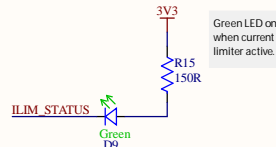
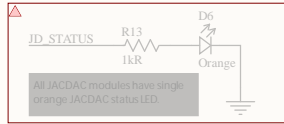
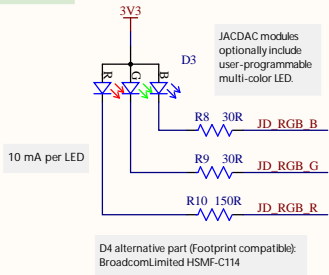
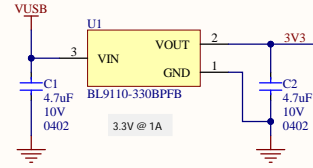


## Status LEDs

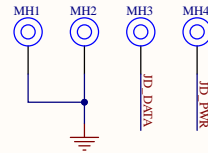


## 3V3 regulator



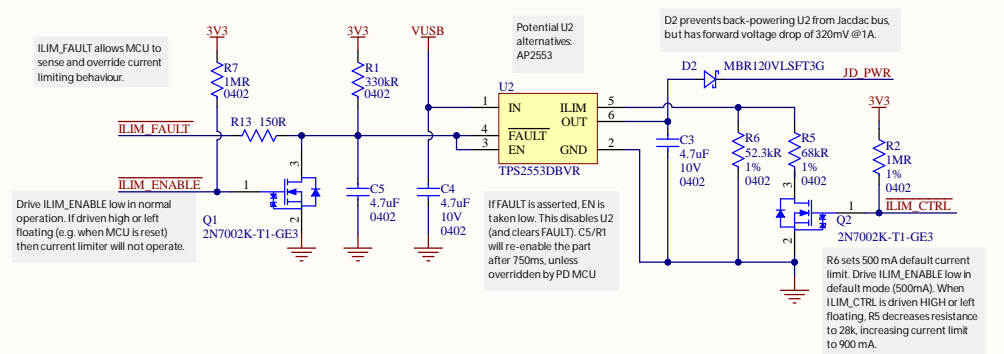
## Mounting holes

MH1, 2 connects to GND.  
MH3 connects to JD\_DATA, and  
MH4 connects to JD\_PWR.

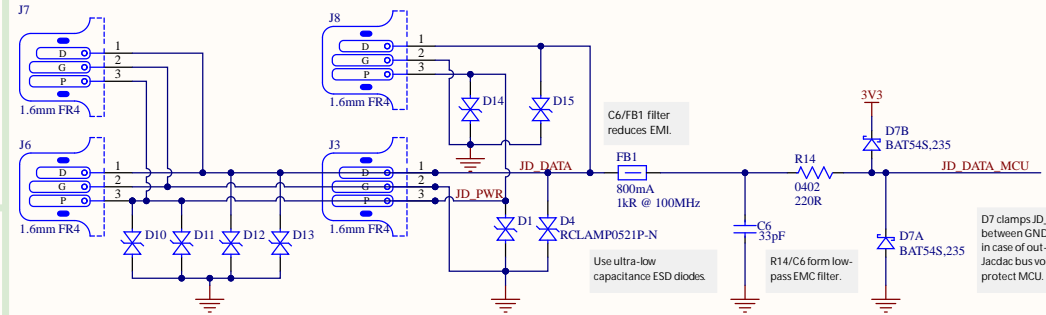


JACDAC mounting holes plated through hole, finished diameter of 2.2mm and annular ring of 3.2mm diameter.

