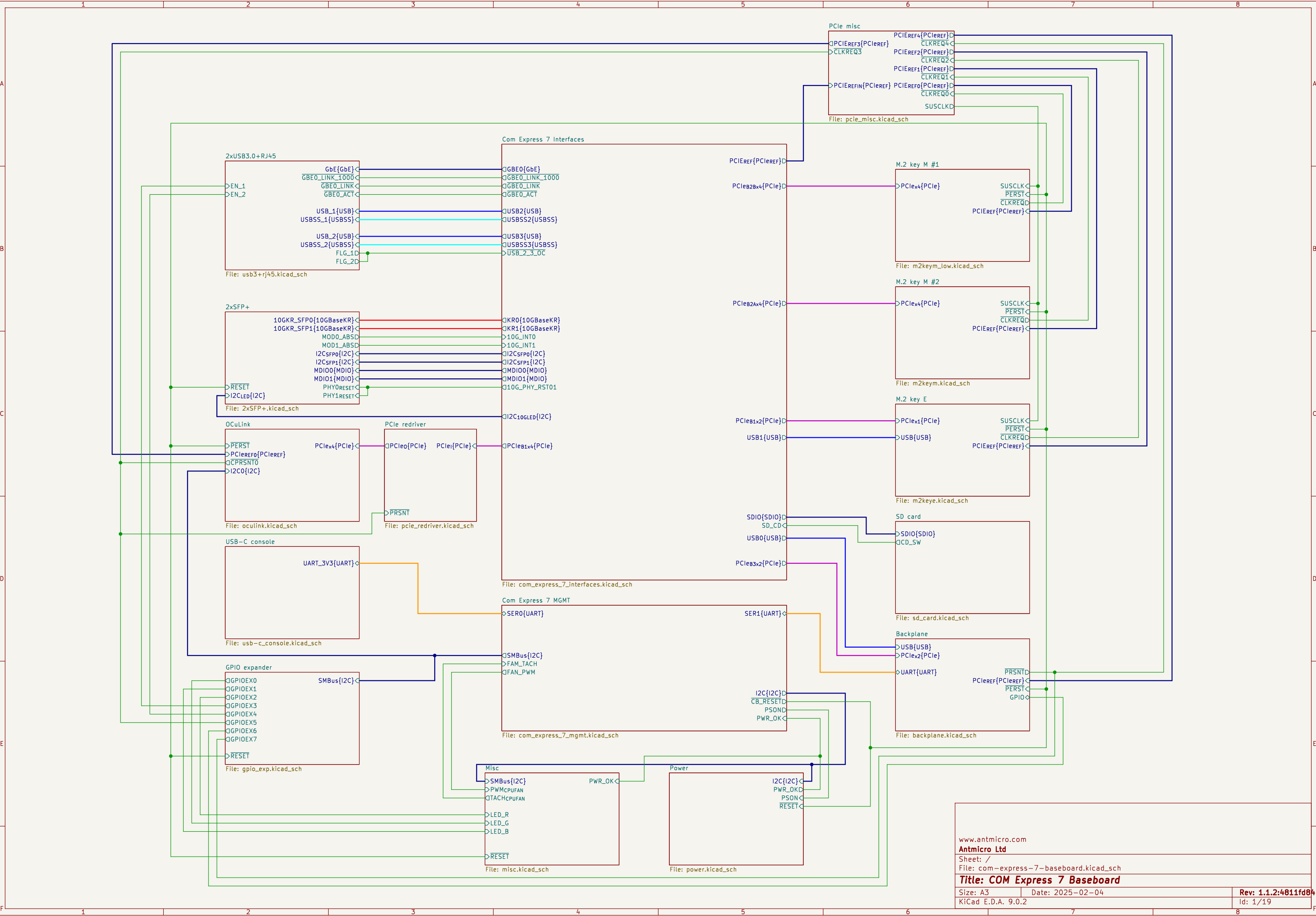
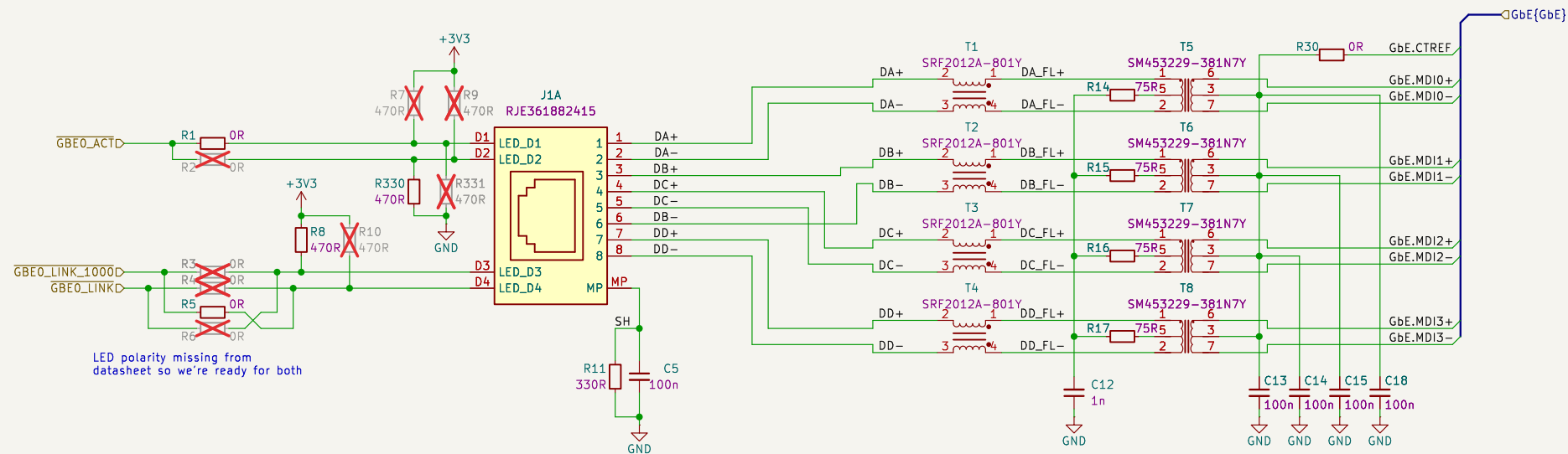
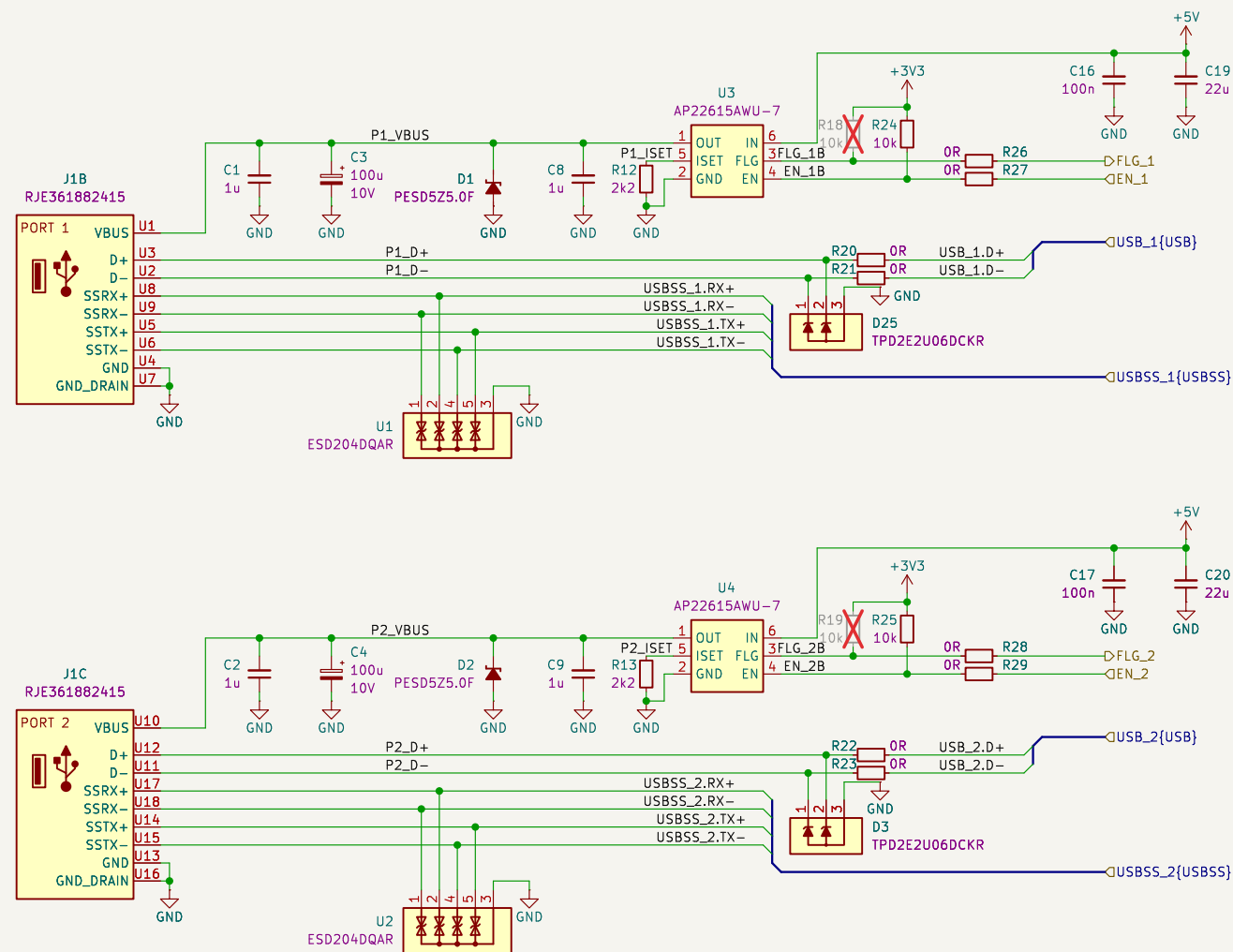


