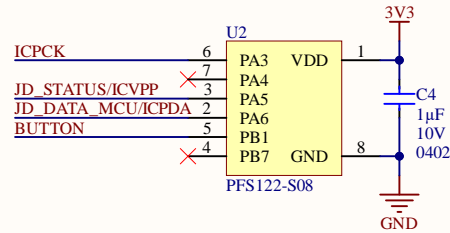
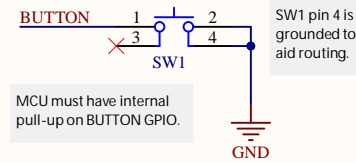


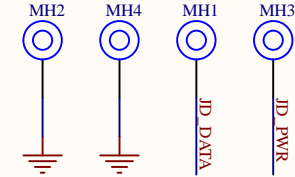
MCU



Button



Mounting holes



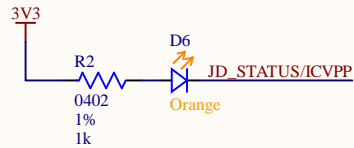
This design uses PTH mounting holes with finished diameter of 3.1mm, annular copper ring of 4.4mm diameter, resist keepout of 5.0mm & copper/component keepout of 7.0mm. The mounting holes must be on a 10mm pitch.

Mounting holes should have appropriate silkscreen marker on both sides of PCB, and MH1 should have a pin 1 marker in copper on the top side only. There is a notch in the PCB outline adjacent to MH1.

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: JD_DATA
MH2 & MH4: GND
MH3: JD_PWR

Status LED



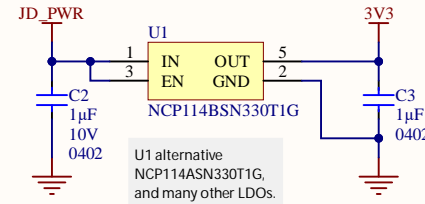
D6 alternative parts:
SML-D12D
E6C0603SEAC1UDA
NCD0603O1

Place a status LED adjacent to edge connector. If using alternative part check R2 value.

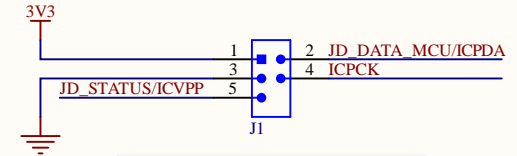
3V3 regulator

Consider using an LDO that is robust to spikes over 6V on input in case of noise on JD_PWR.

This component is a power-consumer.

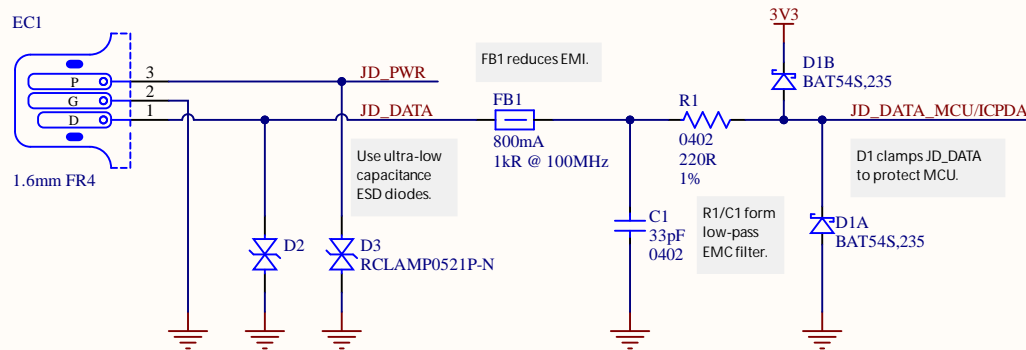


Programming header



"Hack-connect" SWD adapter.
<https://arcade.makecode.com/hardware/dbg>

Jacdac connector



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 manufacturer & module name and identify the version number and optionally a QR code.

This design uses the 'EC30' 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.

