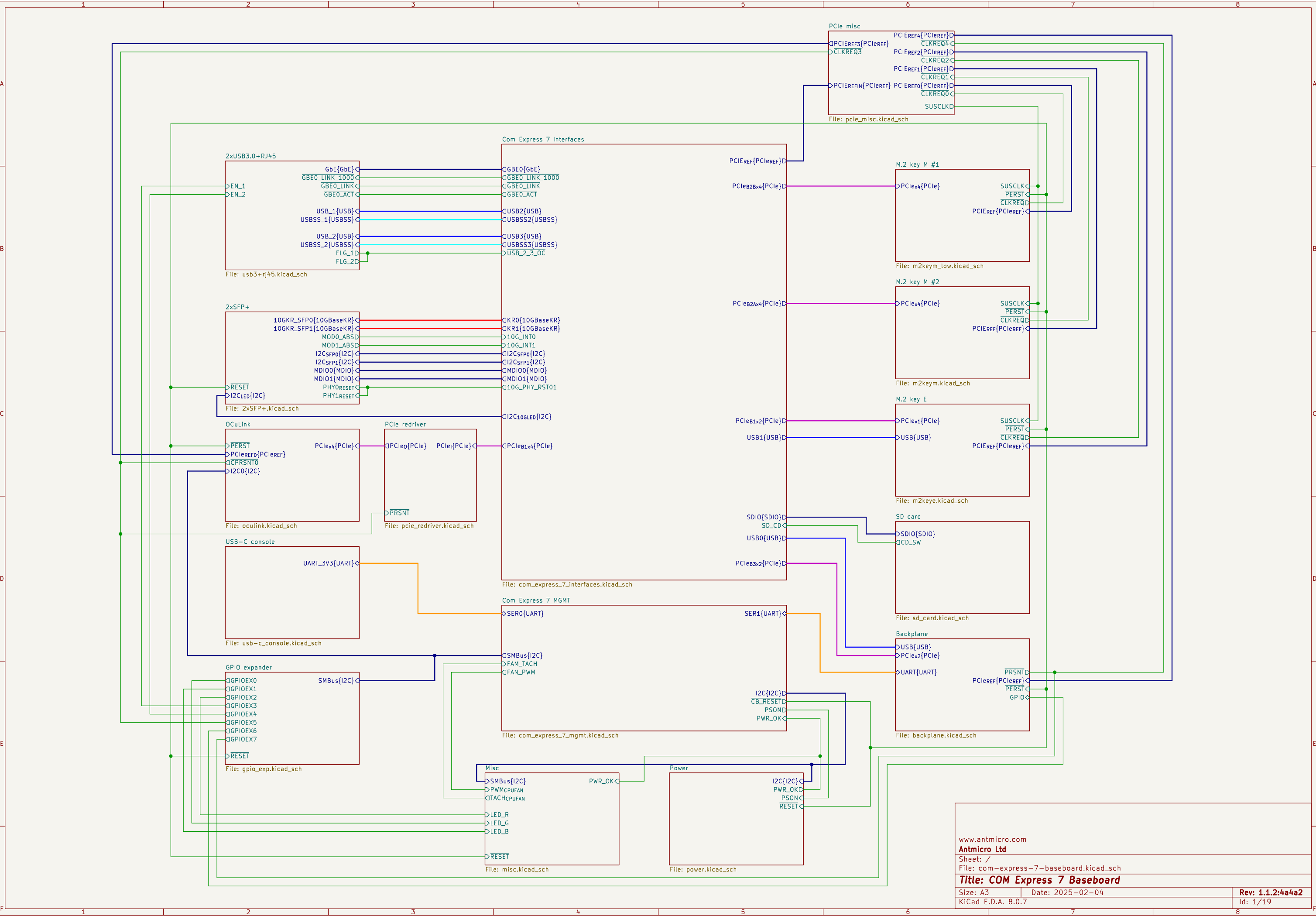
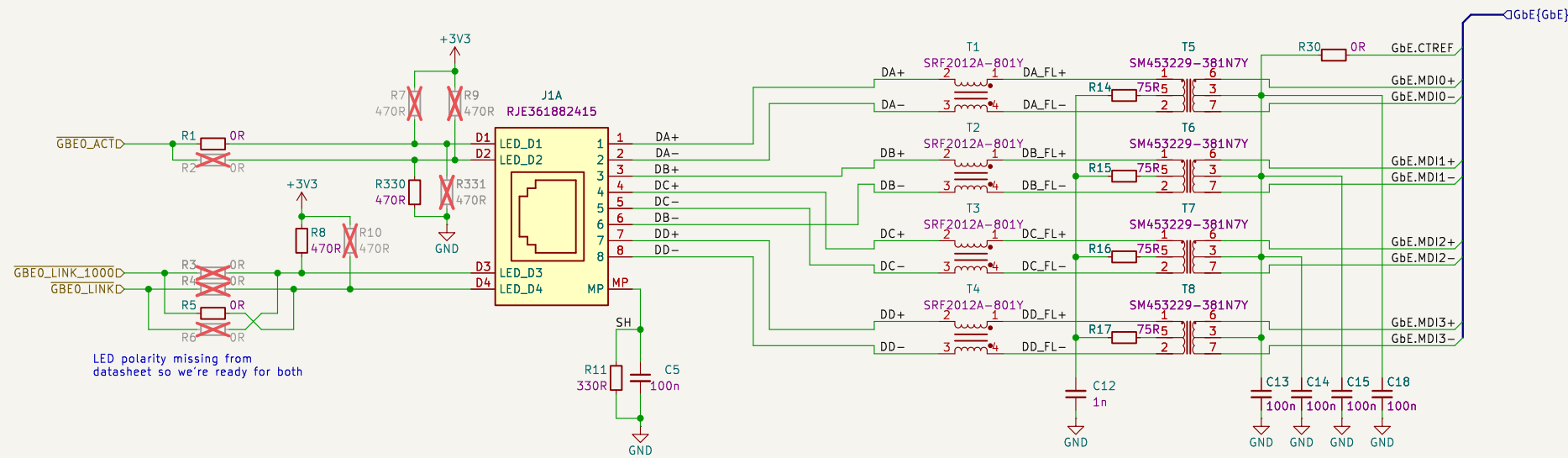
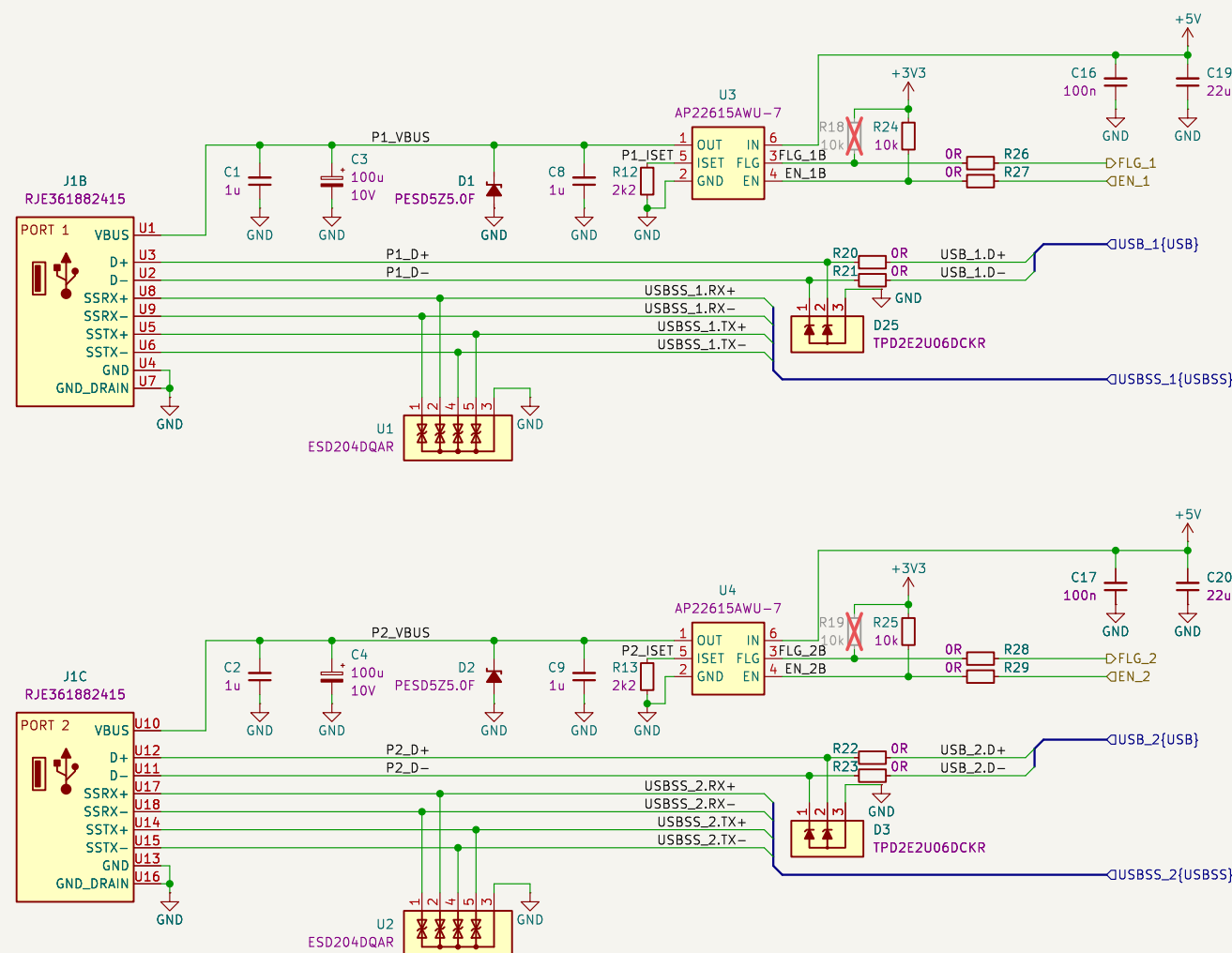