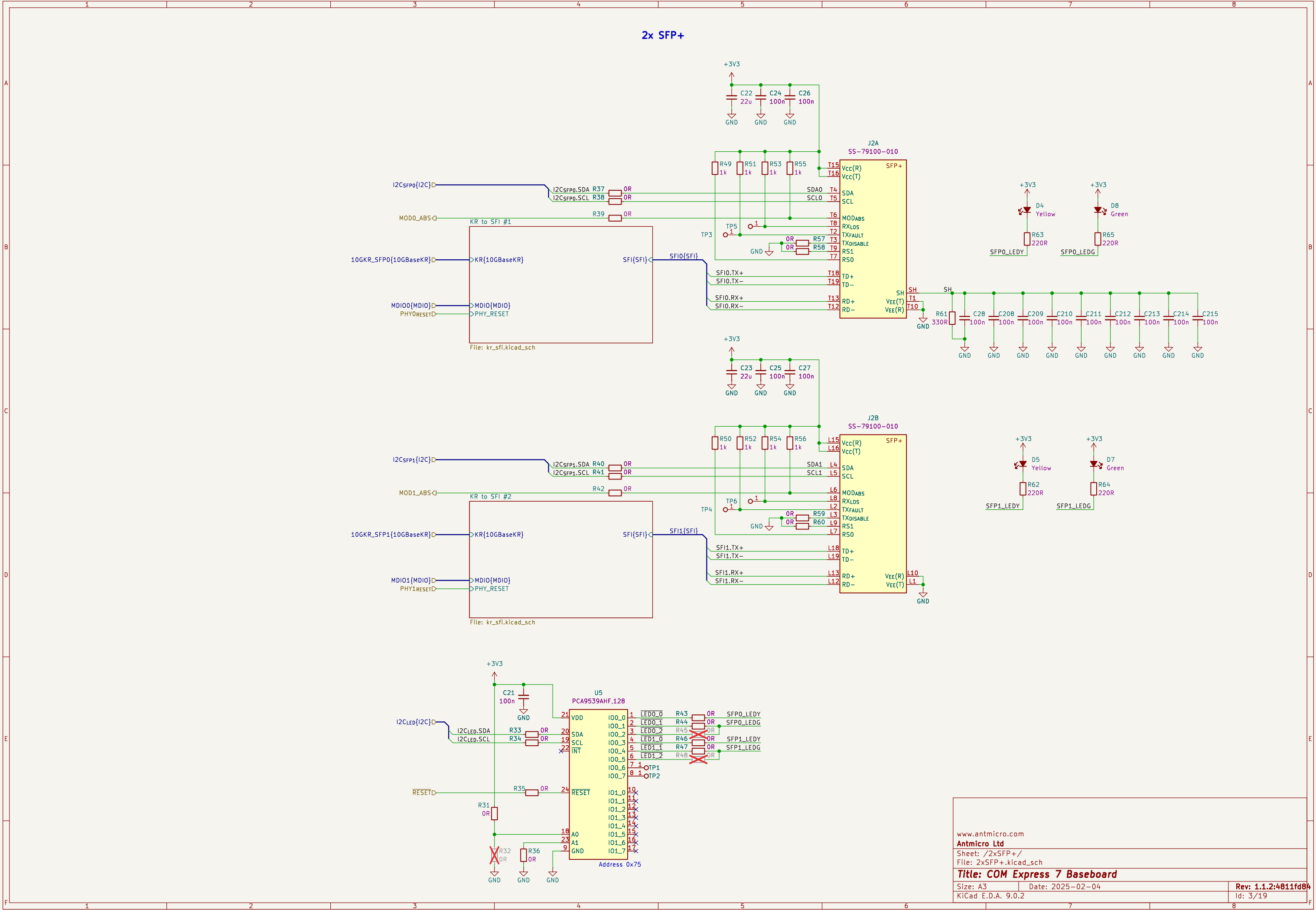


GbE RJ45

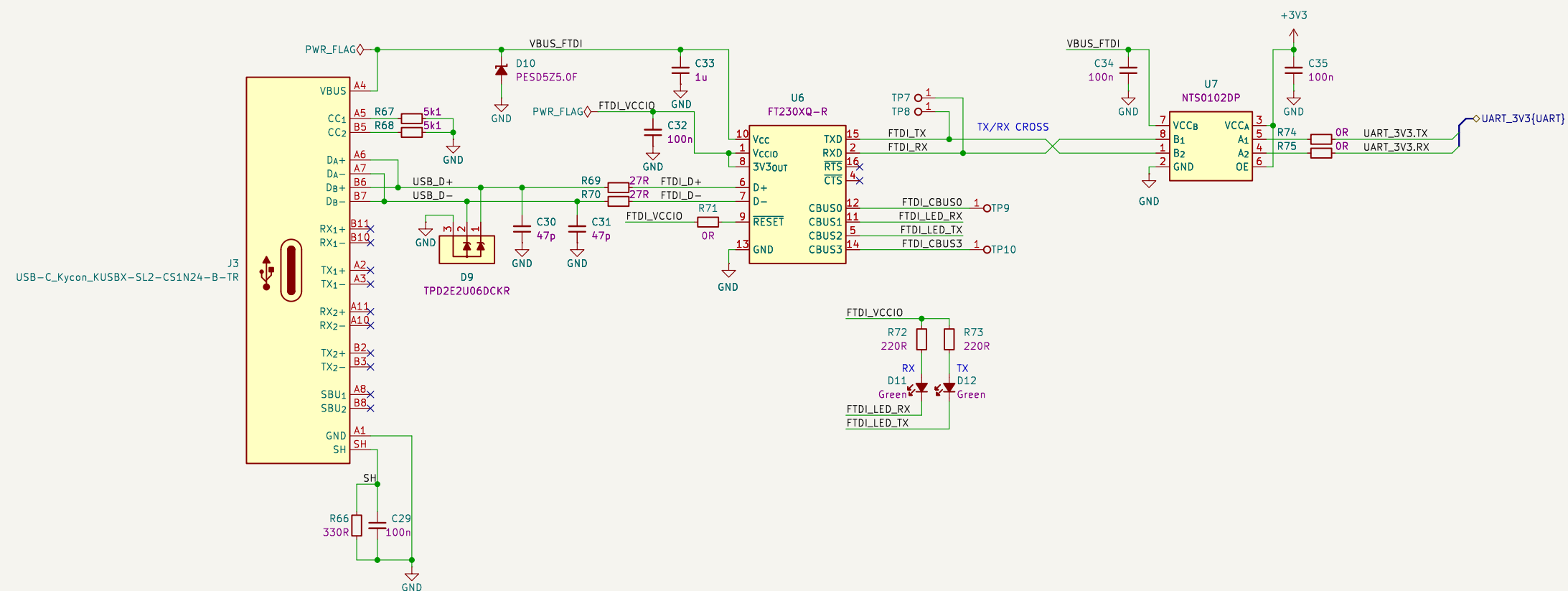


