



České popisky vyřešit a smazat! Anglické zachvat — popisují konfiguraci L69 BLM21PG331SN1D L73 Booth step-down are forced to continuous operation to enforce minimal voltage-ripple and fixed switching frequency. BLM21PG331SN1D \_\_\_\_\_ 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: U9 U11 LTC3601 Designed consumption: 0.8A LTC3601 VCC\_FILTERED 15 VCC\_FILTERED 15 Switching: continuous R39 Frequency: 3.2 MHz PWR\_EN\_14 PWR\_EN\_14 100k 150k Delta I: 1mA (current ripple), for 1mH inductor MODE\_SYNC MODE\_SYNC Irms = 0.885Å ITH GND ITH C66 +57 B00S1 L71 PM5022-102M-RC L67 BOOST +3V3 0.1uF 0.1uF 2.2uH PG3v3\_2 PG5v\_2 PGOOD 3V3V0 PGOOD 5V0 \_\_\_\_\_ C85 13 TRACK 13 TRACK Vor Von R37 L C69 R44 L C83 180k 180k 10pF 22uF 10pF 22uF R38 R45 40k 25k GND GND  $\uparrow \uparrow$  $\uparrow \uparrow$  $\Diamond$ GND GND GNDGND GND GNDGND GND GND Over-temperature fuse Power status LED and header output VCC 5V0 3V3V0 R40 R41 R36 R70 240R 24k PWR EN VCC\_FILTERED PG5v PG3v3 TH1 BZV55C-3,6V D4 RED Thermistor, NCP21XV103J03RA  $\Delta$ D3 RED GND GND GND  $^{+}$ Title: QFHMIX01E GND GND GND 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 "transmited by incoming cable and incomming power wires. PWR\_EN enables power regulation by voltage above 1.25V. Voltage below 1V turn off internal power source. mlab Thermistor NCP21XV103J03RA with 24k resistor is designed Frontend for QFH active antenna to disconnect electronic at 75C. Author: Page: 3/3 Size: A4 Date: 2022-07-31