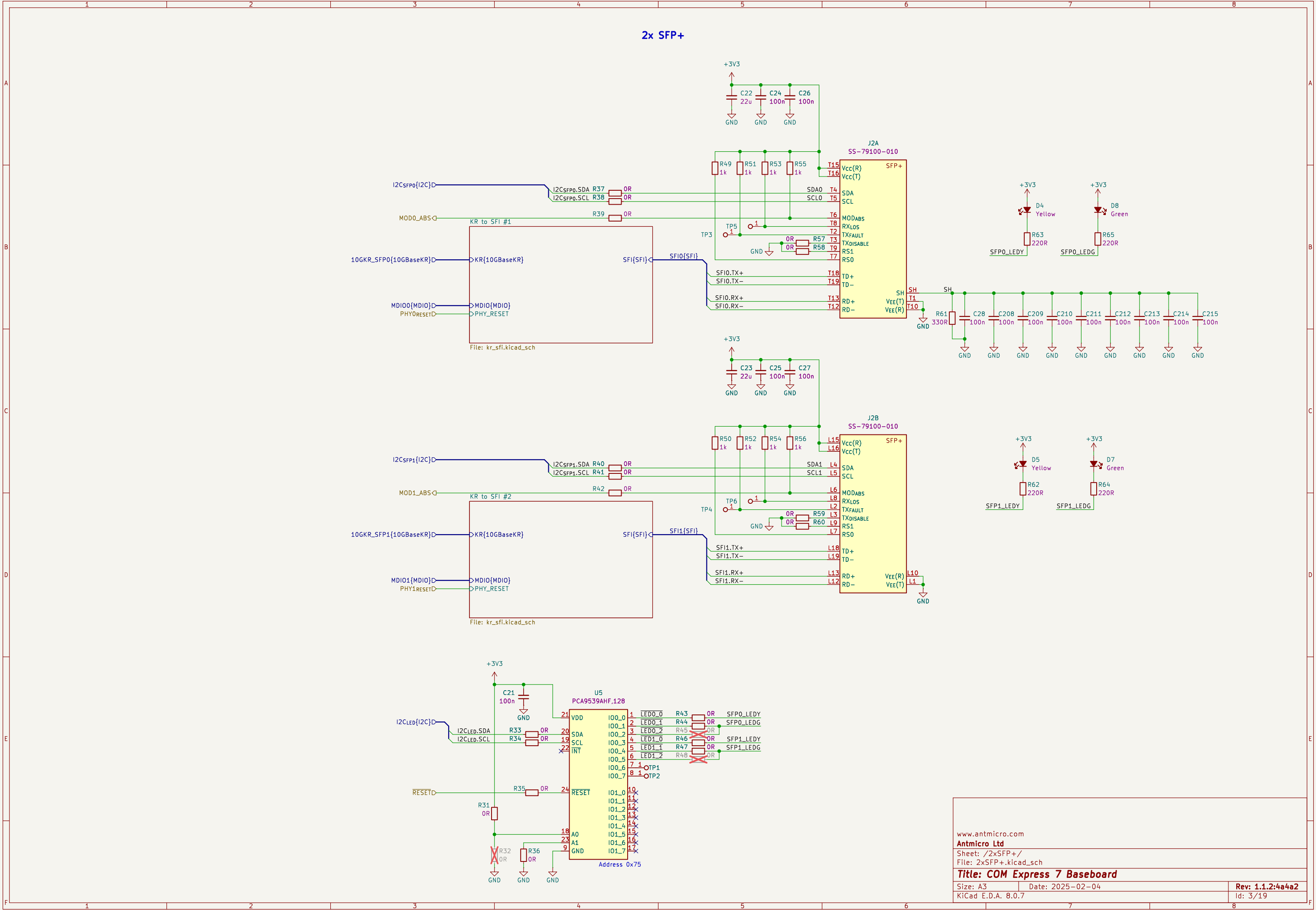


GbE RJ45

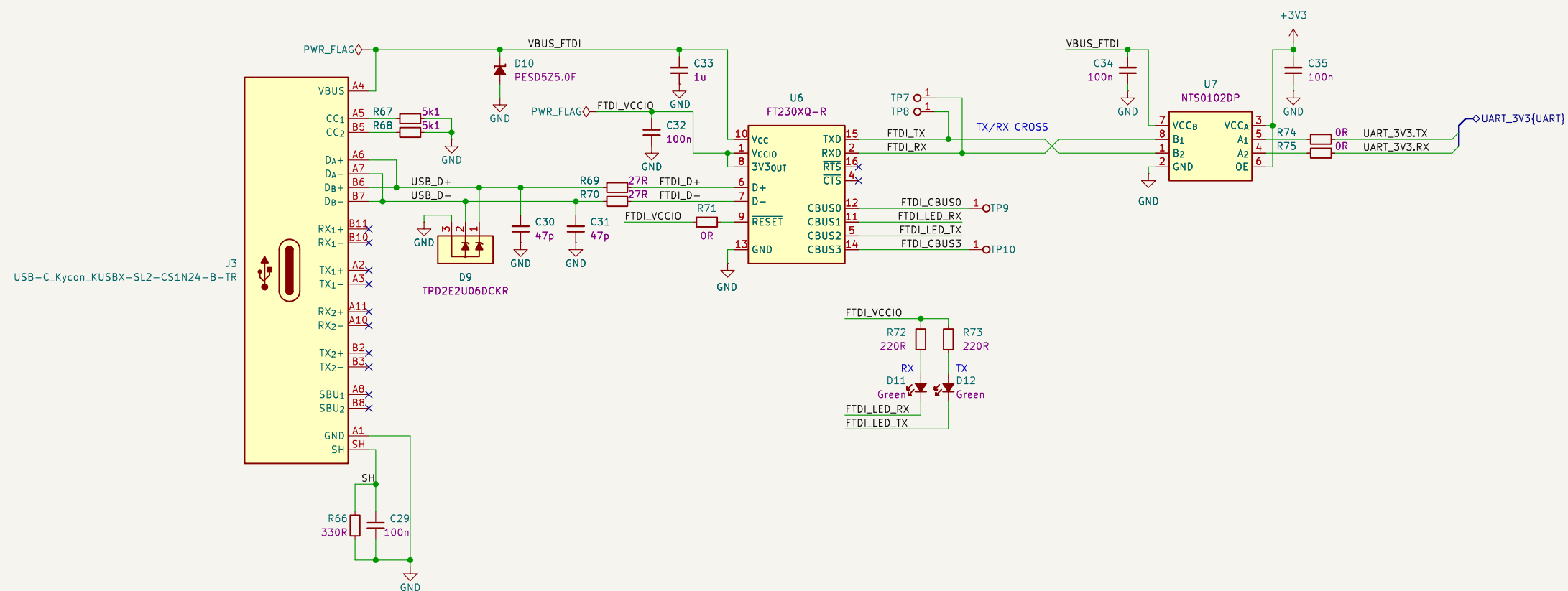


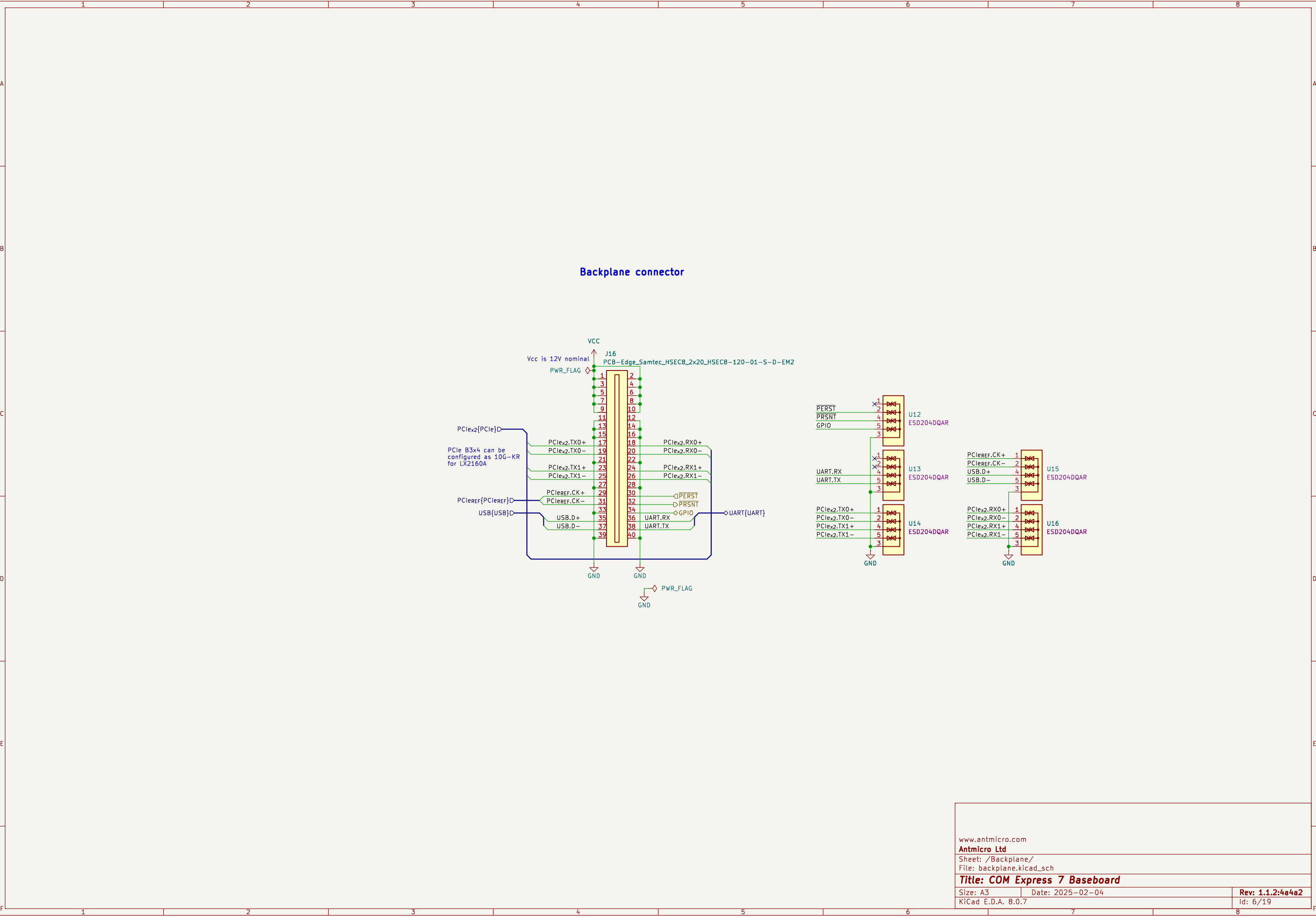
USB 3.0



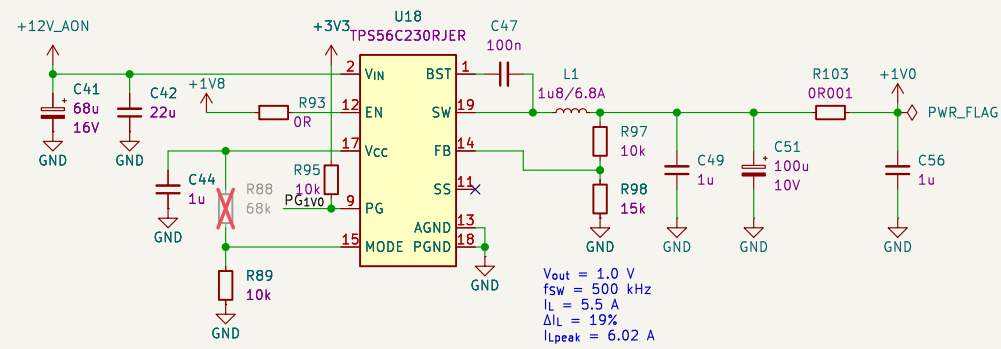


USB-C console

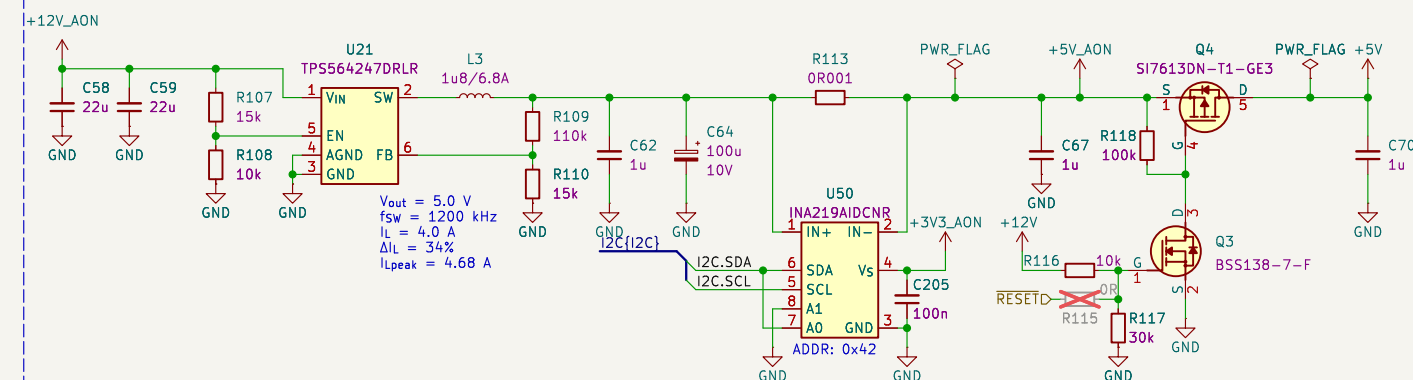




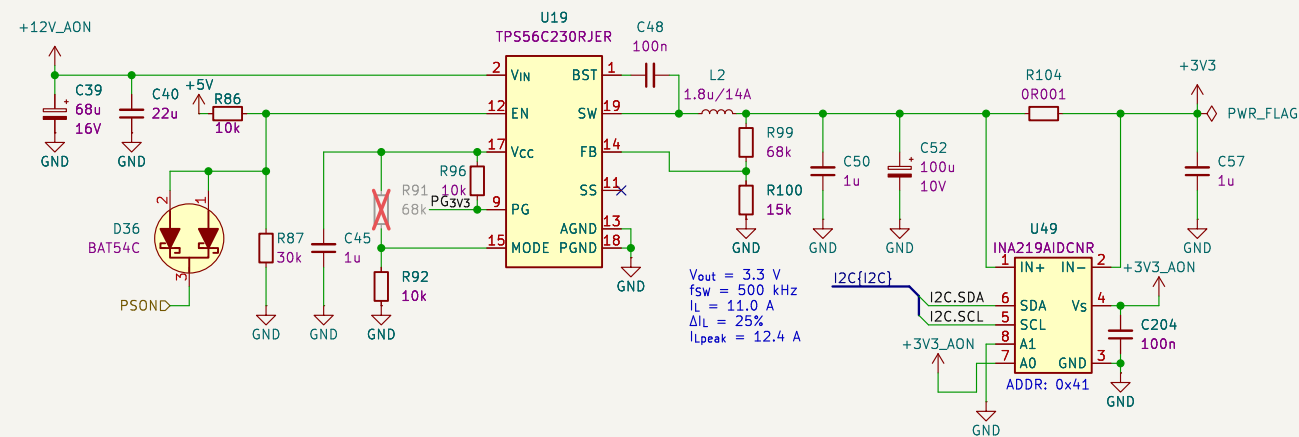
+1V0 DC/DC converter



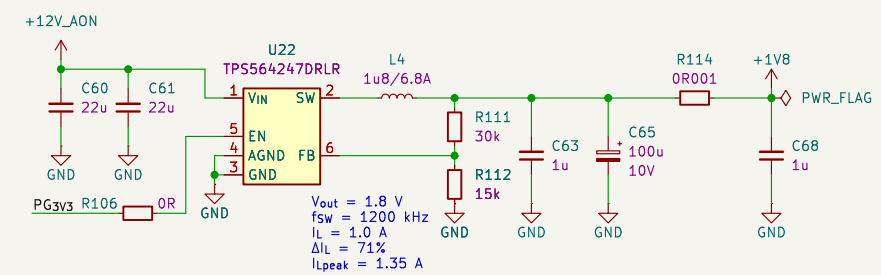
+5V DC/DC converter



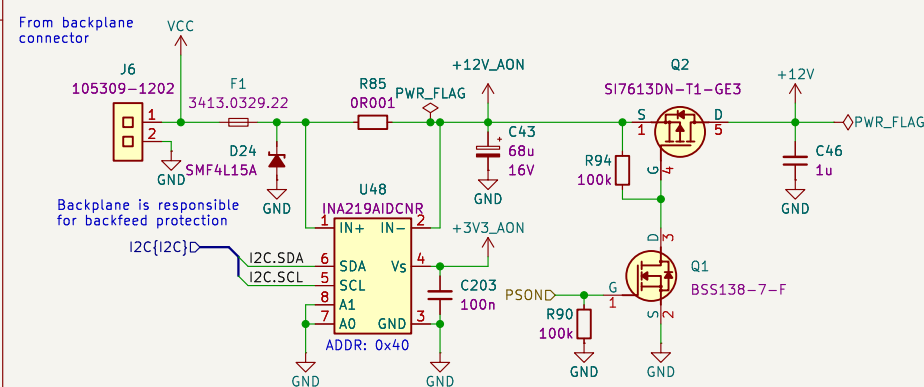
+3V3 DC/DC converter



+1V8 DC/DC converter



**+12V source
and bulk decoupling**



PSU rail description:
