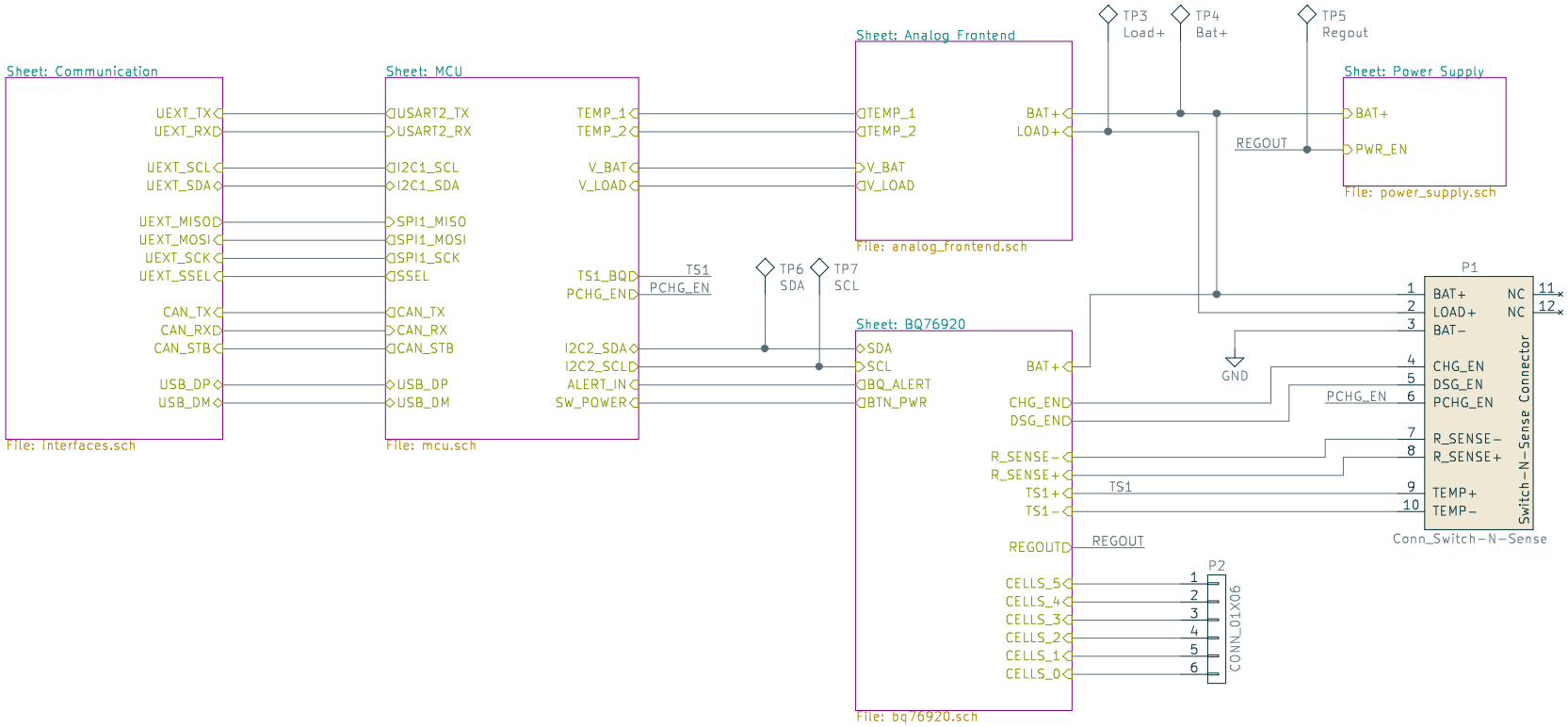

LOGO1 OPEN_HARDWARE_1

LOGO2 LIBRE_SOLAR

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Sheet: /
File: BMS-5s.sch

Title: Libre Solar BMS 5s