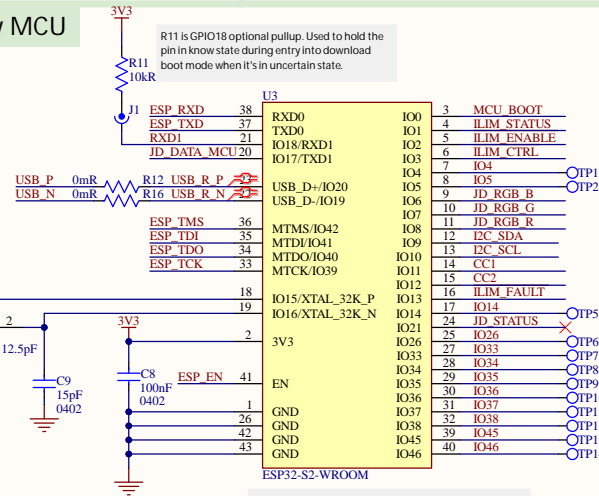
## Current limiter



## Jaccad interface

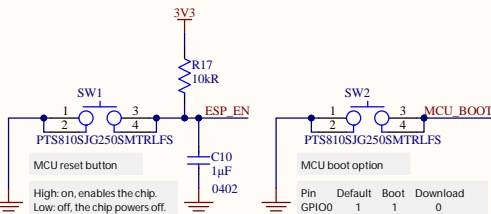


## Brain & power delivery MCU



X1: ESR = Max. 70kR

Alternative part:  
SMD31327681252090 - lscs.com

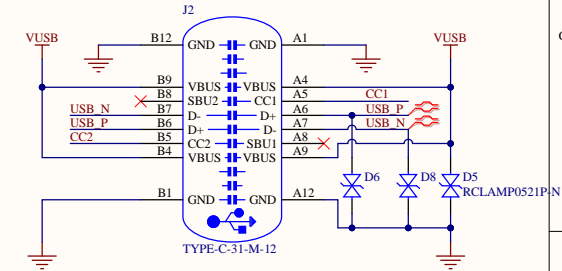


## USB & Qwiic interface

Either CC1 or CC2 will be connected to the DFP (host) via cable. Pull down resistors R3/R4 will form a potential divider with the pull up resistors on the DFP.

Via ADC, the MCU can sense the power delivery capabilities of the DFP without any negotiation.

DFP pull up:	Max current:	10-bit ADC value when VUSB=5V:
56k	500 mA	56k/5.1k = 129
22k	1500 mA	22k/5.1k = 292
10k	3000 mA	10k/5.1k = 525