* +12VA0N – Input power

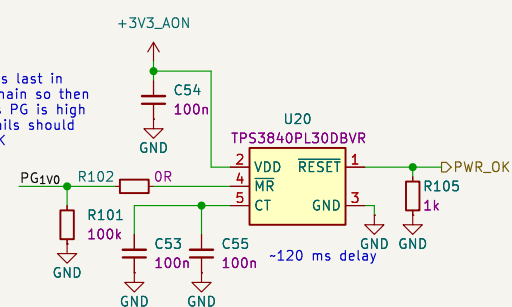
- Always on rails:
- * +5V_{AON}
- * +3V_{3AON}

Board rails (PSON == 1):

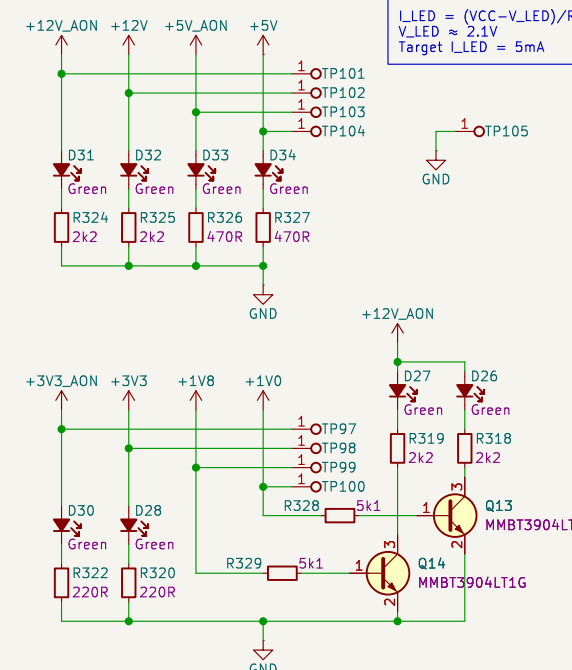
- * +12V
- * +5V
- * +3V3
- * +1V8
- * +1V0

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

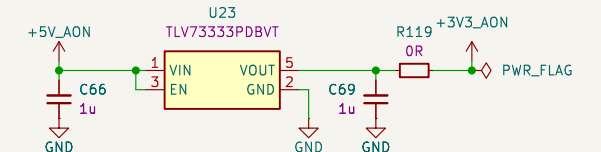
Sequence:
+5VAON
+3V3AON
Power button
+12V
+5V
+3V3
+1V8
+1V0



Power LEDs and testpoints



+3V3_AON LDO



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Sheet: /Power/
File: power.kicad_sch