Size: A4	Date: 2017-05-27	**Rev: 0.1**
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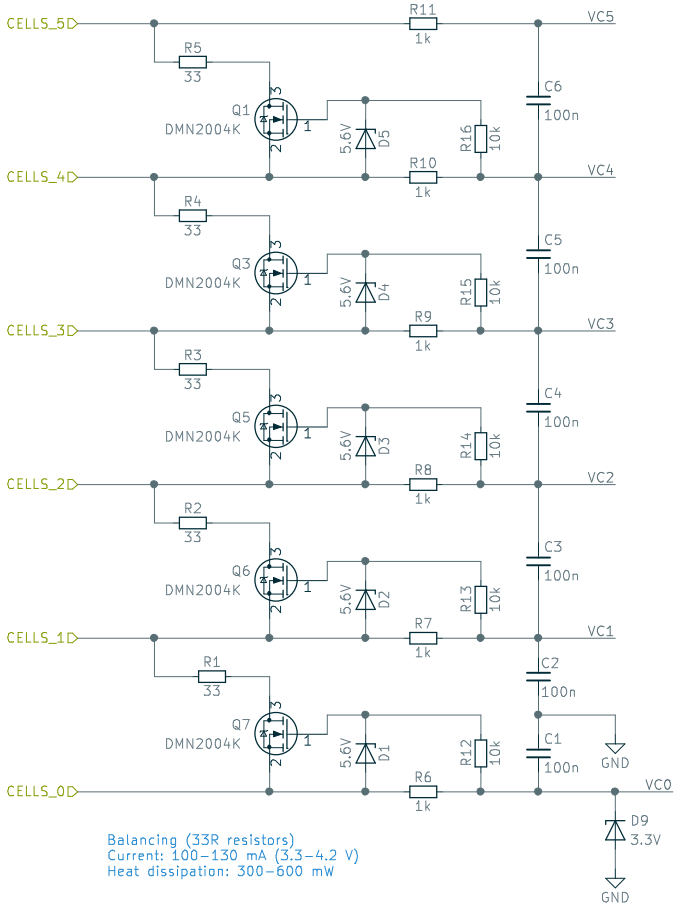
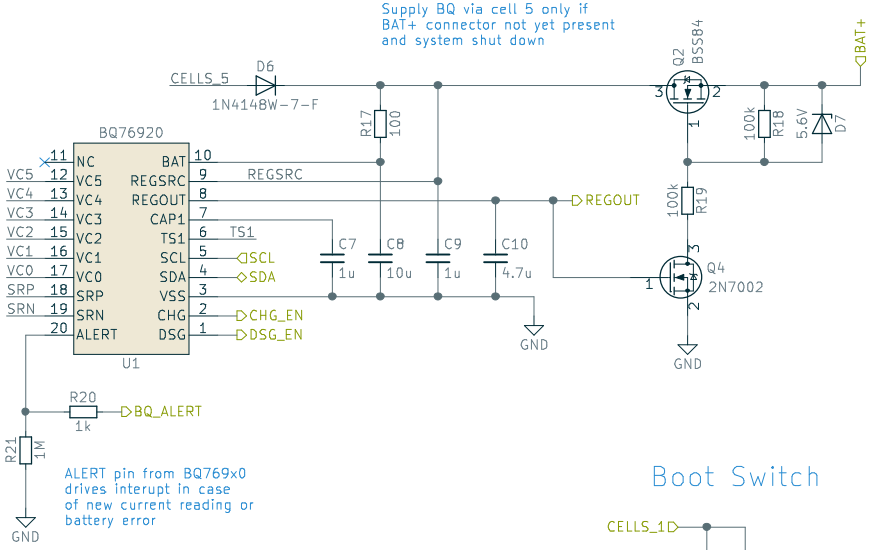
Balancing circuits