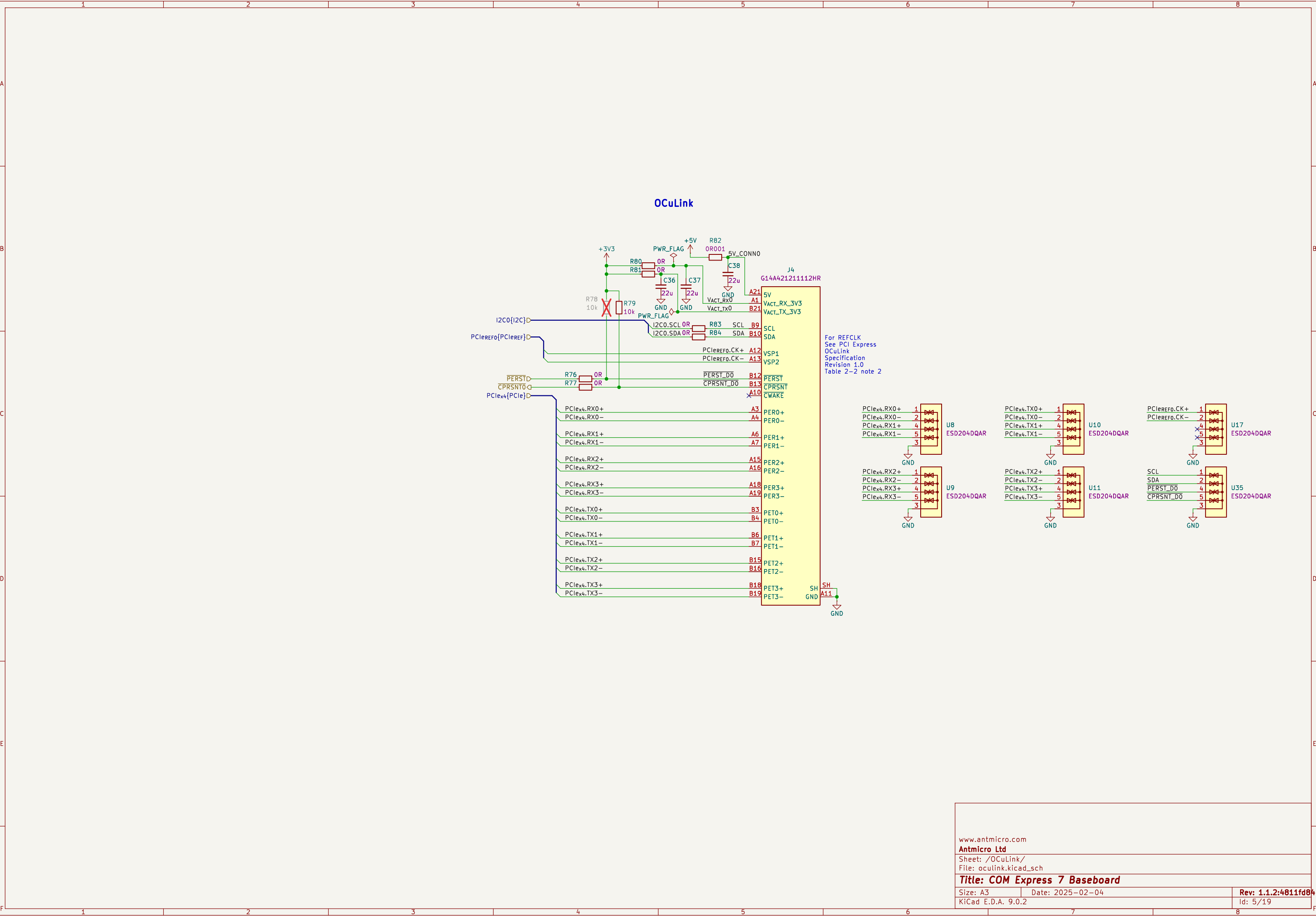
USB 3.0



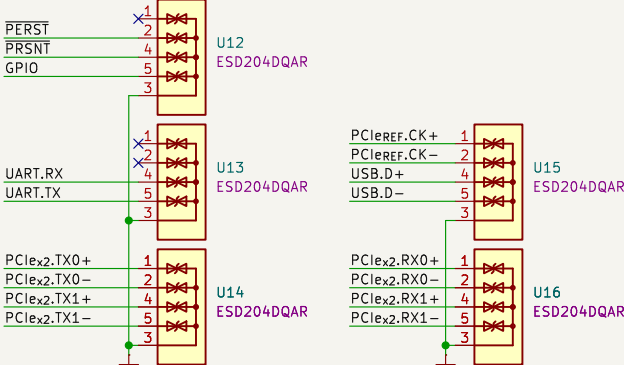
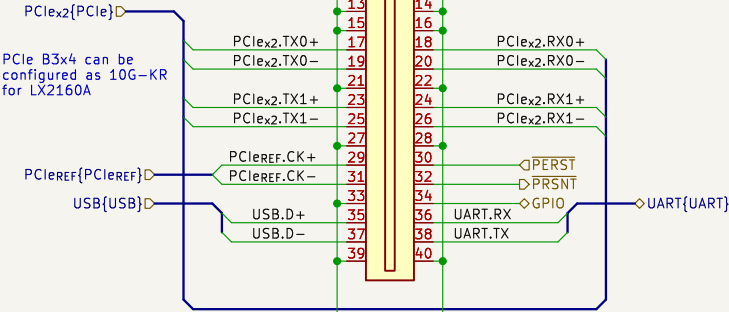


