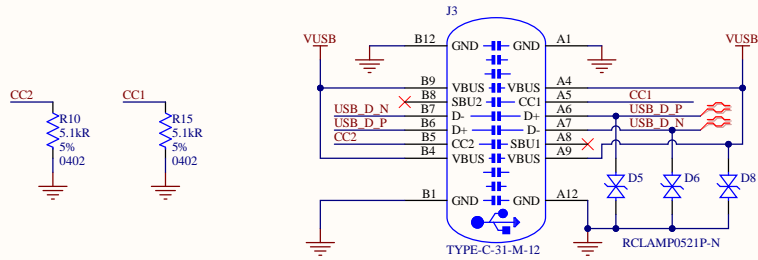


Power supply

This component is a power provider.



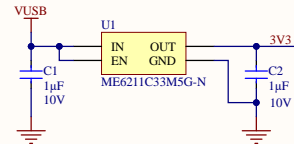
Mounting holes

Mounting holes are electrically connected to the Jacdac bus nets so they can be used as an alternative to the PCB edge connector. Please use the following reference designators and net mapping.

MH1 & MH2: GND
MH3: JD_DATA
MH4: JD_PWR

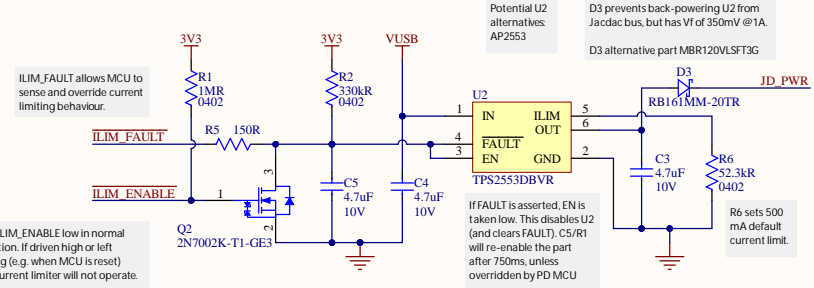
This design uses Jacdac's 'small' mounting holes: PTH with finished diameter of 2.1mm, annular copper ring of 3.0mm diameter & copper/component keepout of 5.0mm. The mounting holes must be on 2.5mm pitch. Mounting holes should have appropriate silkscreen marker, and MH1 should have a pin 1 marker on the top side.

Recommendation: consider replacing U1 with an LDO that is robust to repeated spikes of 8V or more on its input in case there is noise on the Jacdac bus.

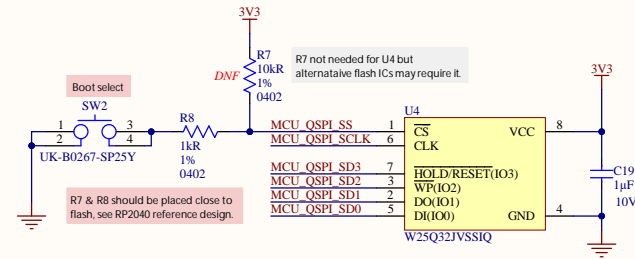


U1 alternative parts:
ME6212C33M5G 6V 260mA @ 200mA Iout 350mA
NCP114ASN330T1G 5.5V 225mA @ 300mA Iout 300mA
NCP114ASN330T1G 5.5V 225mA @ 300mA Iout 300mA

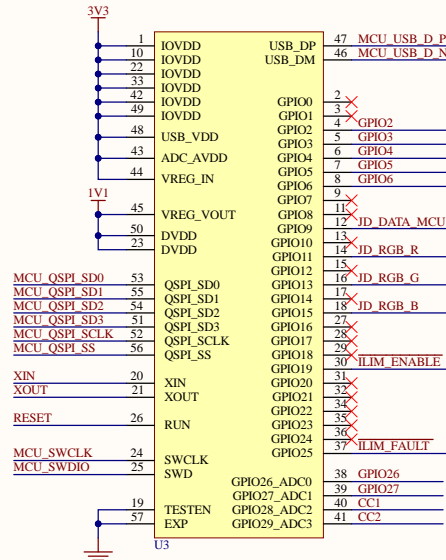
Power provision



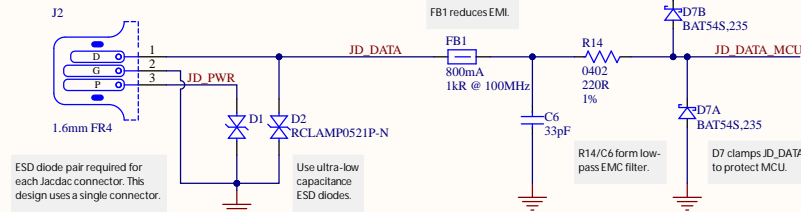
SPI flash



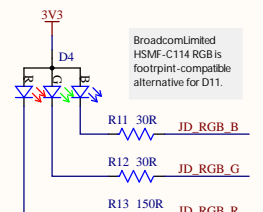
MCU



Jacdac interface



Status LED



This reference design is a guideline. Please refer to the Jacdac docs online at <https://aka.ms/jacdac> for the definitive and most up-to-date information.

Silkscreen should include text to identify the module type and revision, and optionally a QR code.

This design uses a 'cute' board shape.

Silkscreen & layout notes
Block name
Design notes
This information is provided "as-is". You bear the risk of using it. Some information relates to pre-released specification which may change without notice. Microsoft makes no warranties, express or implied, with respect to the information provided here.

When this PDF is viewed with Adobe Reader, clicking on components shows part numbers and other details.

Microsoft

PROJECT DESCRIPTION
Jacdac RP2040 brain

SHEET DESCRIPTION
complete design

SHEET FILENAME JacdacBrainRP2040 59.SchDoc

PROJECT FILENAME JacdacBrainRP2040 59.PrjPCB

PROJECT CODENAME JacdacBrainRP2040

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PAGE 1 OF 1

DRAWN BY JD, SH & DG

REVISION 0.2 PCB ID 59-0.2