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  
Jaccad ESP32 brain

SHEET DESCRIPTION  
complete design

LAST MODIFIED 05/08/2021 PAGE 1 OF 1 DRAWN BY JD, SH & DG REVISION 0.3 PCB ID 48-0.3

SHEET FILENAME JaccadBrainESP32 48.SchDoc

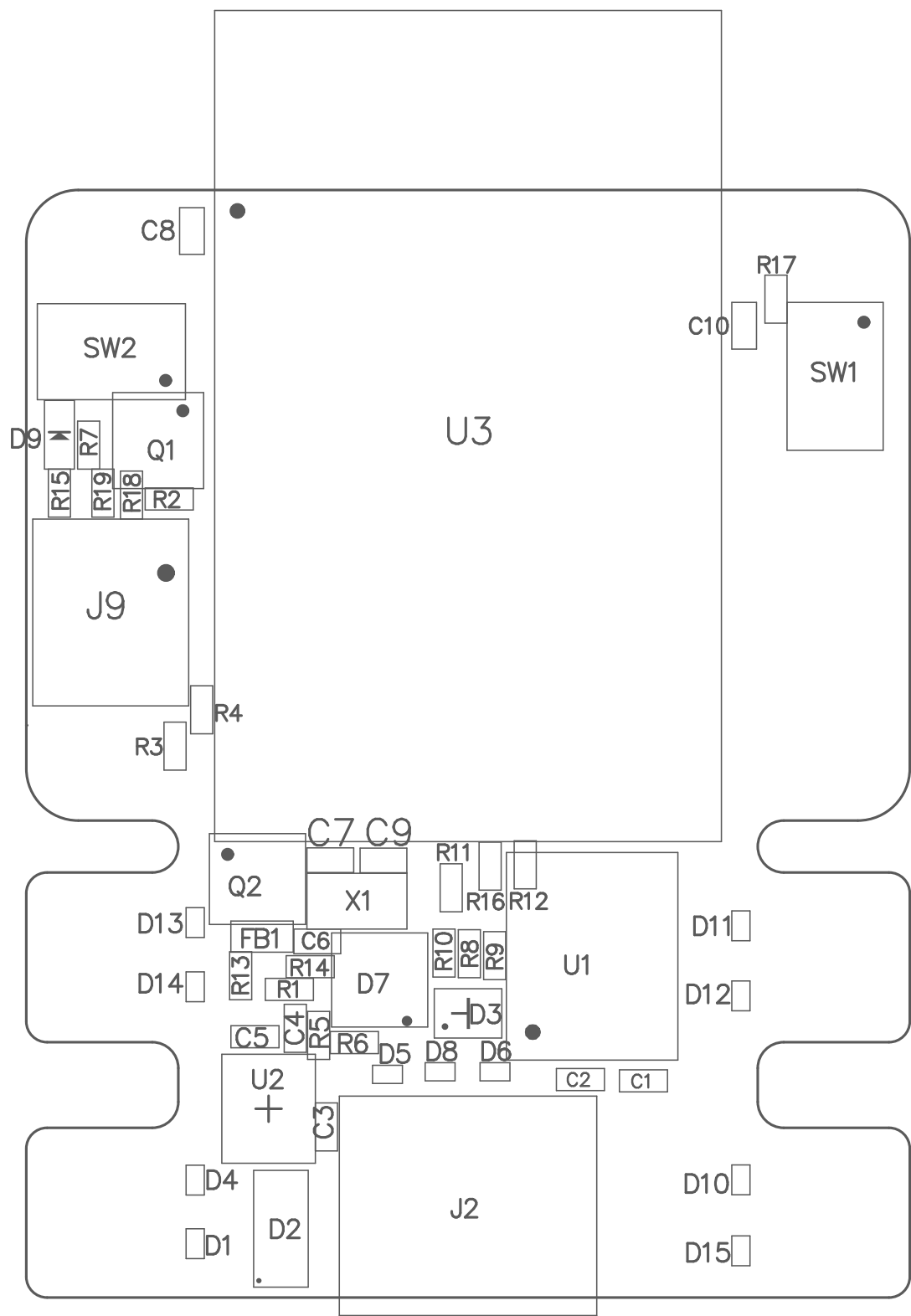
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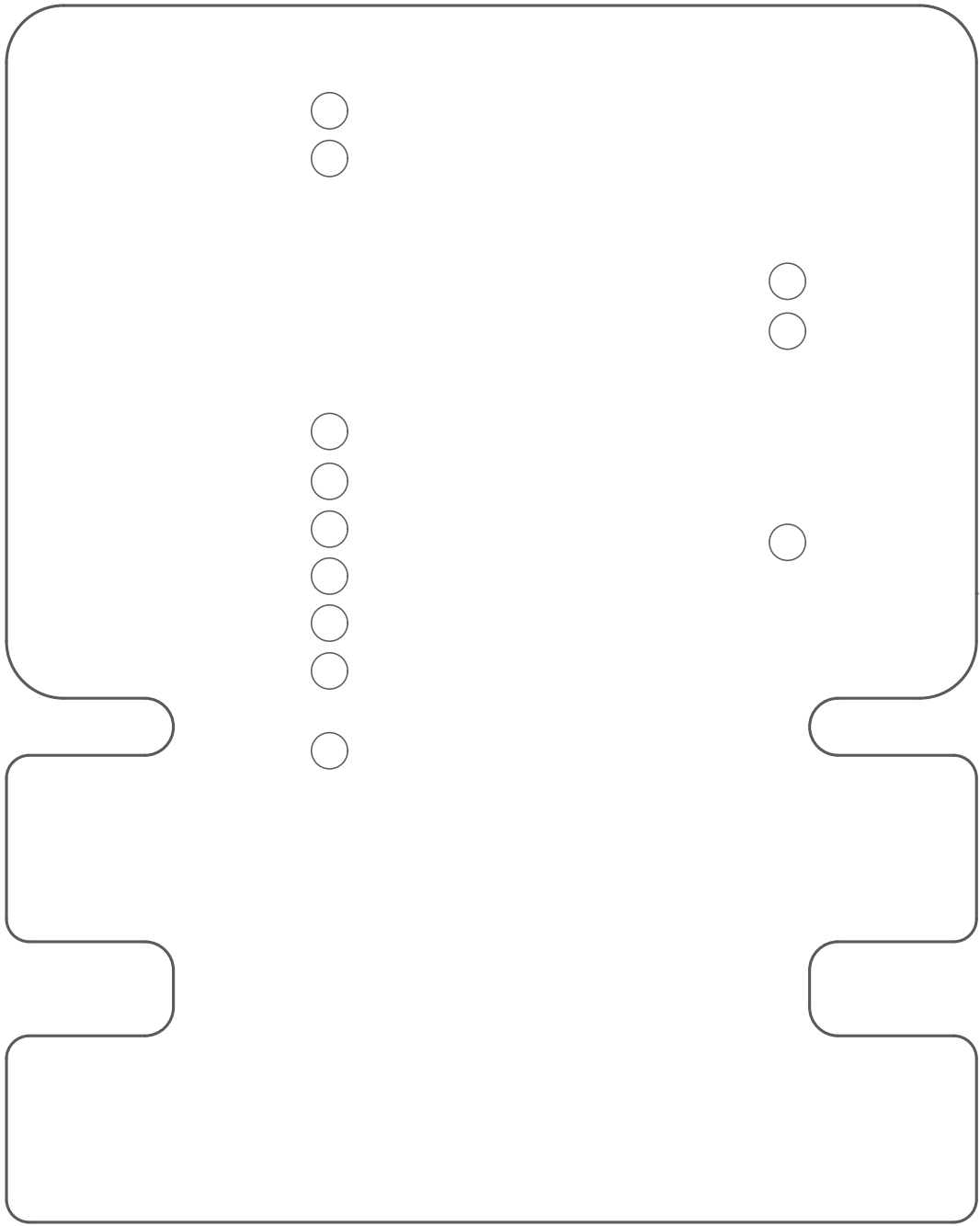