PROJECT FILENAME JacdacTactEc30 115.PrjPCB

PROJECT CODENAME JacdacTactEc30

SHEET FILENAME JacdacTactEc30 115.SchDoc

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Microsoft

PROJECT DESCRIPTION
Jacdac tact button using PADAUK MCU

LAST MODIFIED 12/06/2022

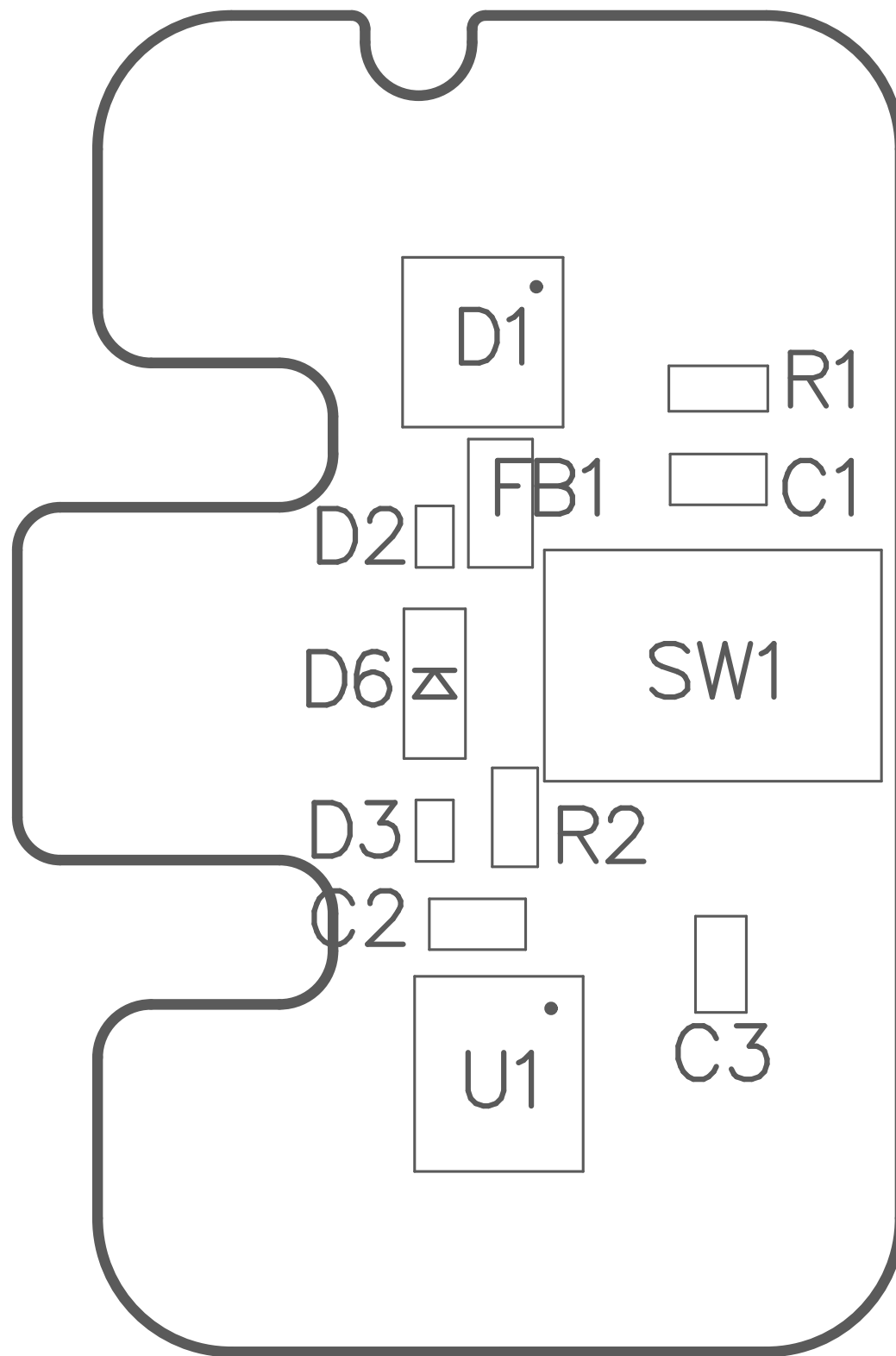
PAGE 1 OF 1