Title: COM Express 7 Baseboard

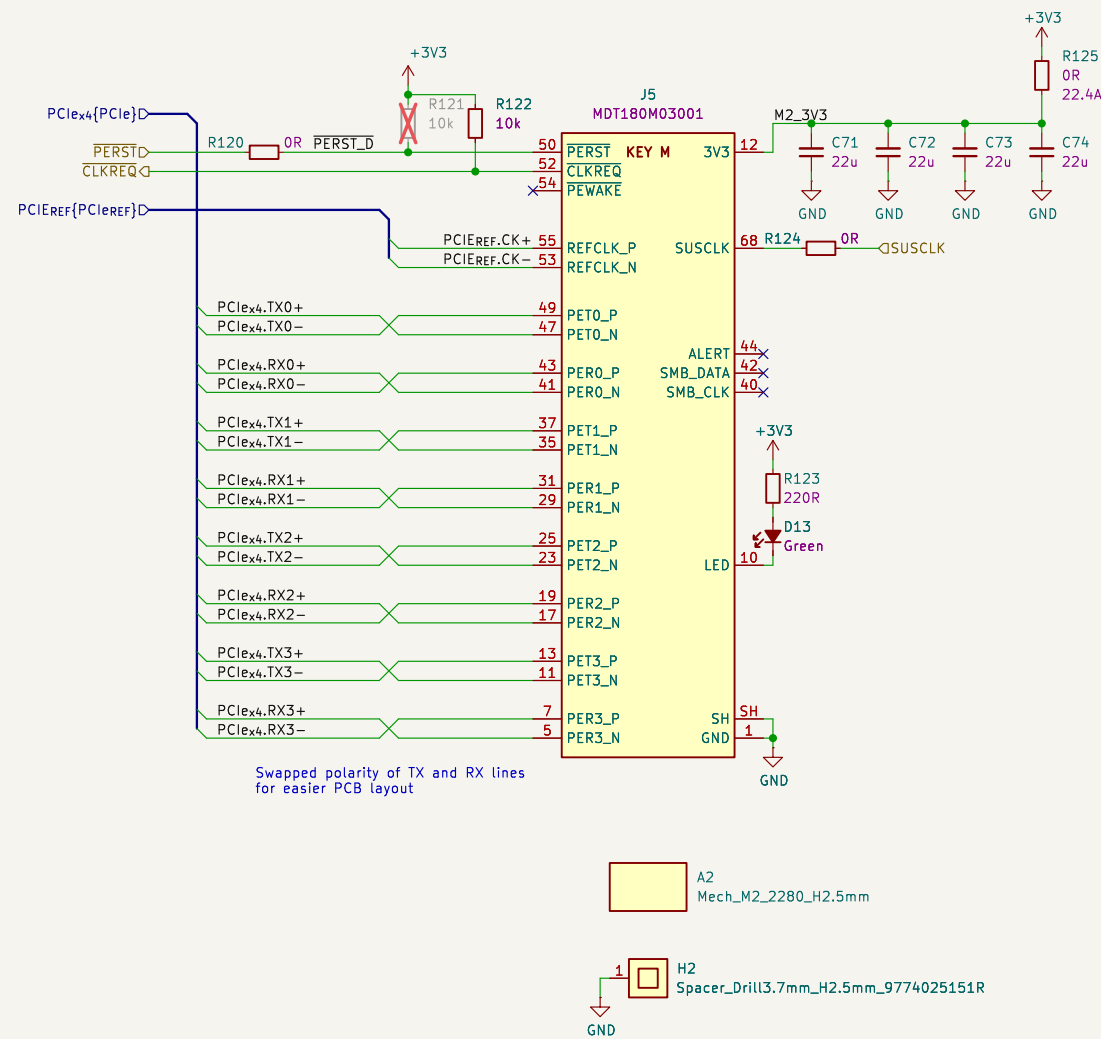
Size: A3

Date: 2025-02-04

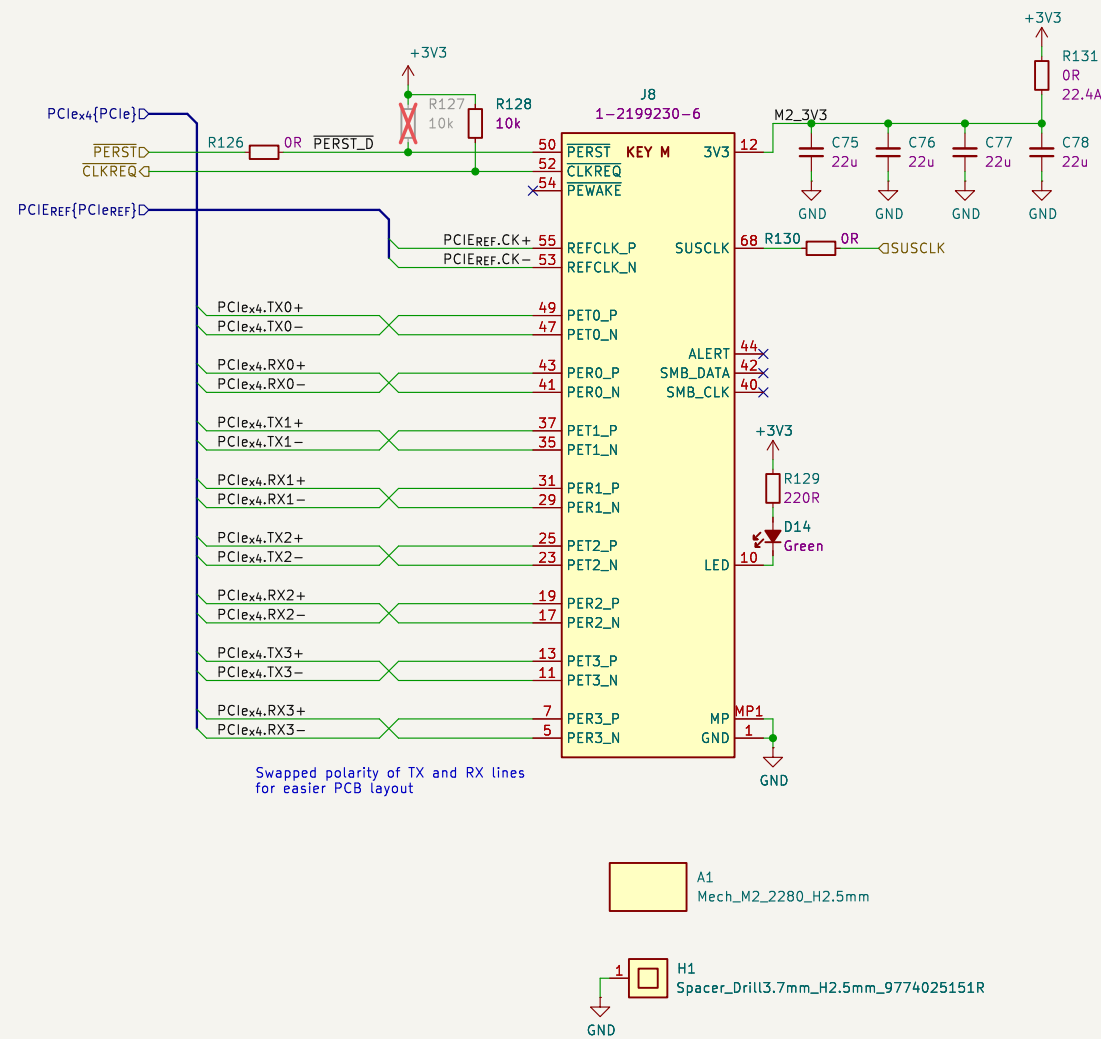
Rev: 1.1.2:4a4a2

Id: 7/19

M.2 key M



M.2 key M



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Sheet: /M.2 key M #2/