USB-C console

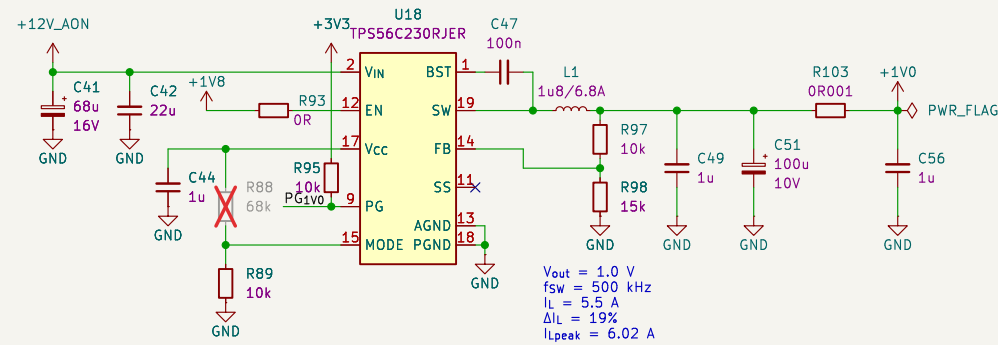




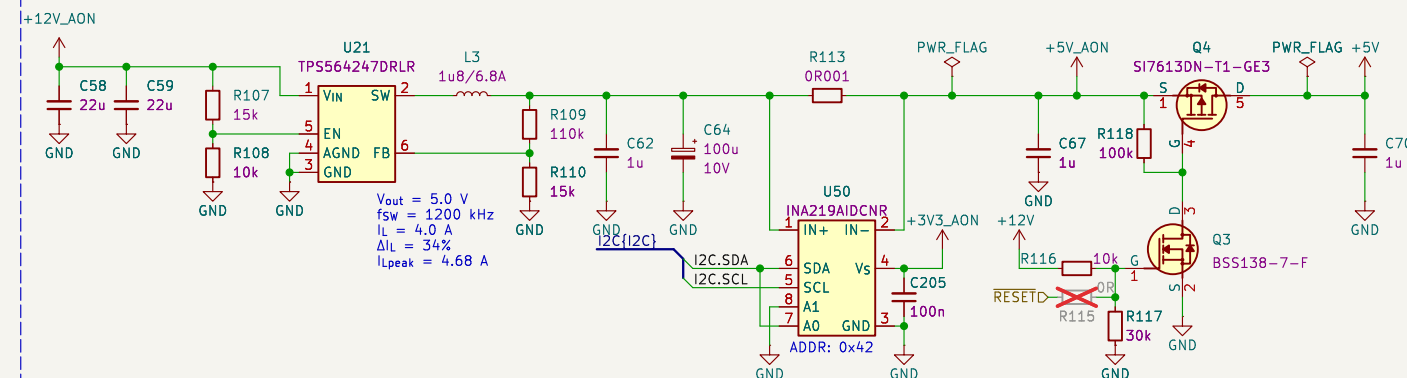
Backplane connectors



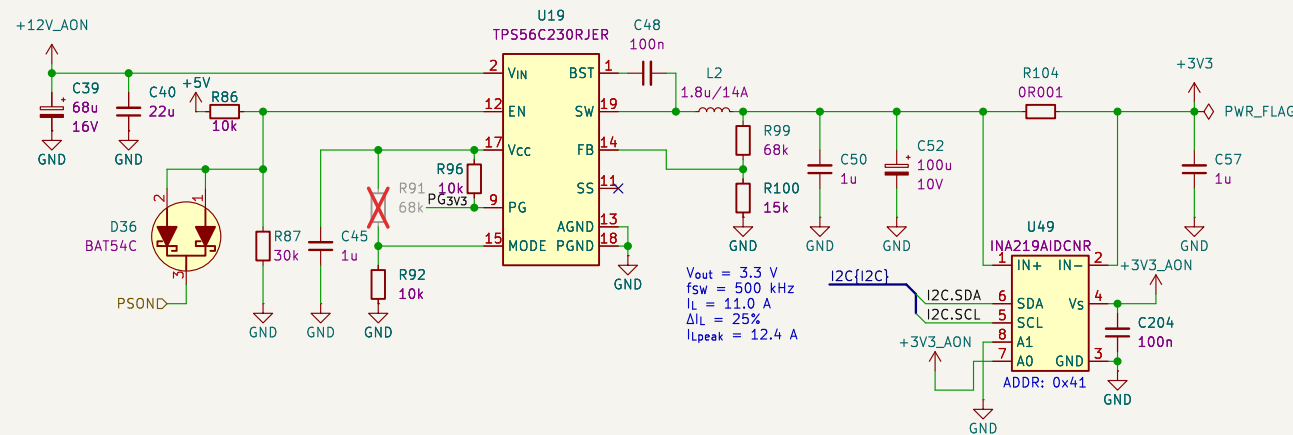
+1V0 DC/DC converter



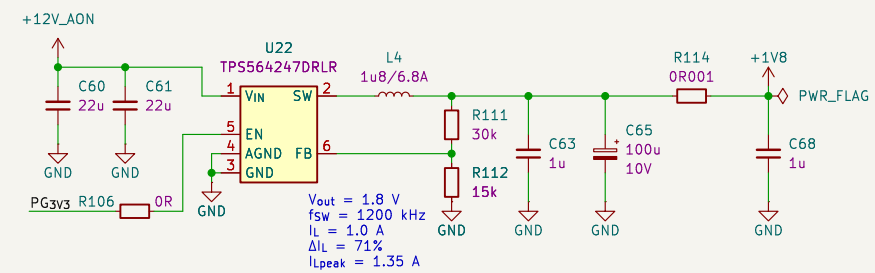
+5V DC/DC converter



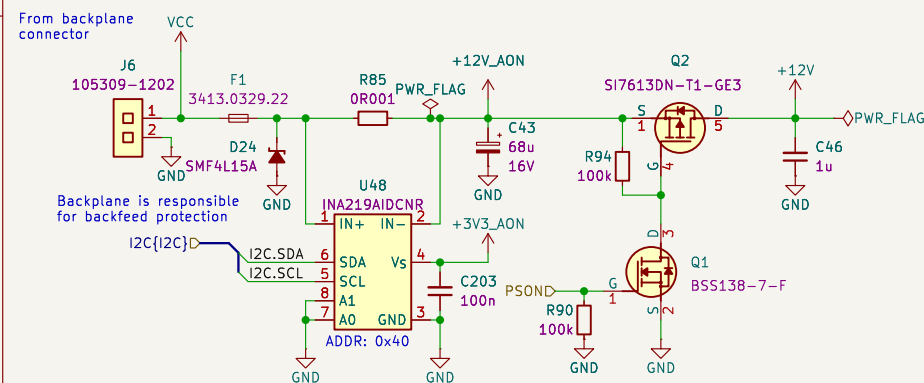
+3V3 DC/DC converter



+1V8 DC/DC converter



+12V source and bulk decoupling



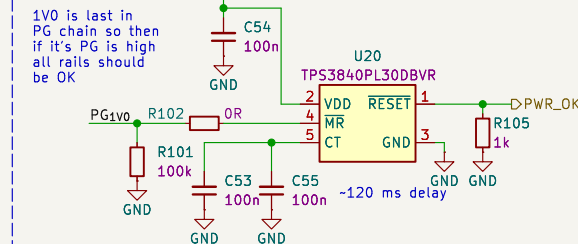
PSU rail description:
* +12VAON - Input power

Always on rails:
* +5VAON
* +3V3AON
* Power button*

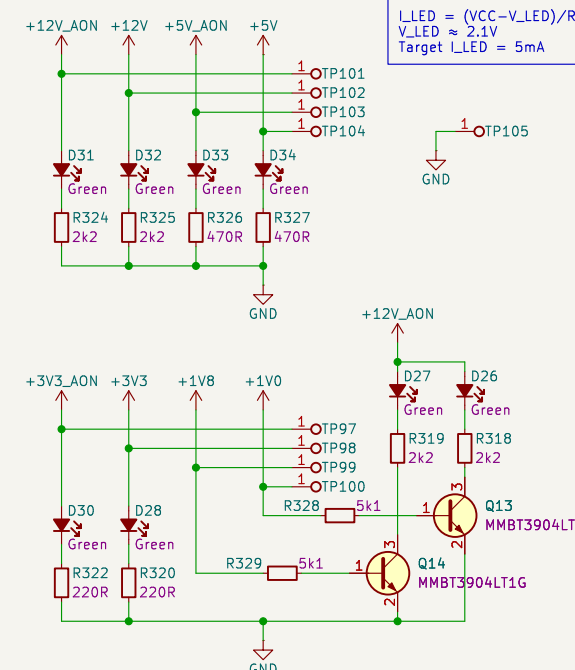
Board rails (PSON == 1):
* +12V
* +5V
* +3V3
* +1V8
* +1V0

1V0 is last in
PG chain so then
if it's PG is high
all rails should
be OK

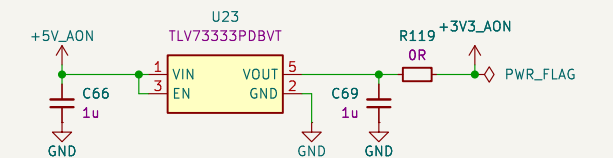
Sequence:
+5VAON
+3V3AON
Power button
+12V
+5V
+3V3
+1V8
+1V0



