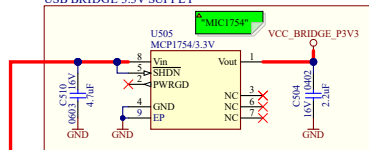


POWER-SUPPLY

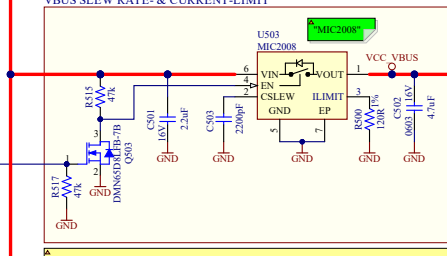
CURRENT MEASURE

MCP1754/3.3V:
Vin: 3.6V to 16.0V
Vout: Fixed 3.3V
Imax: 150mA
Dropout: 300mV @ 150mA

USB BRIDGE 3.3V SUPPLY

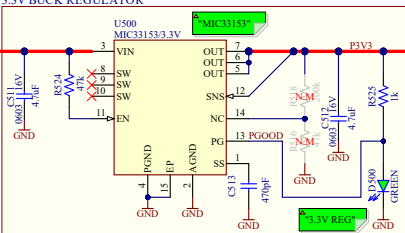


VBUS SLEW RATE- & CURRENT-LIMIT

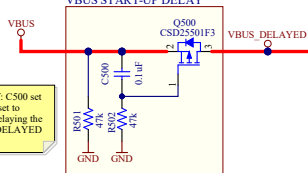


SLEW RATE LIMIT:
- With C503 set to 2200pF, the slew rate of VCC_VBUS is limited to 2 V/ms by the power switch MIC2008.
CURRENT LIMIT:
- With R500 set to 120ohm, the current through the power switch MIC2008 is limited to 2A.

3.3V BUCK REGULATOR

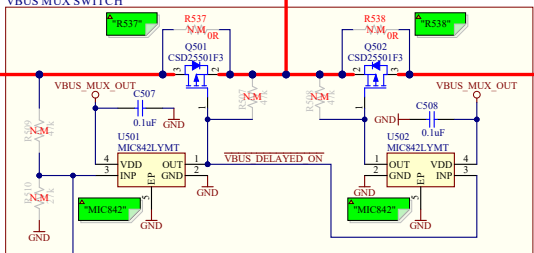


VBUS START-UP DELAY

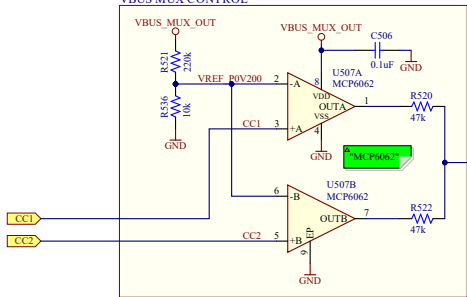


START-UP DELAY: C506 set to 0.1µF and R502 set to 47kohm. Q500 is delaying the turn-on of VBUS. DELAYED by ~1ms.

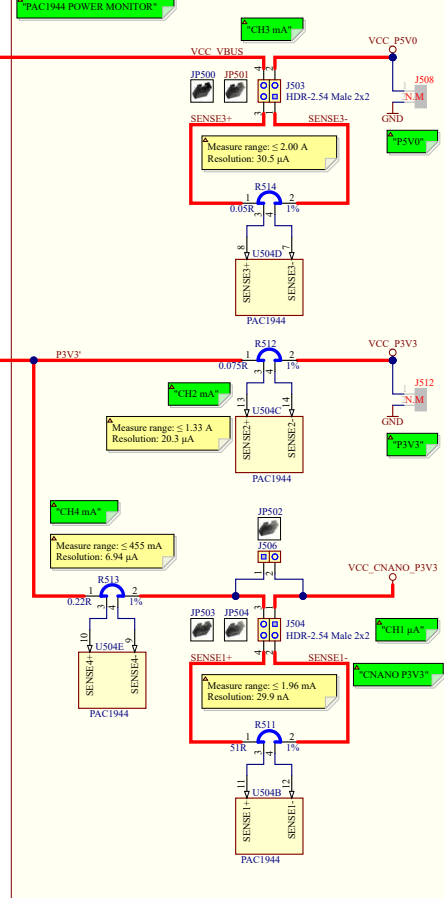
VBUS MUX SWITCH



VBUS MUX CONTROL



PAC1944 POWER MONITOR



Project Owner: AH
PCB Layout Contact: TF, VL
PartNumber: EV58G97A
Project Title: Curiosity Nano Explorer
Variant: Default Assembly

Sheet Title: Power Supply
Size: A3
Rev: 3
Date: 06.03.2024
Rev: 2
Sheet 8 of 9

Designed with Altium Altium.com

Project Owner: AH
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File: Curiosity Nano Explorer Power SchDoc