

COMMENTO

Title: Input RF filter

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Ceské popisky vyřešit a smazat!

Anglické zachvat – popisují konfiguraci

Booth step-down are forced to continuous operation to enforce minimal voltage-ripple and fixed switching frequency.

Frequency is set by external resistor, because according to documentation, it is more accurate and less affected by for example temperature changes then using default frequency by tingting pin to VCC. Switching freq is 2300kHz.

3.3V source parameters:

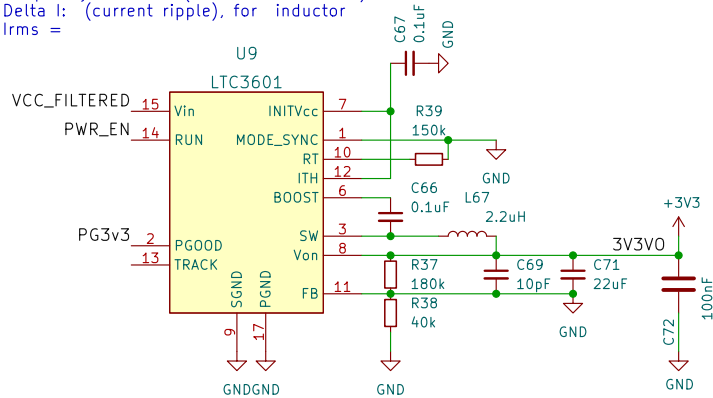
Designed consumption: 0.05A

Switching: continuous

Frequency: 3.2 MHz (same as 5V source)

Delta I: (current ripple), for inductor

Irms =



5V source parameters:

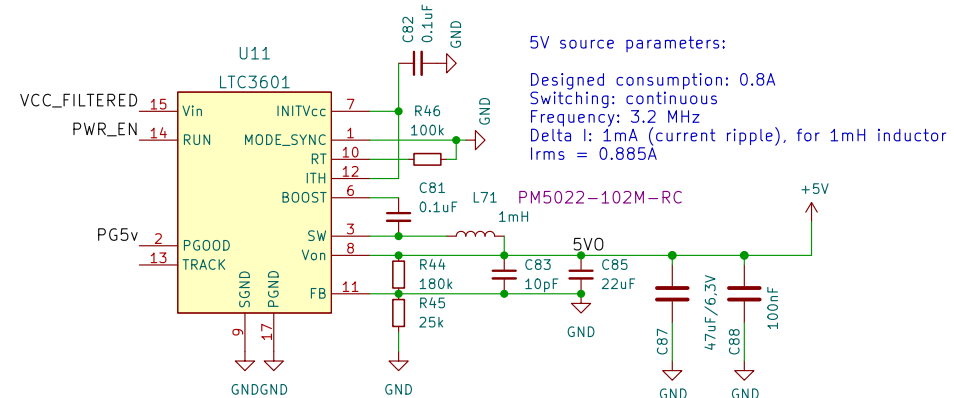
Designed consumption: 0.8A

Switching: continuous

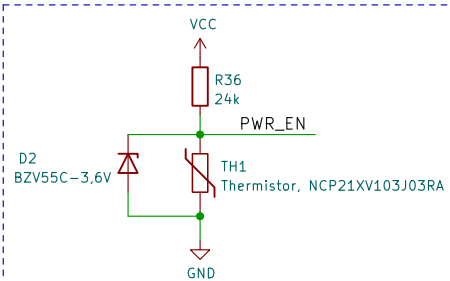
Frequency: 3.2 MHz

Delta I: 1mA (current ripple), for 1mH inductor

Irms = 0.885A



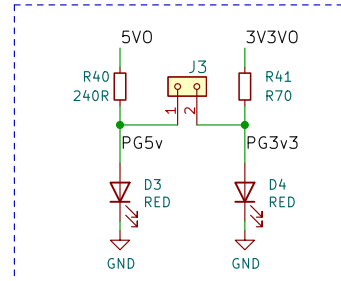
Over-temperature fuse



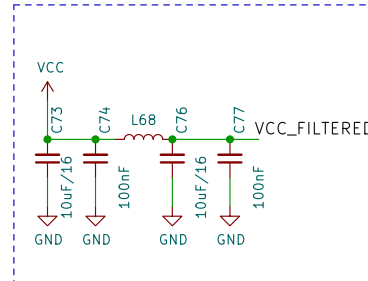
PWR_EN enables power regulation by voltage above 1.25V. Voltage below 1V turn off internal power source.

Thermistor NCP21XV103J03RA with 24k resistor is designed to disconnect electronic at 75C.

Power status LED and header output



LED is powered by 10 mA to ensure that maximum current trough power source PG pin is the same.



Ensures that switching frequency is not "transmitted" by incoming cable and incoming power wires.

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