Power LEDs and testpoints



+3V3_AON LDO



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Sheet: /Power/

File: power.kicad_sch

Title: COM Express 7 Baseboard

Size: A3

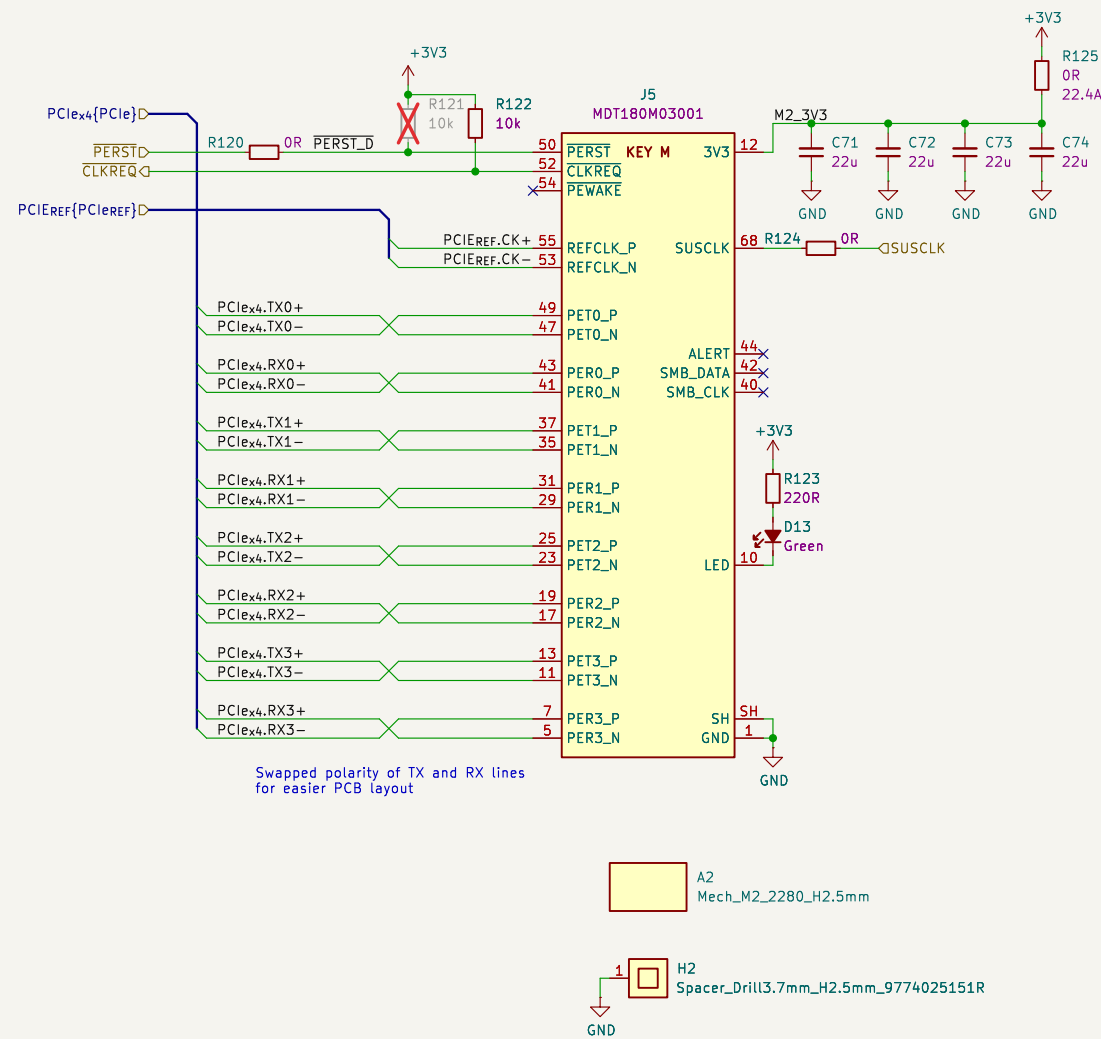
Date: 2025-02-04

Rev: 1.1.2:4811fd84

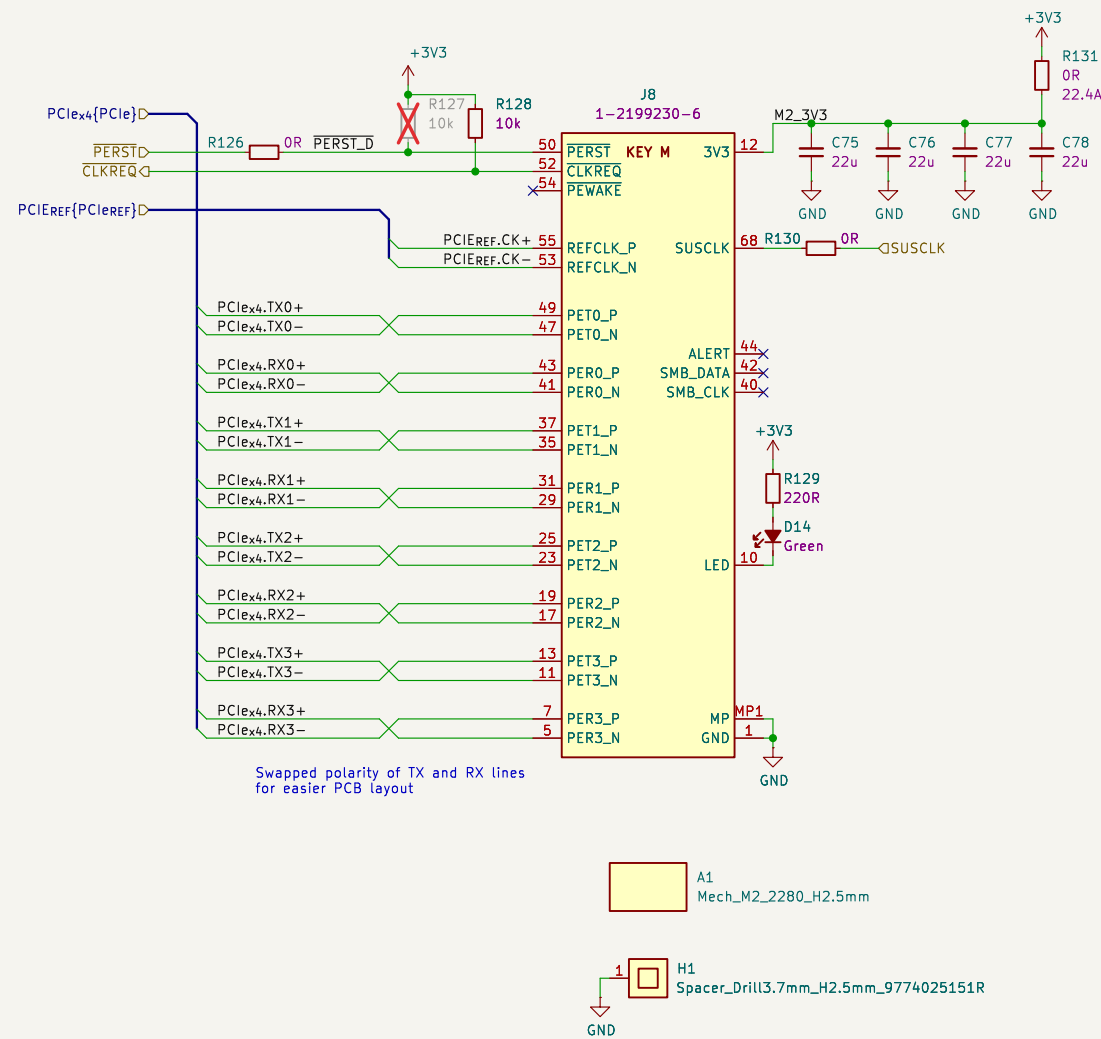