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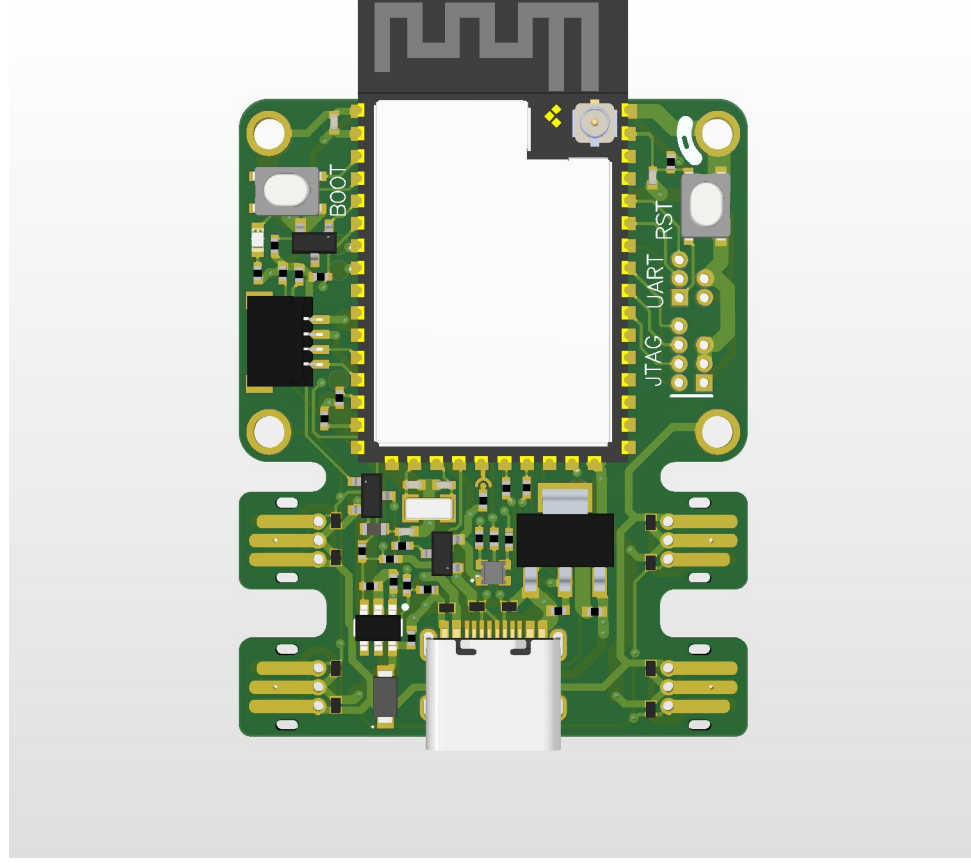
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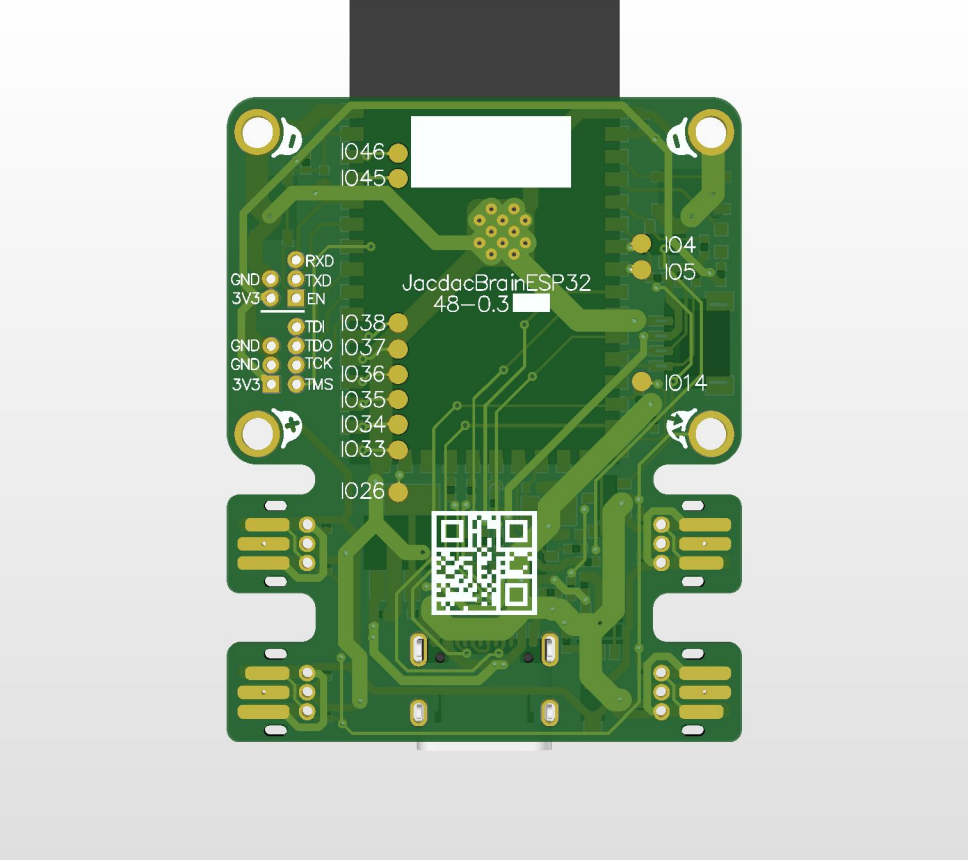
PROJECT DESCRIPTION Jaccad ESP32 brain