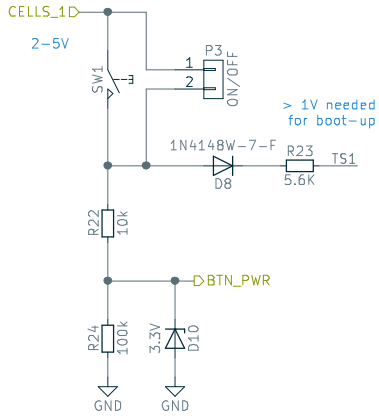
Balancing (33R resistors)
Current: 100–130 mA (3.3–4.2 V)
Heat dissipation: 300–600 mW

Supply BQ via cell 5 only if
BAT+ connector not yet present
and system shut down

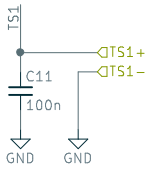


ALERT pin from BQ769x0
drives interupt in case
of new current reading or
battery error

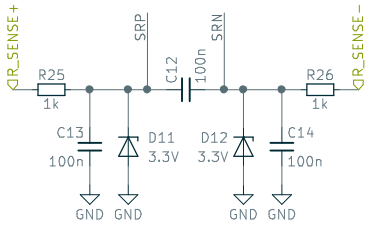
Boot Switch



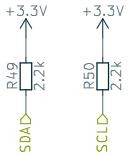
Temperature sensor



Current sense filter



I2C pull-ups



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Sheet: /BQ76920/
File: bq76920.sch

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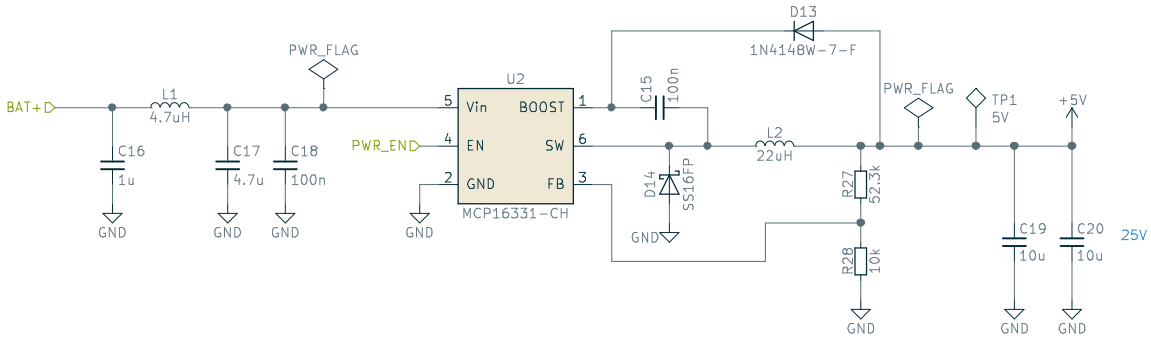
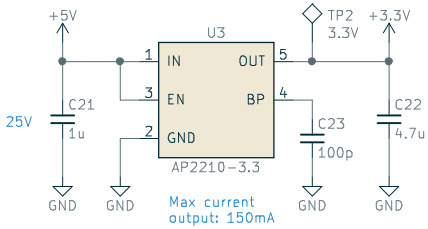
Battery to 5V (SMPS)



5V to 3.3V (LDO)