KiCad E.D.A. 9.0.2

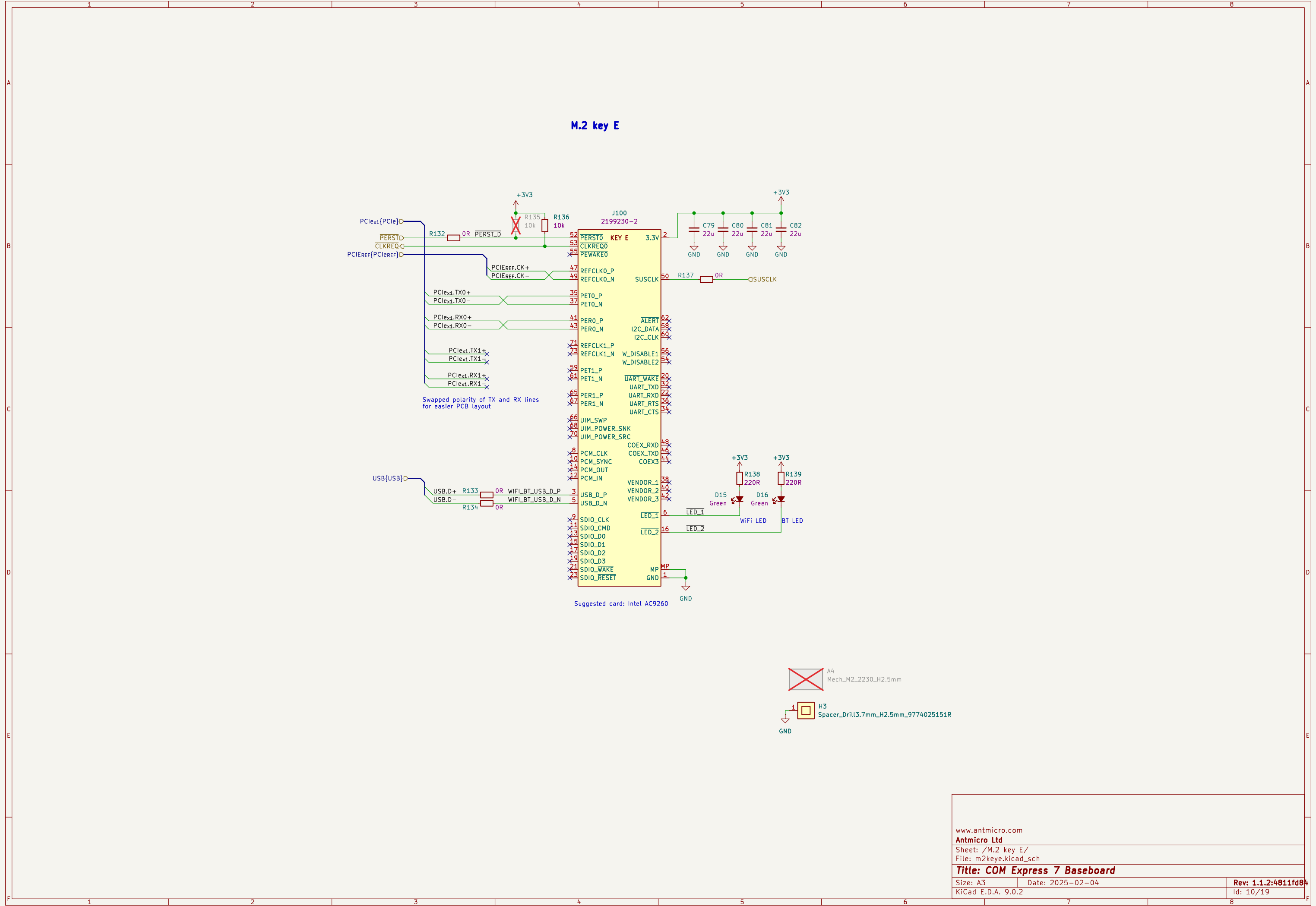
Id: 7/19

M.2 key M

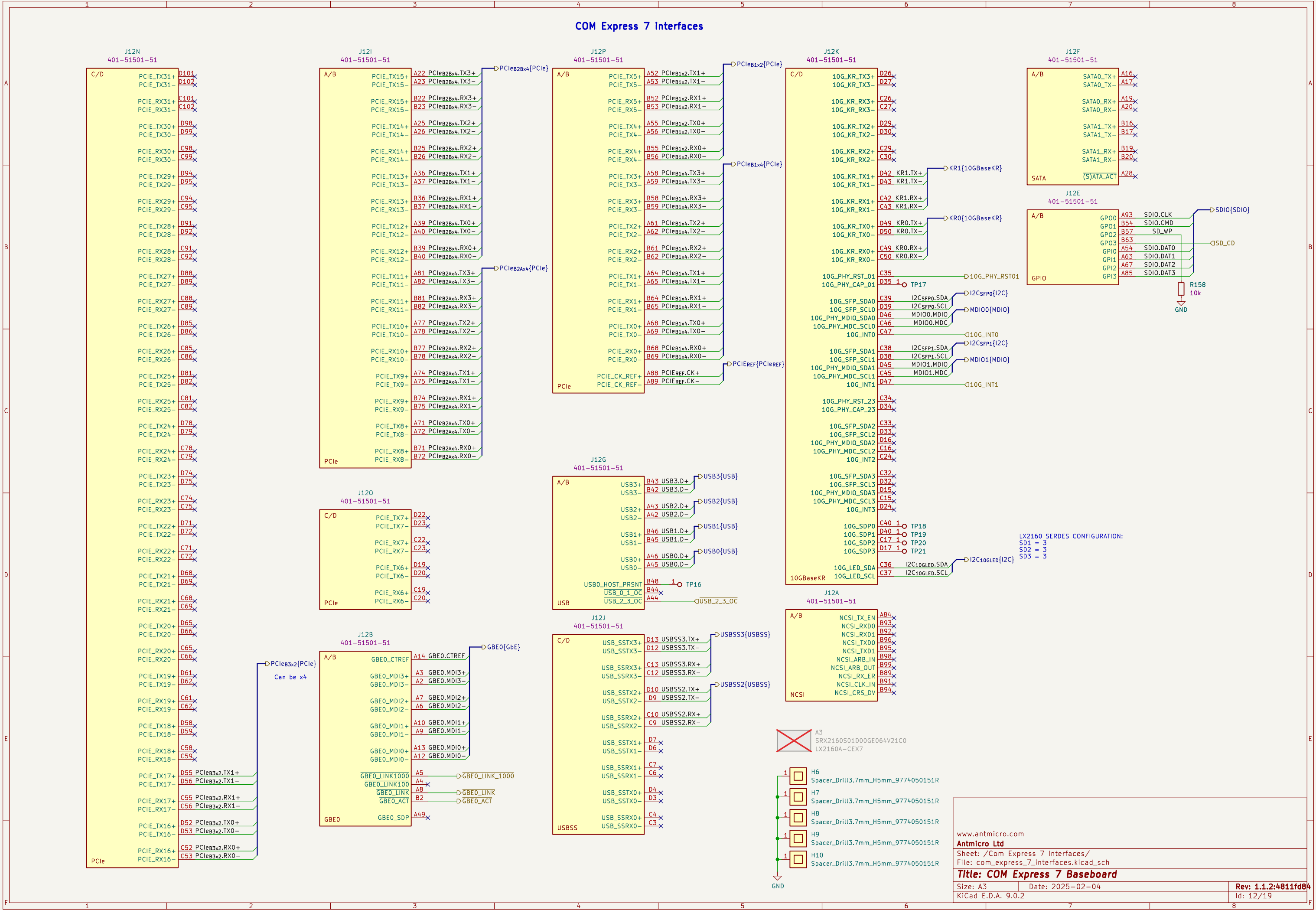


M.2 key M

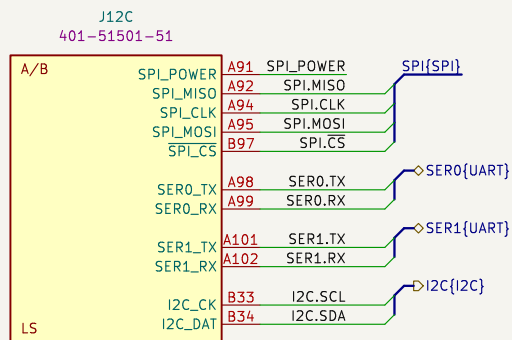
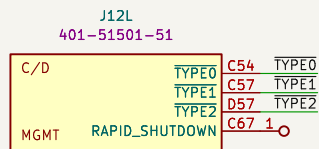
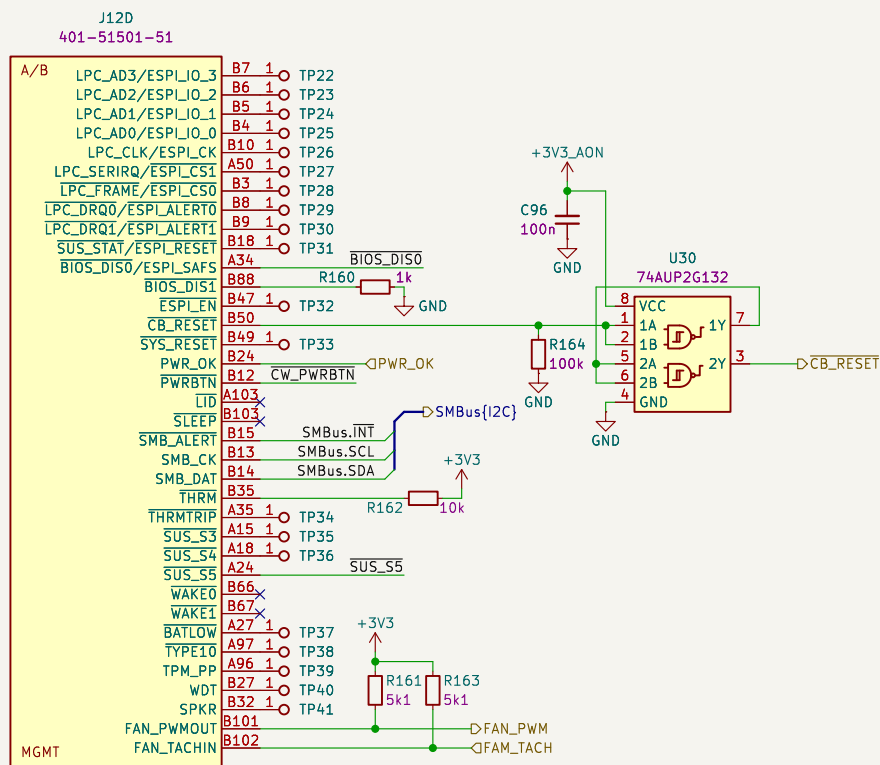
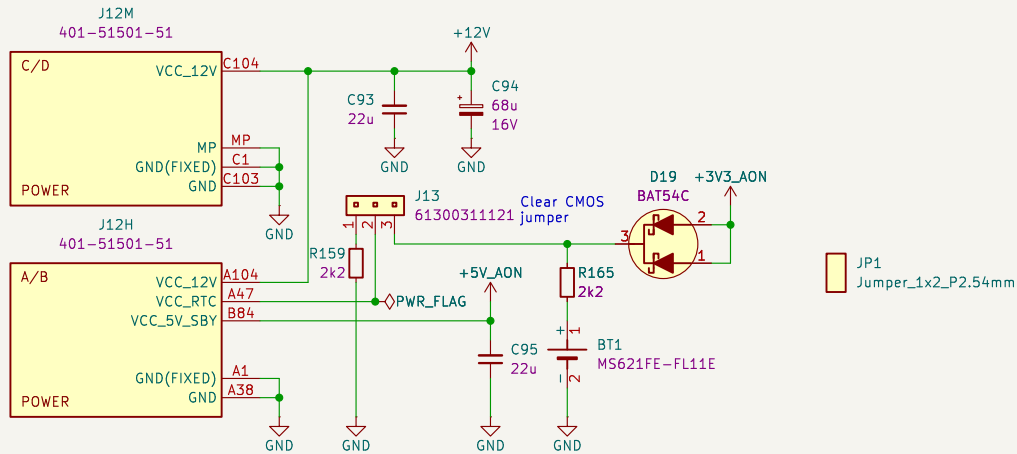