File: m2keym.kicad_sch

Title: COM Express 7 Baseboard

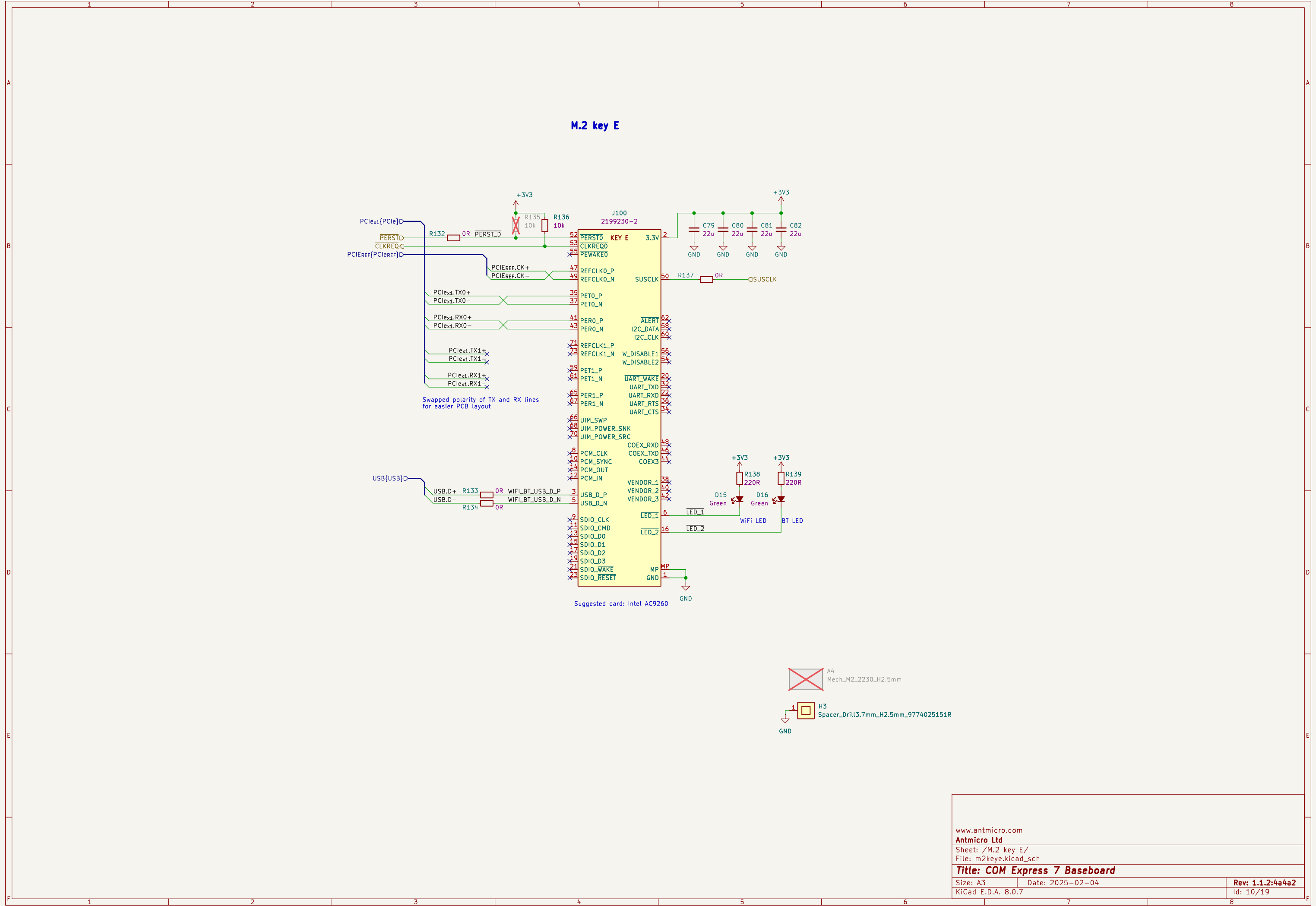
Size: A3

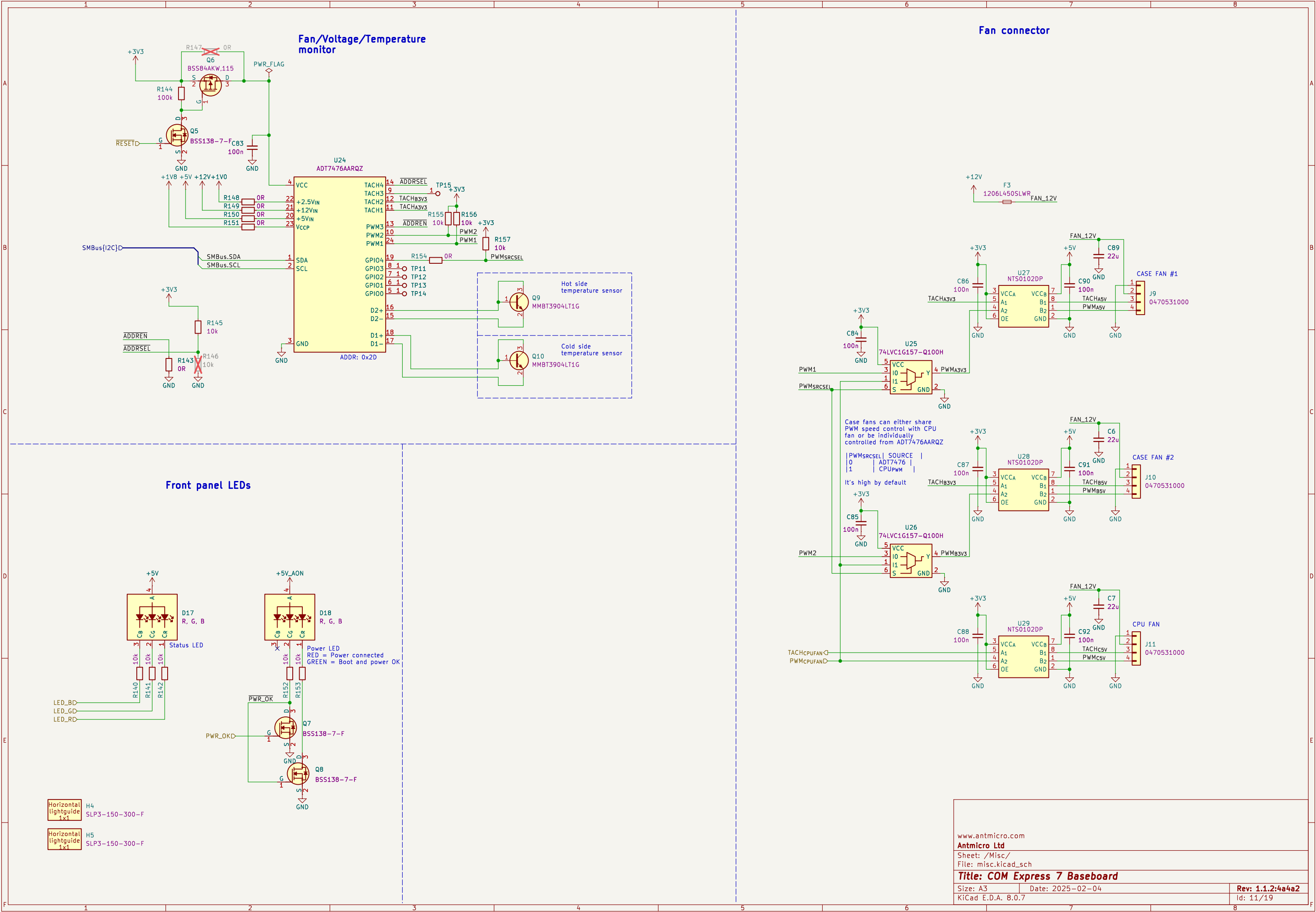
Date: 2025-02-04

Rev: 1.1.2:4a4a2

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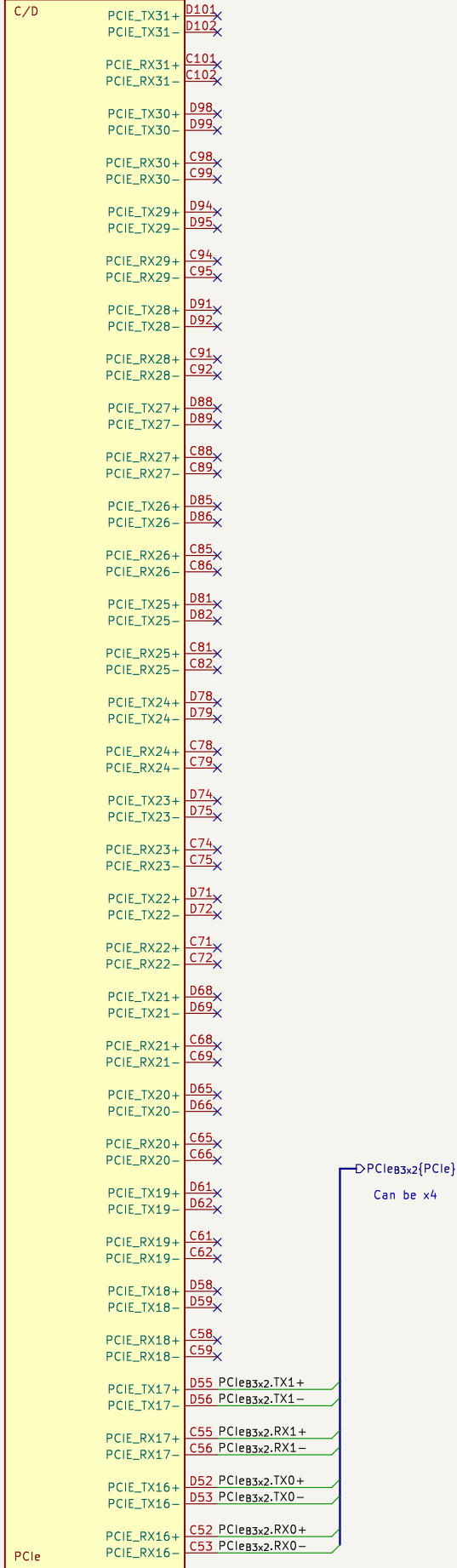
Id: 9/19



