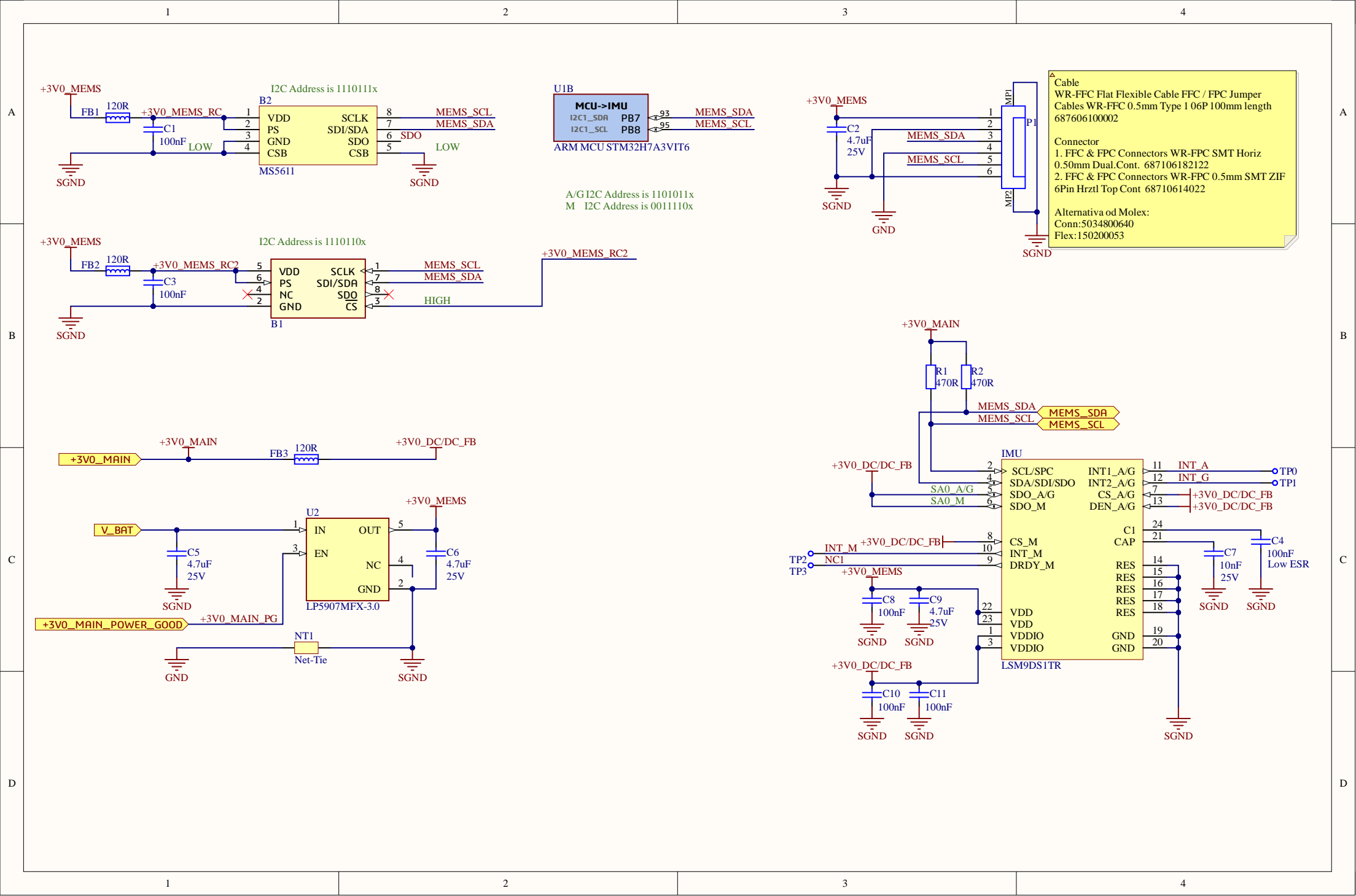
Output Capacitance Min: 10uF

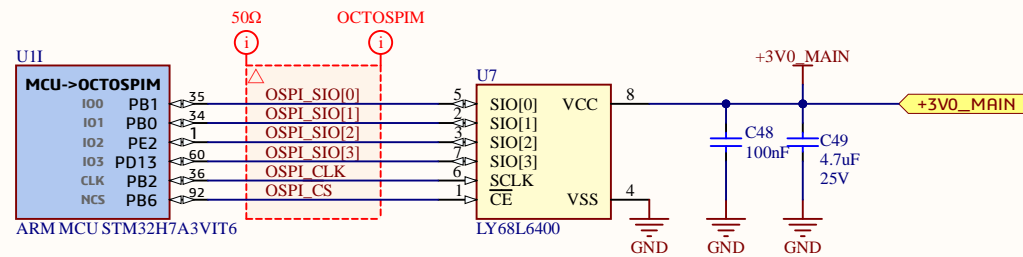
Measurement:
Output ripple from 4,08mV to 10,8mV
Switching frequency: from 1,71MHz to 855kHz
Rated output current 750mA
Current overload up to 1A@205kHz, ACripple=24mV, coil temp=38°C, IC temp=43°C

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 Lyontek Inc. LY68L6400SLIT v púuzdre sop8 150mil _ WSON nekupis....
https://lcsc.com/product-detail/RAM_Lyontek-Inc-LY68L6400SLIT_C261881.html

 Alternativa
 Vilsion Tech VTI7064MSME
https://lcsc.com/product-detail/RAM_VTI7064MSME_C139966.html

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