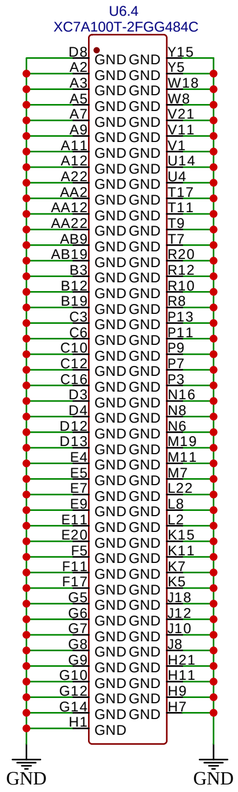
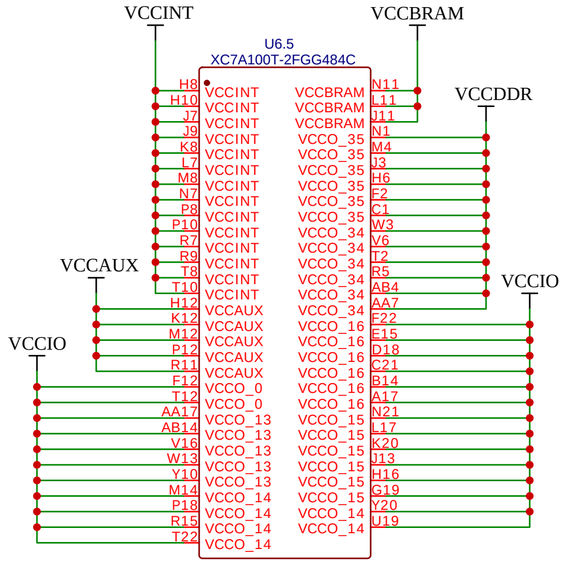
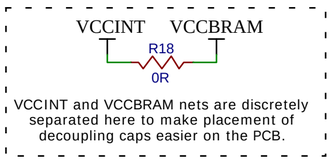
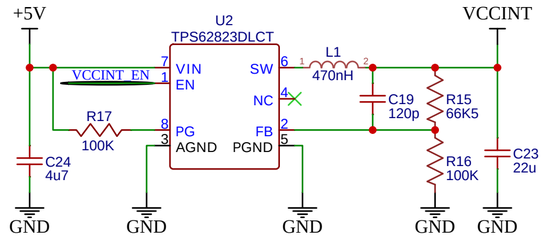




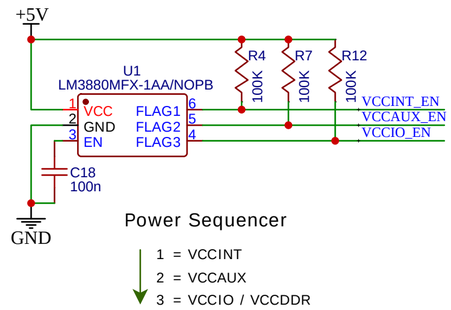
VCCINT = VCCINT
VCCBRAM = VCCINT
VCCAUX = VCCAUX
VCCO_0-16 = VCCIO
VCCO_34-35 = VCCDDR



VCCINT and VCCBRAM nets are discretely separated here to make placement of decoupling caps easier on the PCB.

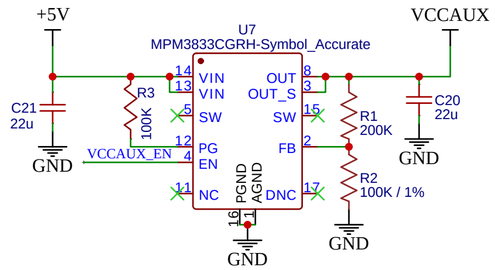


VCCINT = 1.0V/3A
Values for R15 & R16 obtained from TI WEBENCH app.

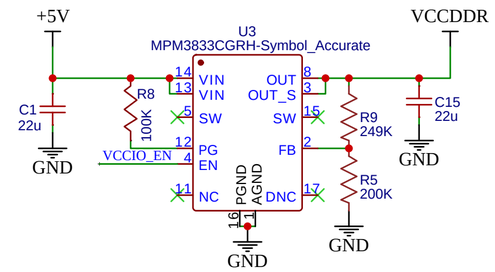


Power Sequencer

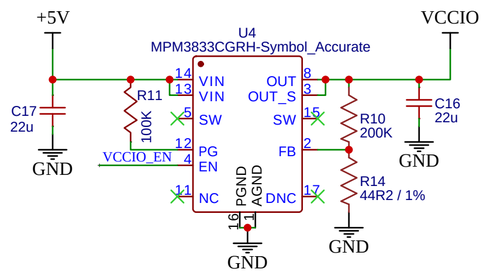
1 = VCCINT
2 = VCCAUX
3 = VCCIO / VCCDDR



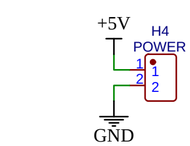
VCCAUX = 1.8V/3A



VCCDDR = 1.35V/3A

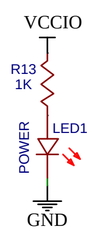


VCCIO = 3.3V/3A



Core Board Power

Only to be used if not connected to a carrier board.



The XCAT core board is designed to be powered via 5V feed from the carrier board, or a 5V supply via H4 if not connected to a carrier board.

Table 1: Resistor Values for Common Output Voltages

VOUT (V)	R1 (kΩ)	R2 (kΩ)
1.0	200 (1%)	300 (1%)
1.2	200 (1%)	200 (1%)
1.8	200 (1%)	100 (1%)
2.5	200 (1%)	63.2 (1%)
3.3	200 (1%)	44.2 (1%)

Consider MPM3833 instead of TPS62823.
Slightly larger, but no inductor req'd. 3A only.

https://www.monolithicpower.com/en/design-tools/design-tools/dc-dc-designer-online.html?PN=MPM3833C/

TITLE: Power		REV: 1.0
嘉立创EDA	Company: 10103	Sheet: 3/7
	Date: 20-01-2022	Drawn By: nockieboy