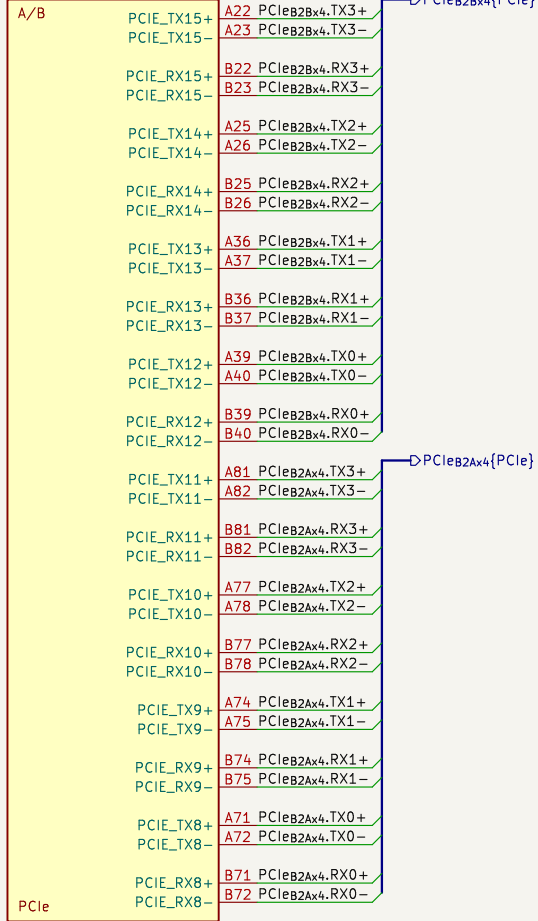


COM Express 7 interfaces

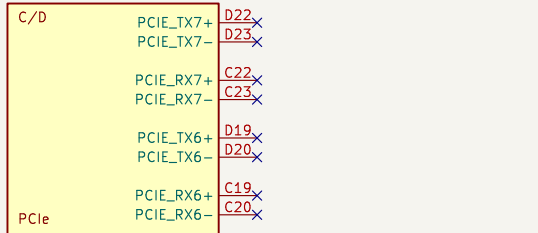
J12N
401-51501-51



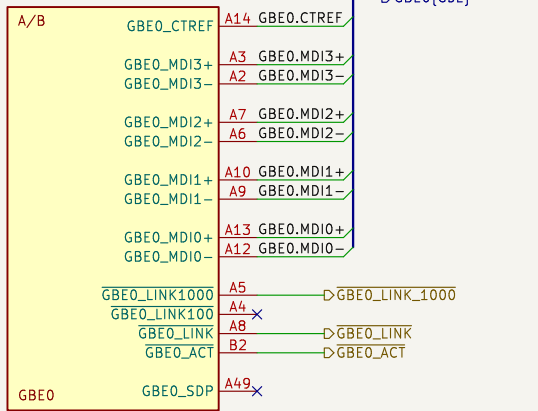
J12I
401-51501-51



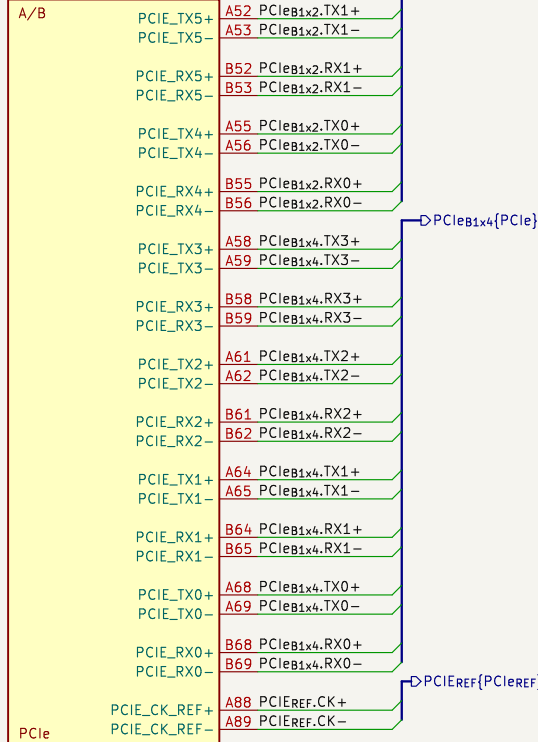
J12O
401-51501-51



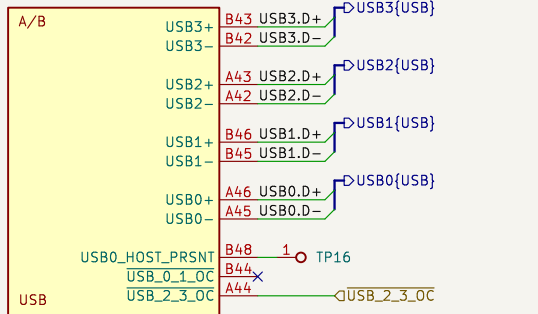
J12B
401-51501-51



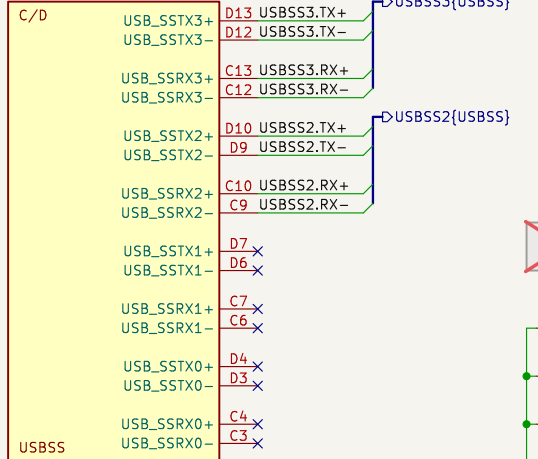
J12P
401-51501-51



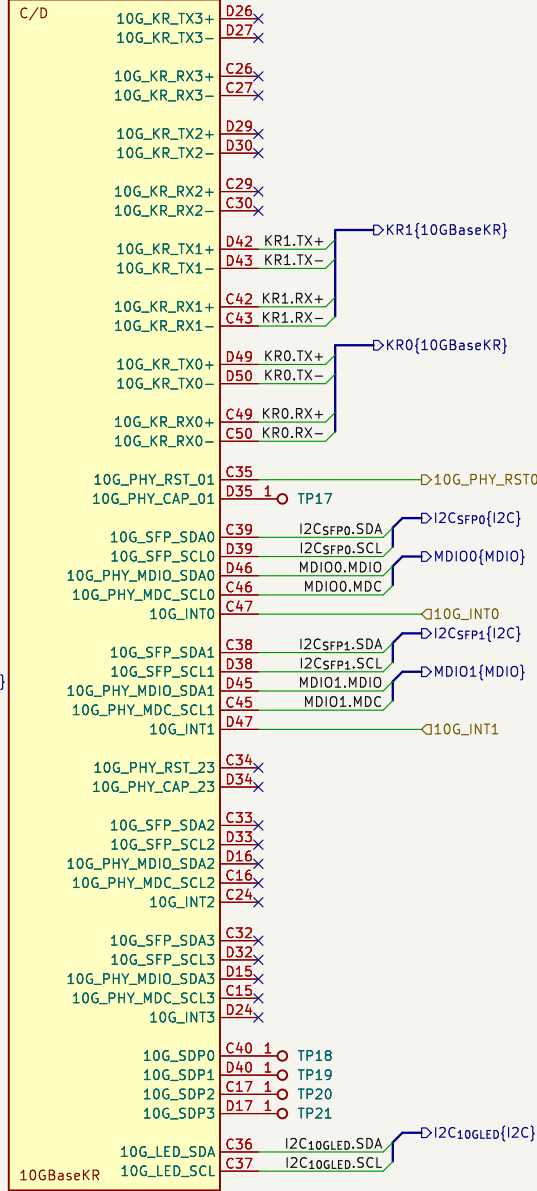
J12G
401-51501-51