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File: power_supply.sch

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Size: A4	Date: 2017-05-27	**Rev: 0.1**
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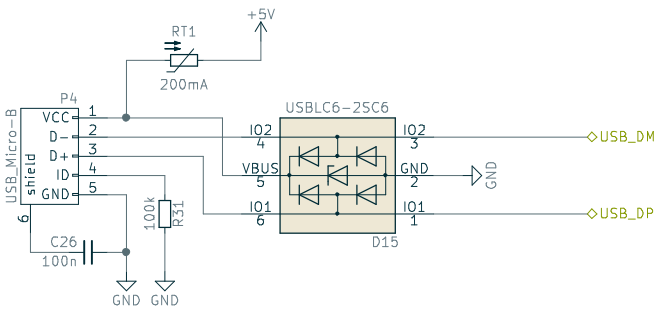
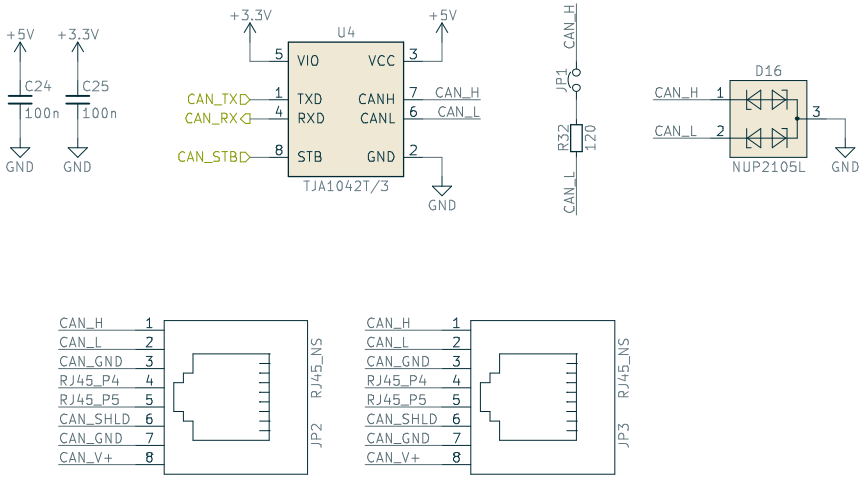
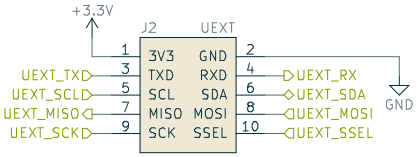
USB connector



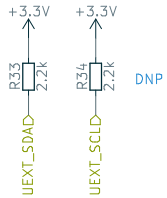
CAN interface



Extension connector



I2C pull-ups



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Sheet: /Communication/
File: interfaces.sch

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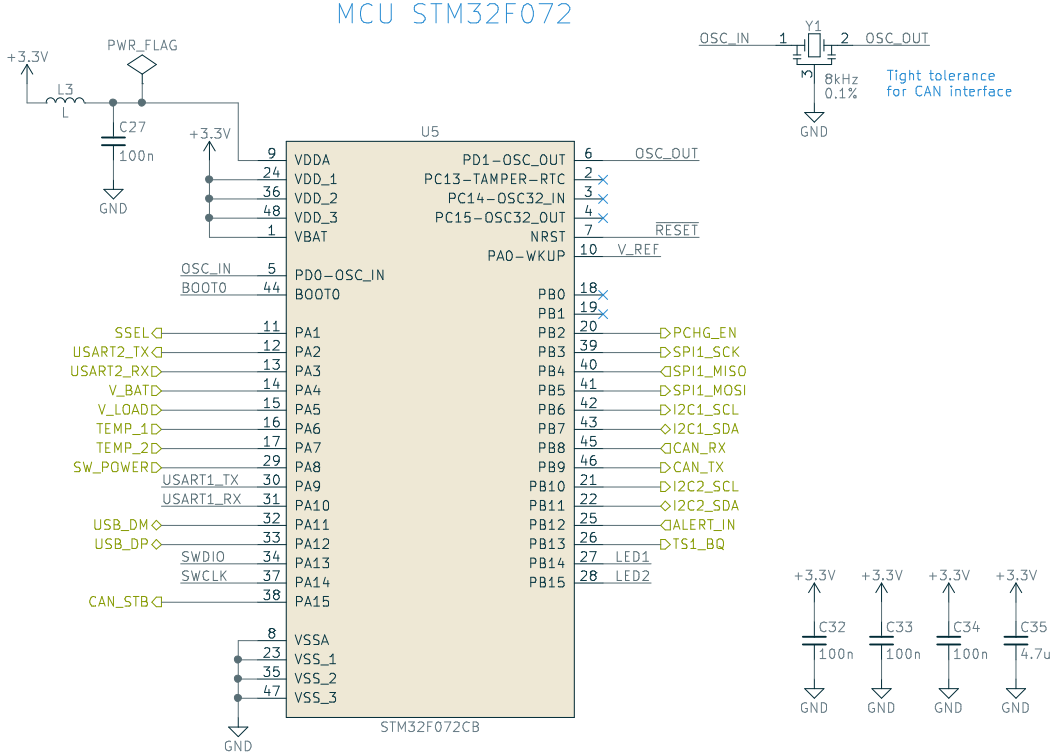
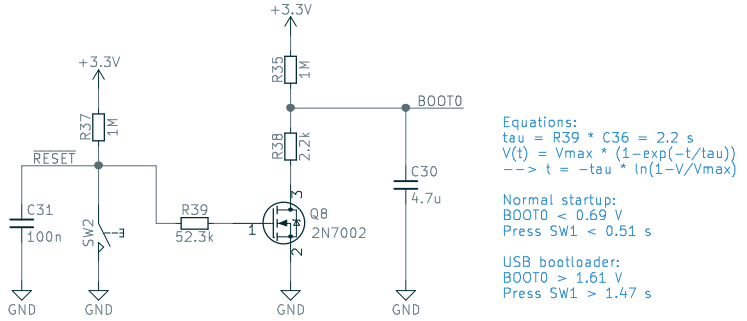
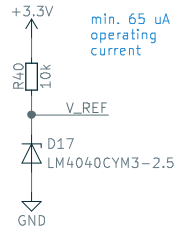
MCU STM32F072