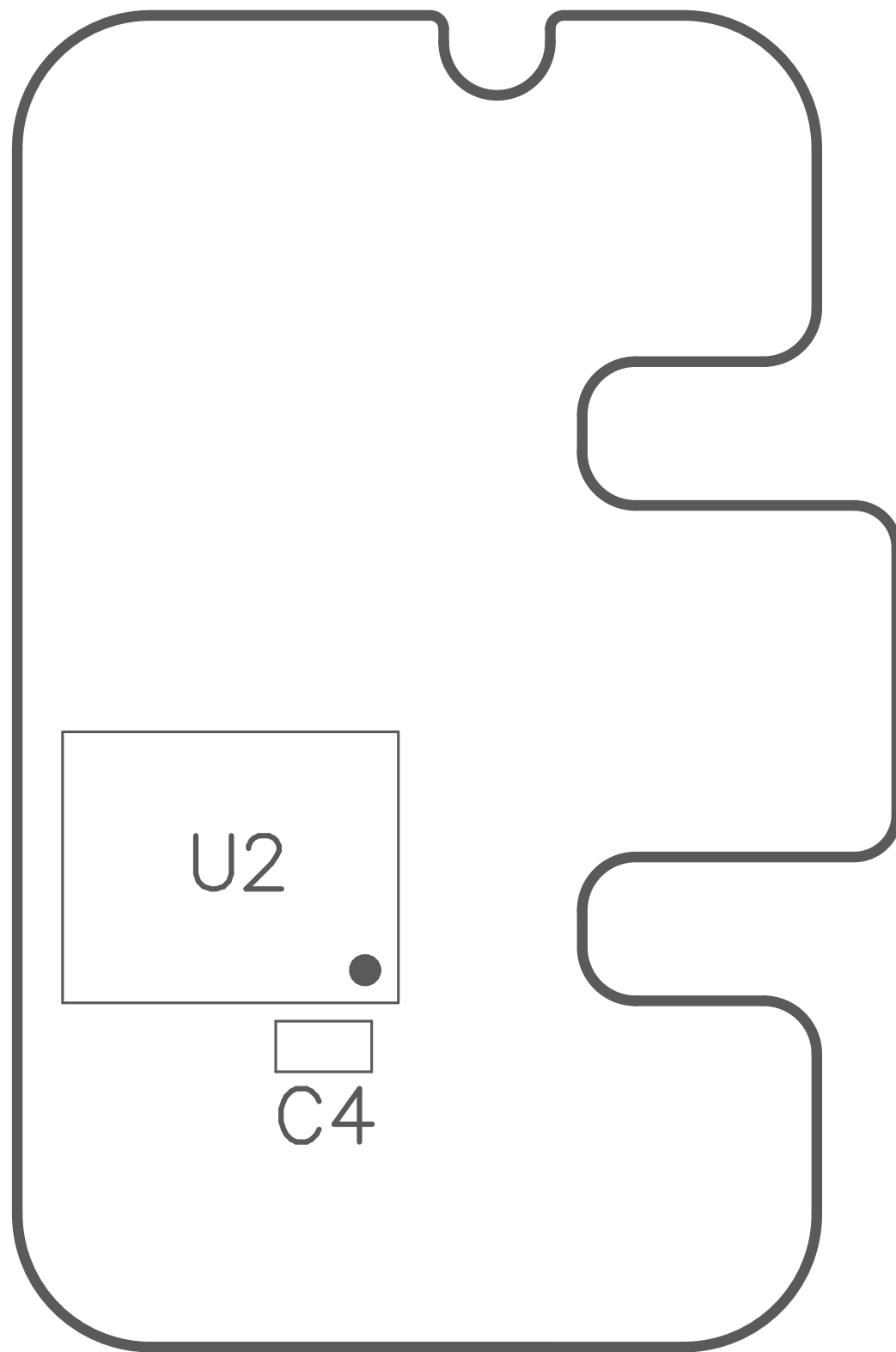
DRAWN BY DG, JD & SH

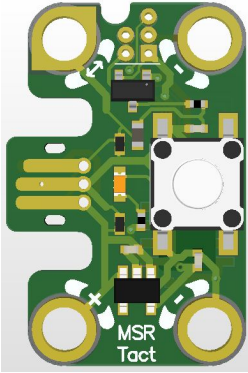
SHEET DESCRIPTION
Complete design

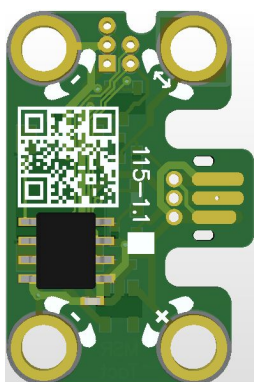
REVISION 1.1

PCB ID 115-1.1









no board edge pips/
rat's teeth/mouse bites
in this region - make
sure board edge is clean

non-plated slots x2