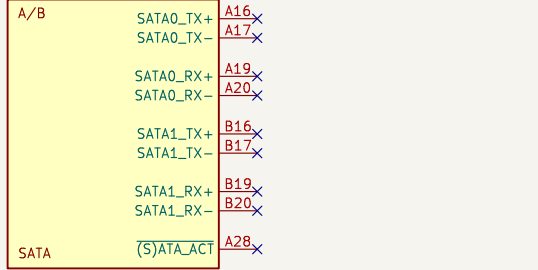
J12J
401-51501-51



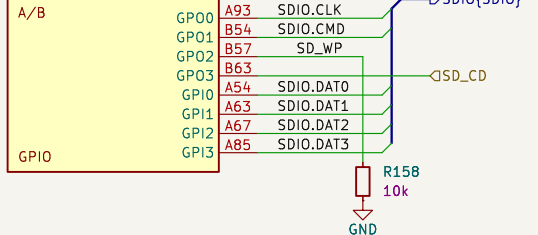
J12K
401-51501-51



J12F
401-51501-51

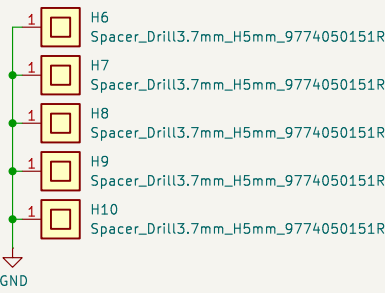


J12E
401-51501-51

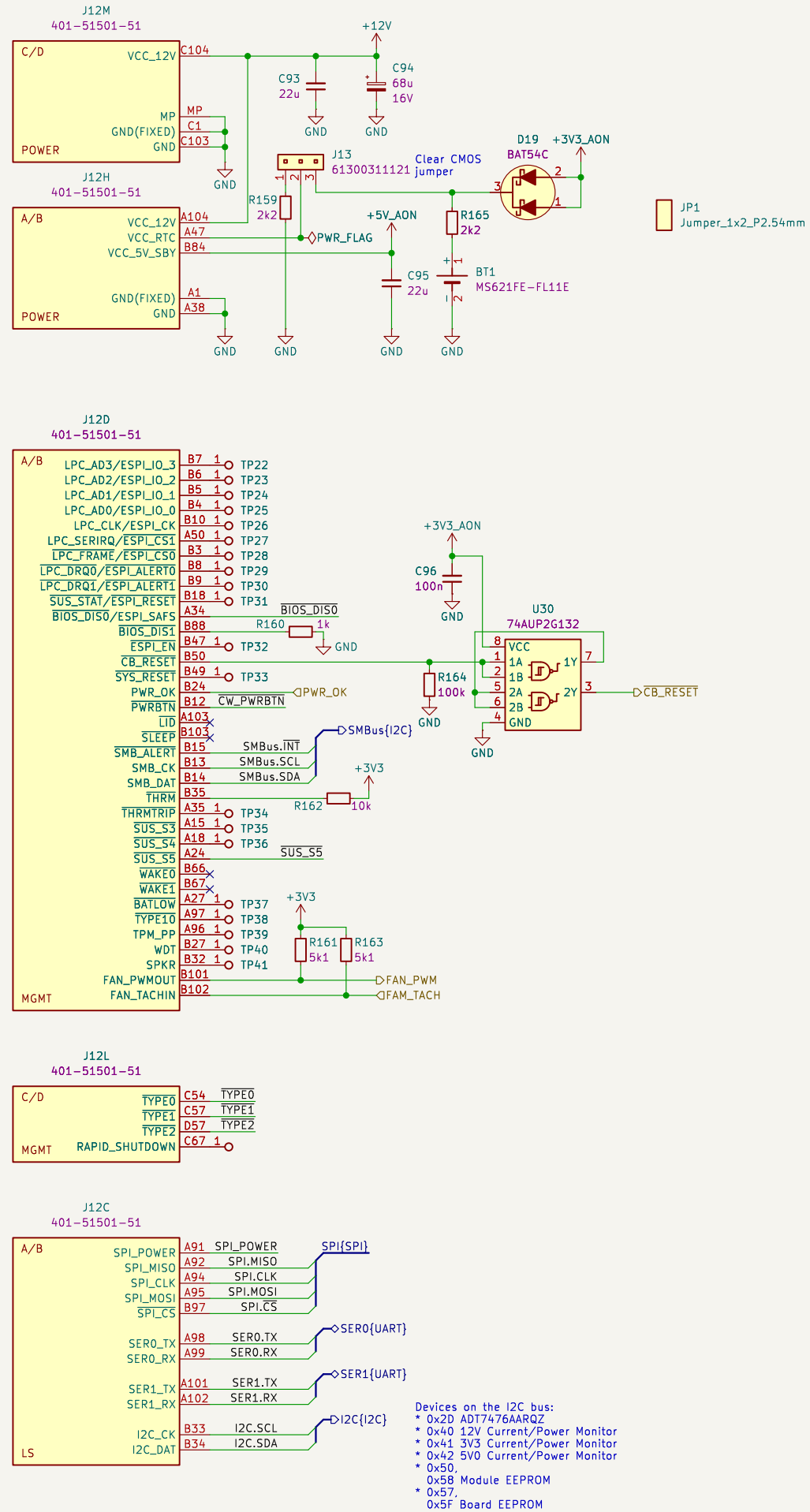


LX2160 SERDES CONFIGURATION:
SD1 = 3
SD2 = 3
SD3 = 3

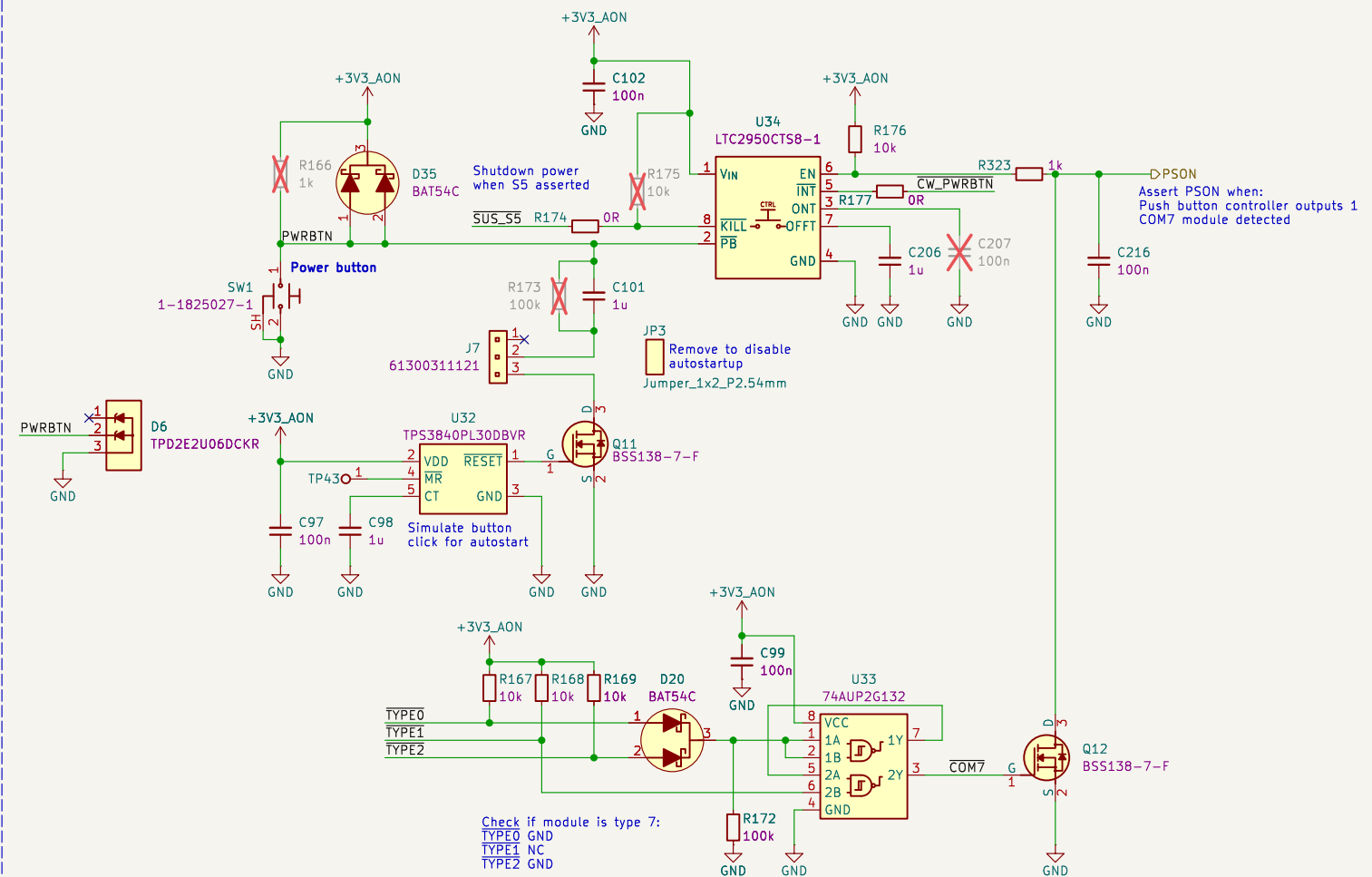
A3
SRX2160S01D00GE064V21C0
LX2160A-CEX7



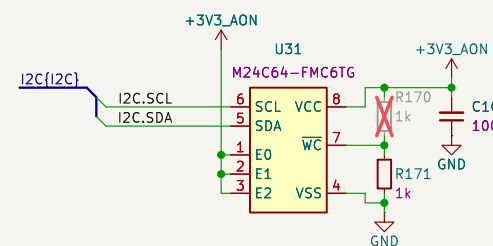
COM Express 7 power and management