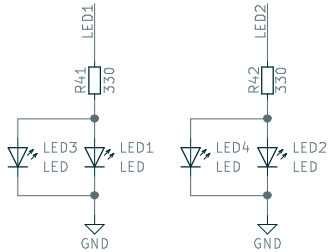
MCU reset and boot circuit



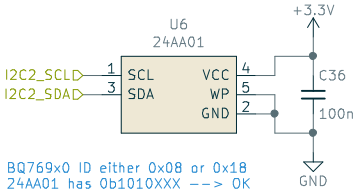
Voltage reference



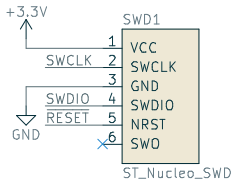
Status LEDs



EEPROM



STM Nucleo SWD and USART



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File: mcu.sch

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Size: A4	Date: 2017-05-27	**Rev: 0.1**
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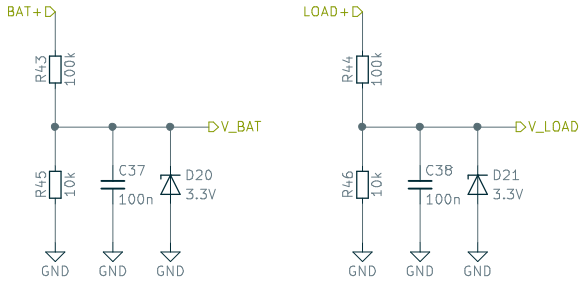
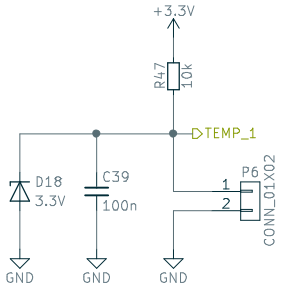
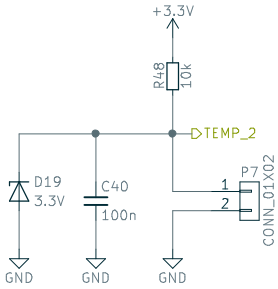
Battery and load voltage



Maximum voltage: 5*4.2V = 21V

Temperature (ext./int.)





If not stated otherwise, all MLCC 50V X7R

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Sheet: /Analog Frontend/
File: analog_frontend.sch

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