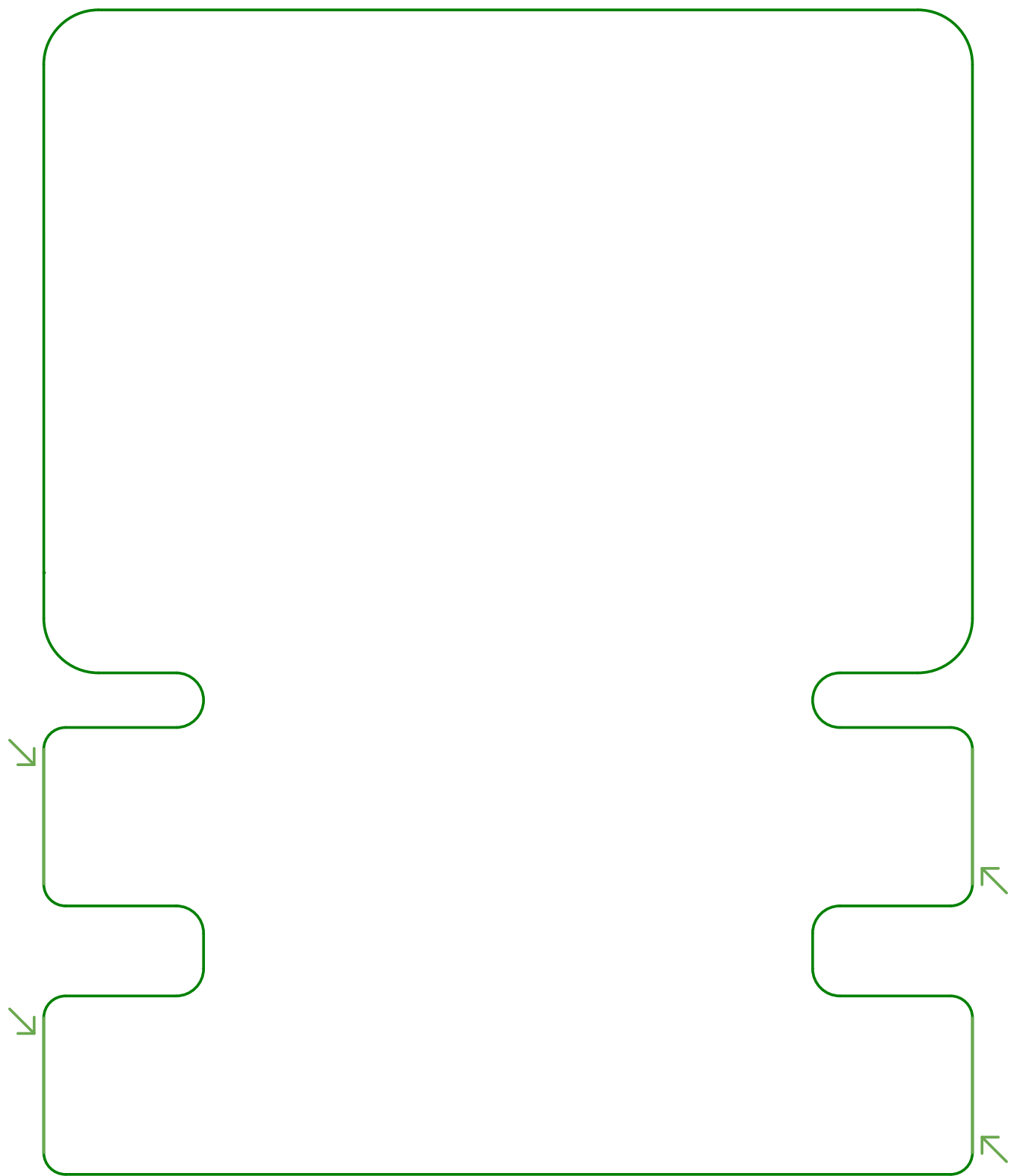
SHEET DESCRIPTION complete design

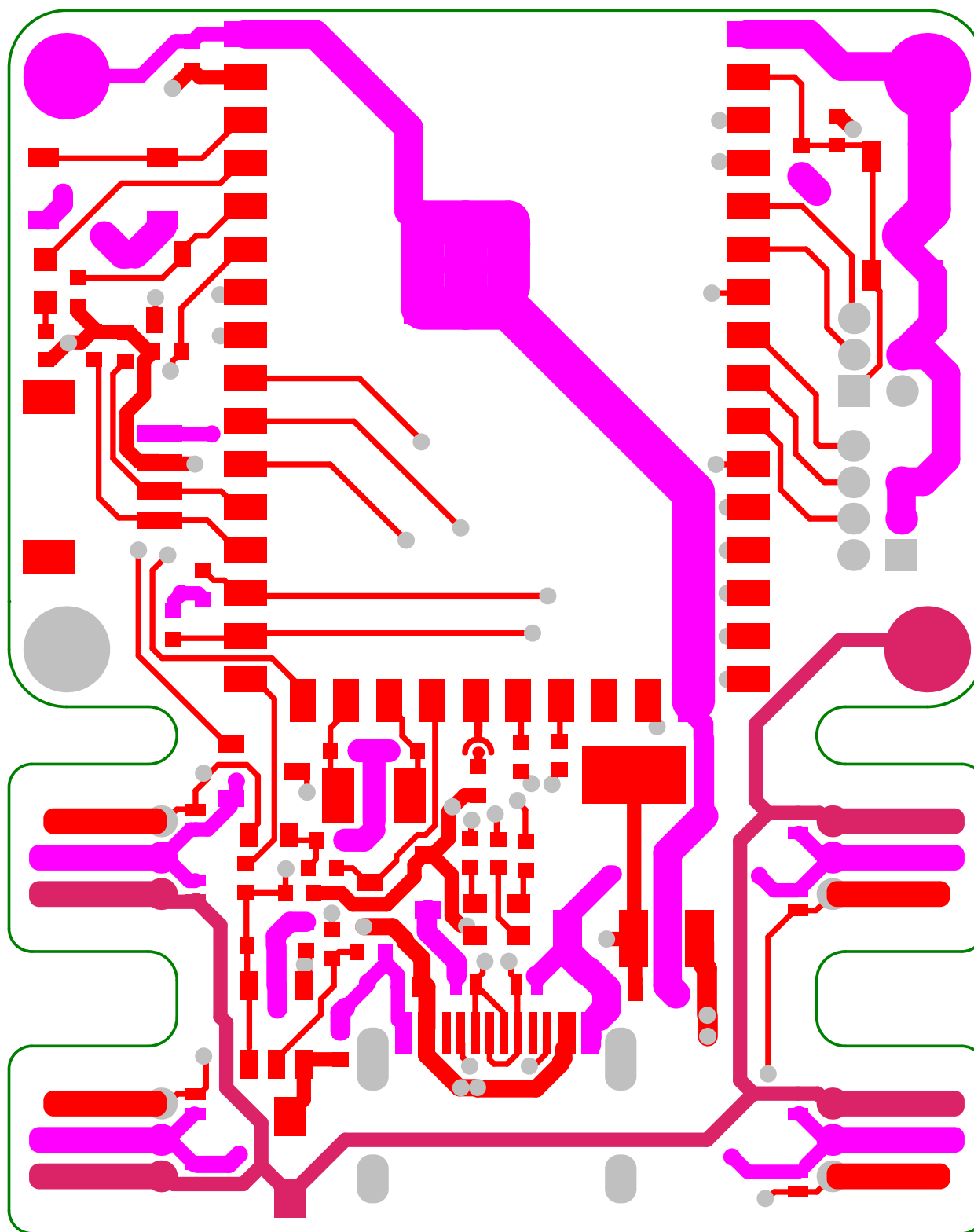