COM Express 7 interfaces



COM Express 7 power and management

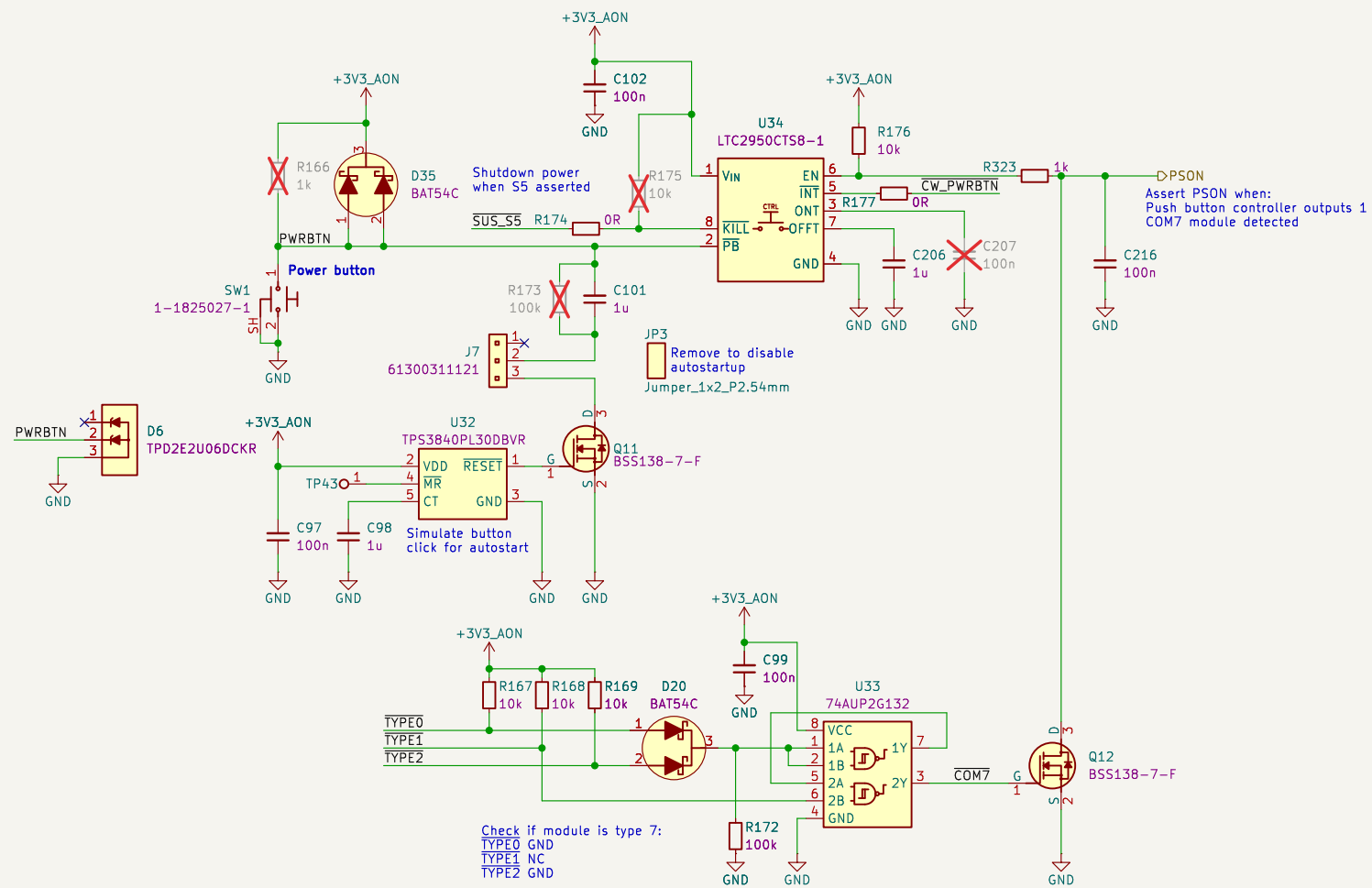


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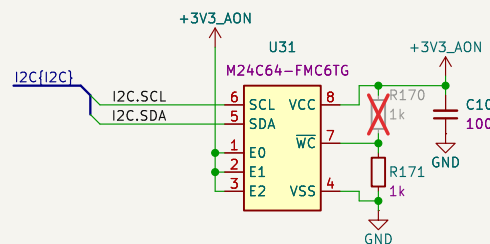
Devices on the I2C bus:
* 0x2D ADT7476AARQZ
* 0x40 12V Current/Power Monitor
* 0x41 3V3 Current/Power Monitor
* 0x42 5V0 Current/Power Monitor
* 0x50,
  0x58 Module EEPROM
* 0x57,
  0x5F Board EEPROM

```

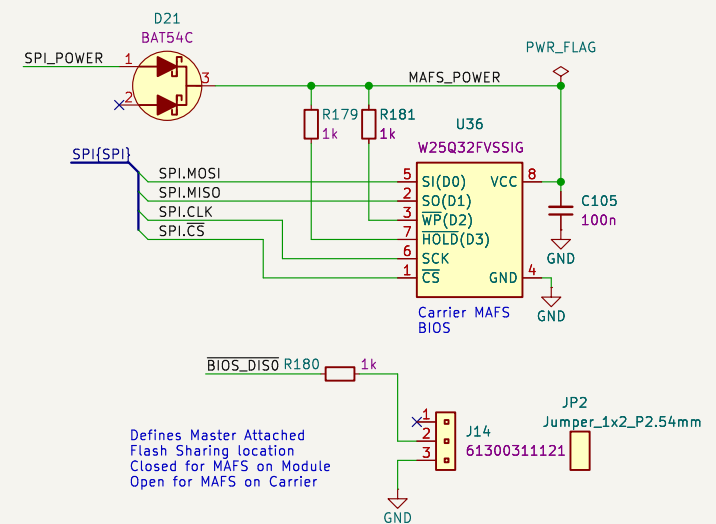
Power and reset



Carrier Board EEPROM



Carrier MAFS BIOS