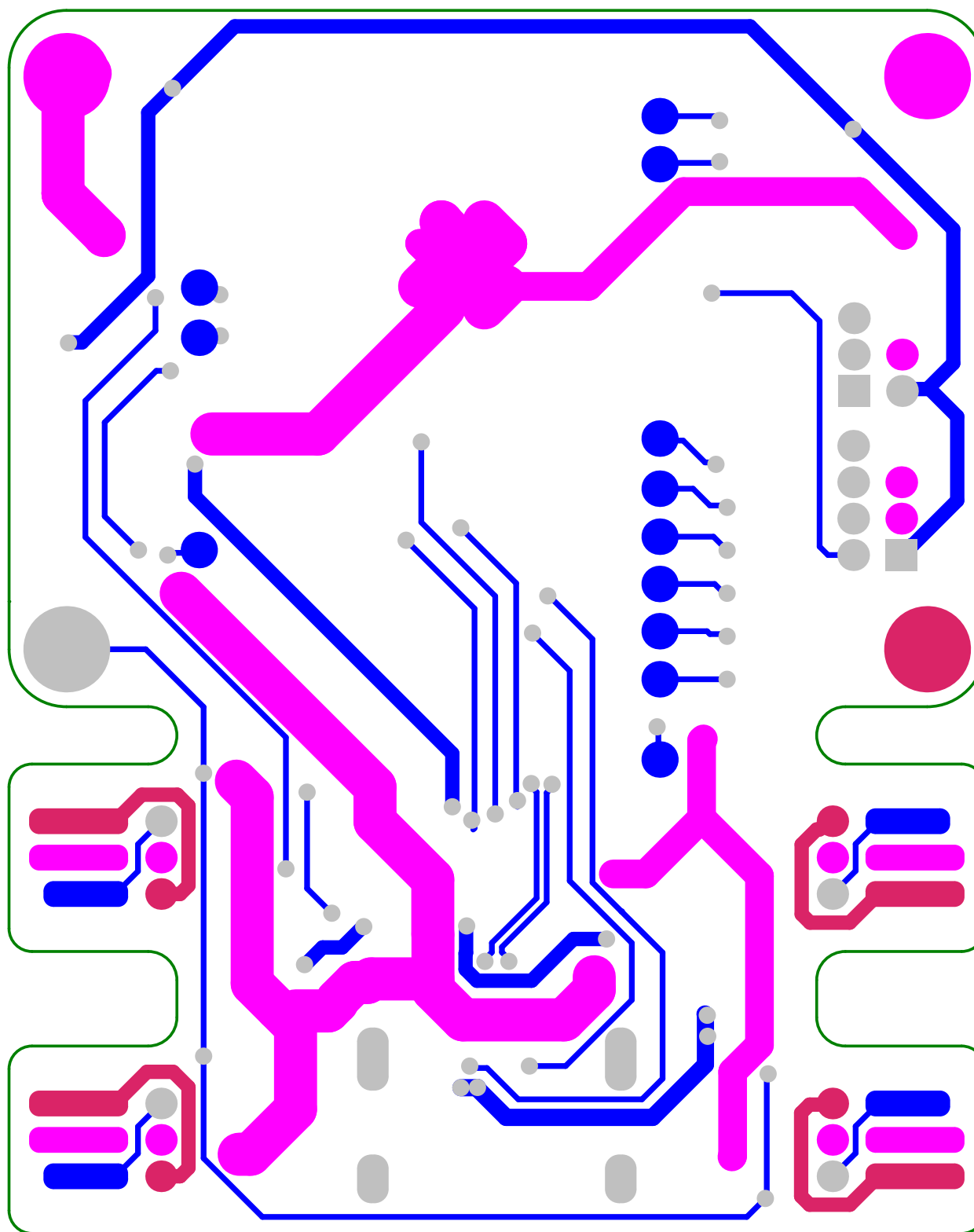




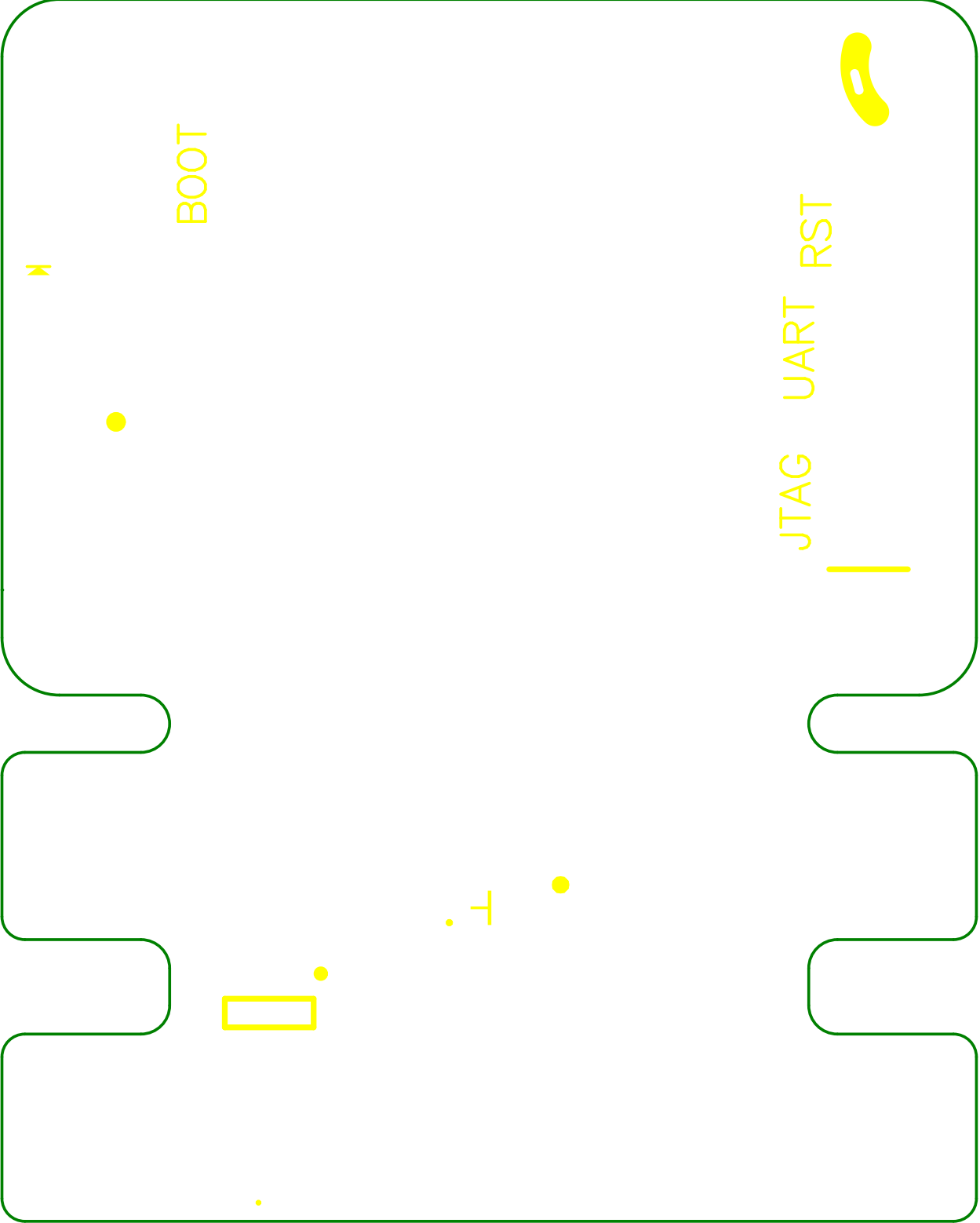














1045  
1046

105  
104

JacdacBrainESP32  
48-0.3

3V3  
GND  
TXD  
RXD  
EN

1038  
1037  
1036  
1035  
1034  
1033

3V3  
GND  
GND  
TCK  
TDO  
TDI

1014



1056