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Sheet: /Com Express 7 MGMT/

File: com_express_7_mgmt.kicad_sch

Title: COM Express 7 Baseboard

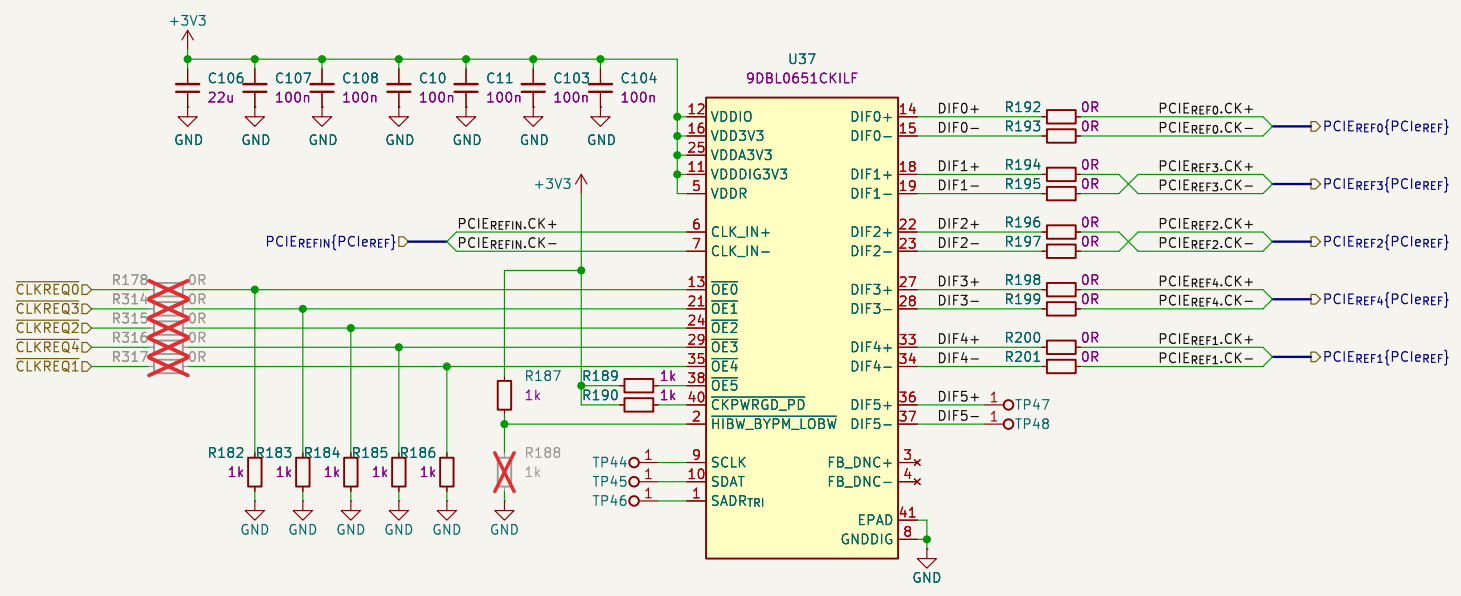
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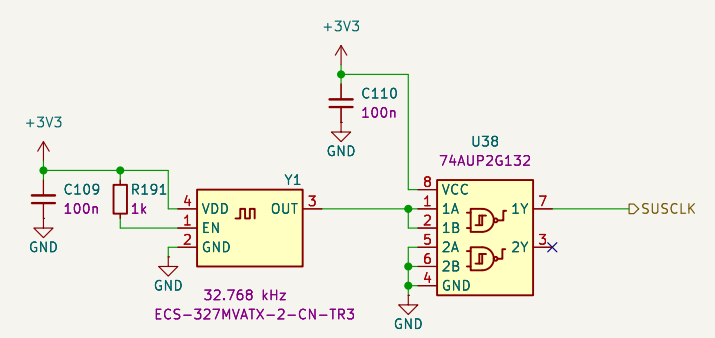
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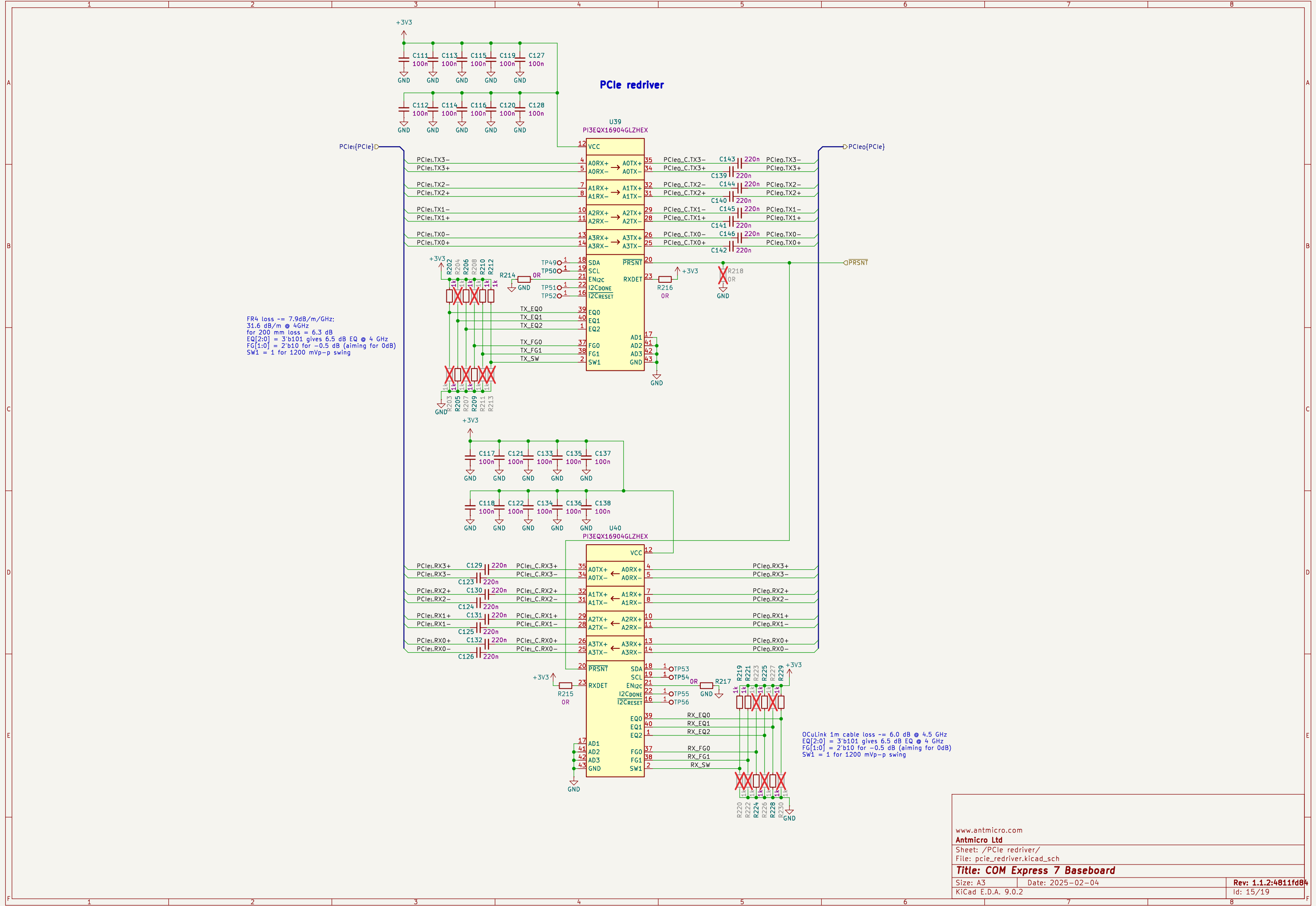
KiCad E.D.A. 9.0.2

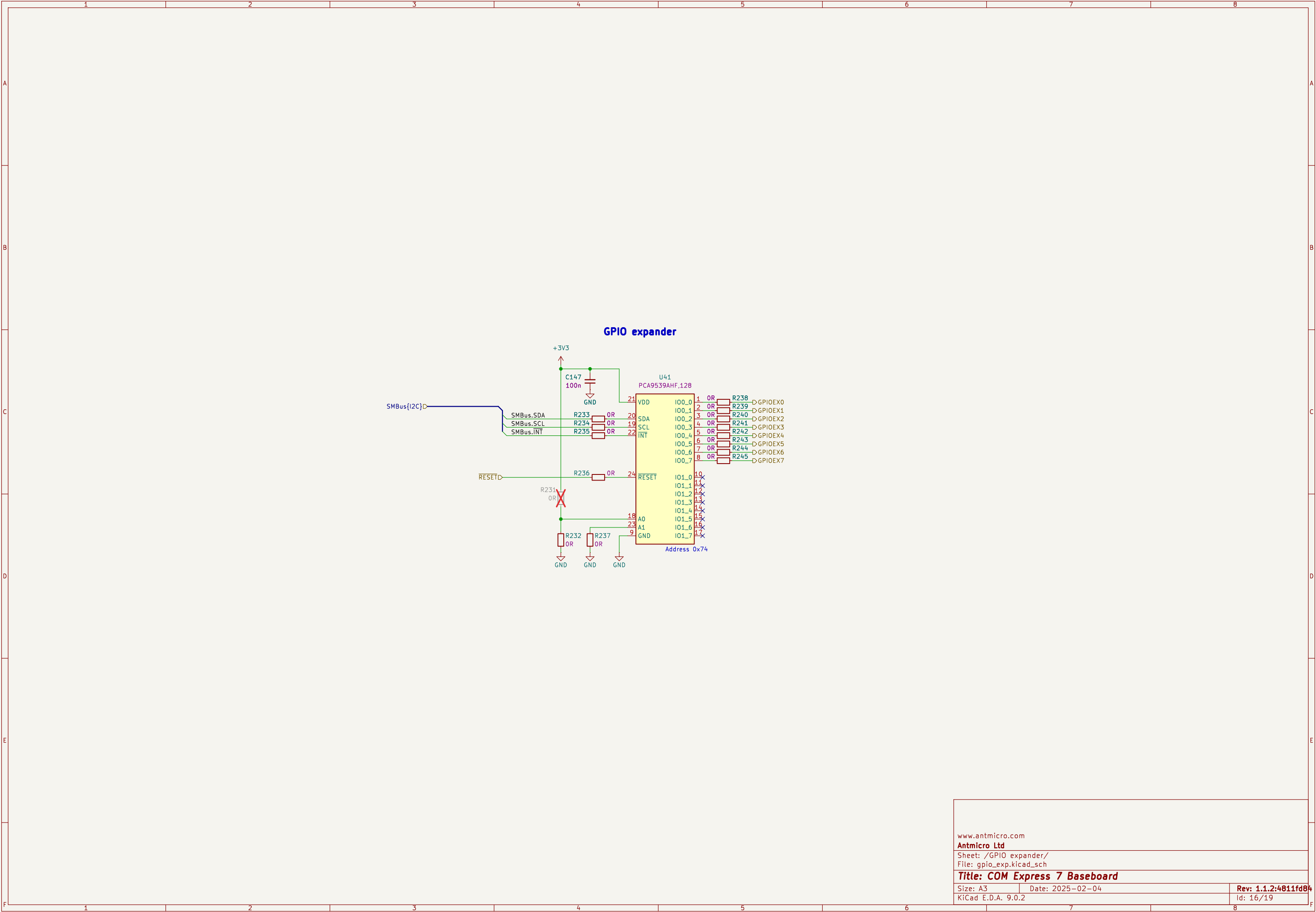
PCIe clock fanout buffer

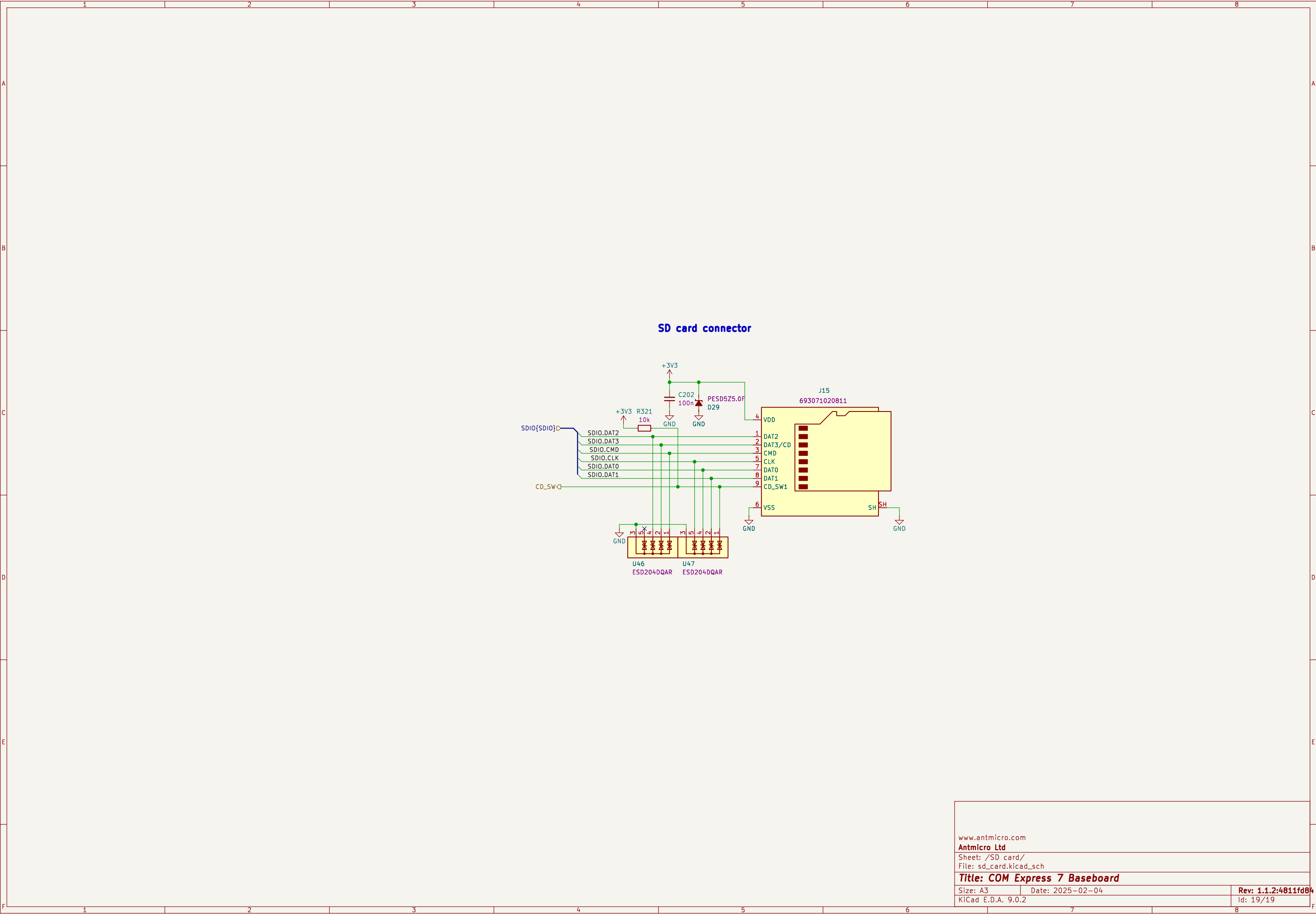


SUSCLK generator









10GKR to SFI