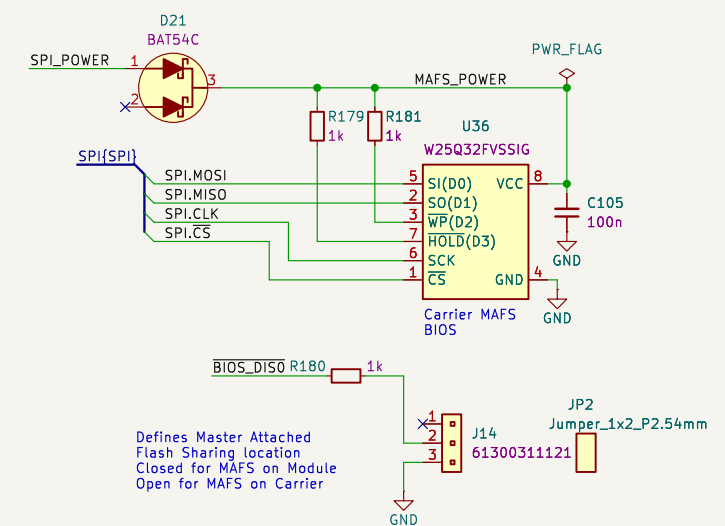
Power and reset



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

Size: A3

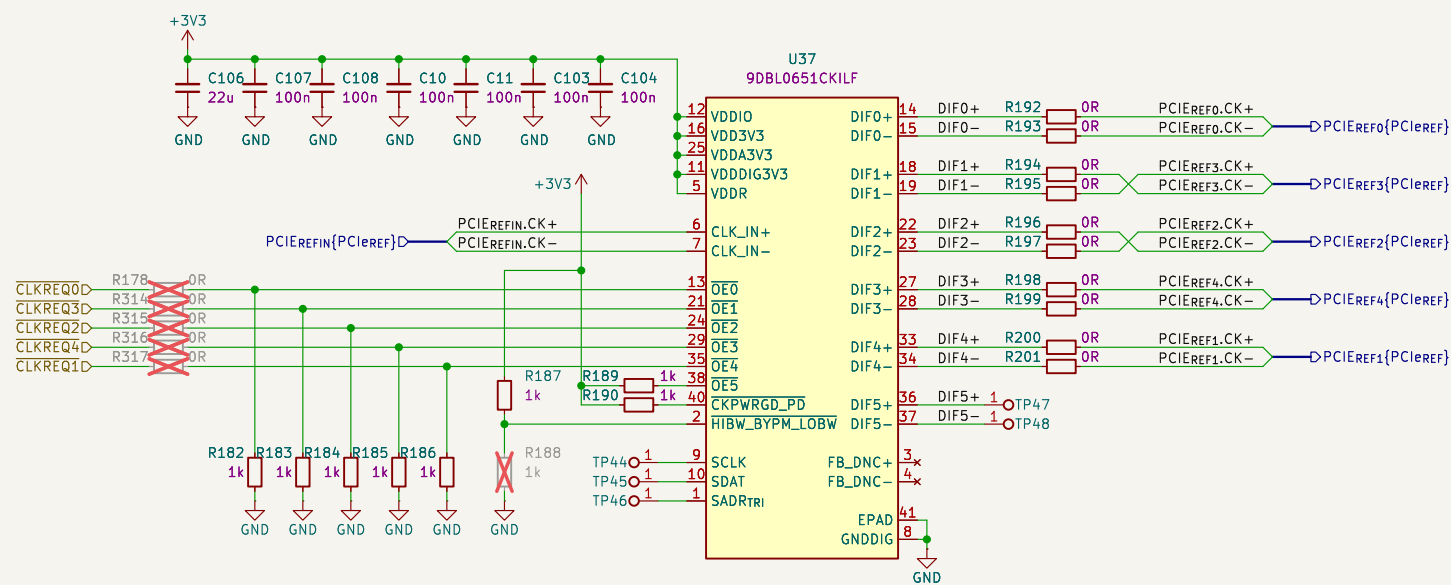
Date: 2025-02-04

Rev: 1.1.2:4a4a2

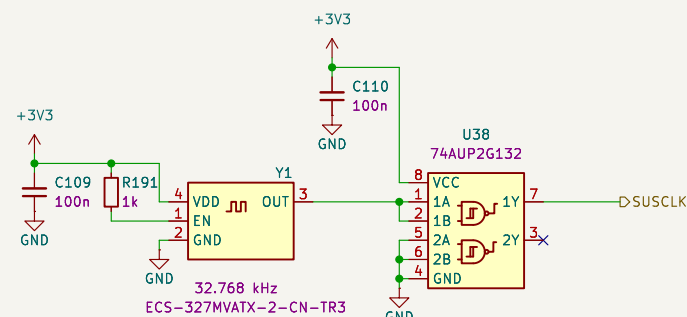
KiCad E.D.A. 8.0.7

Id: 13/19

PCIe clock fanout buffer



SUSCLK generator



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Sheet: /PCIe misc/

File: pcie_misc.kicad_sch

Title: COM Express 7 Baseboard

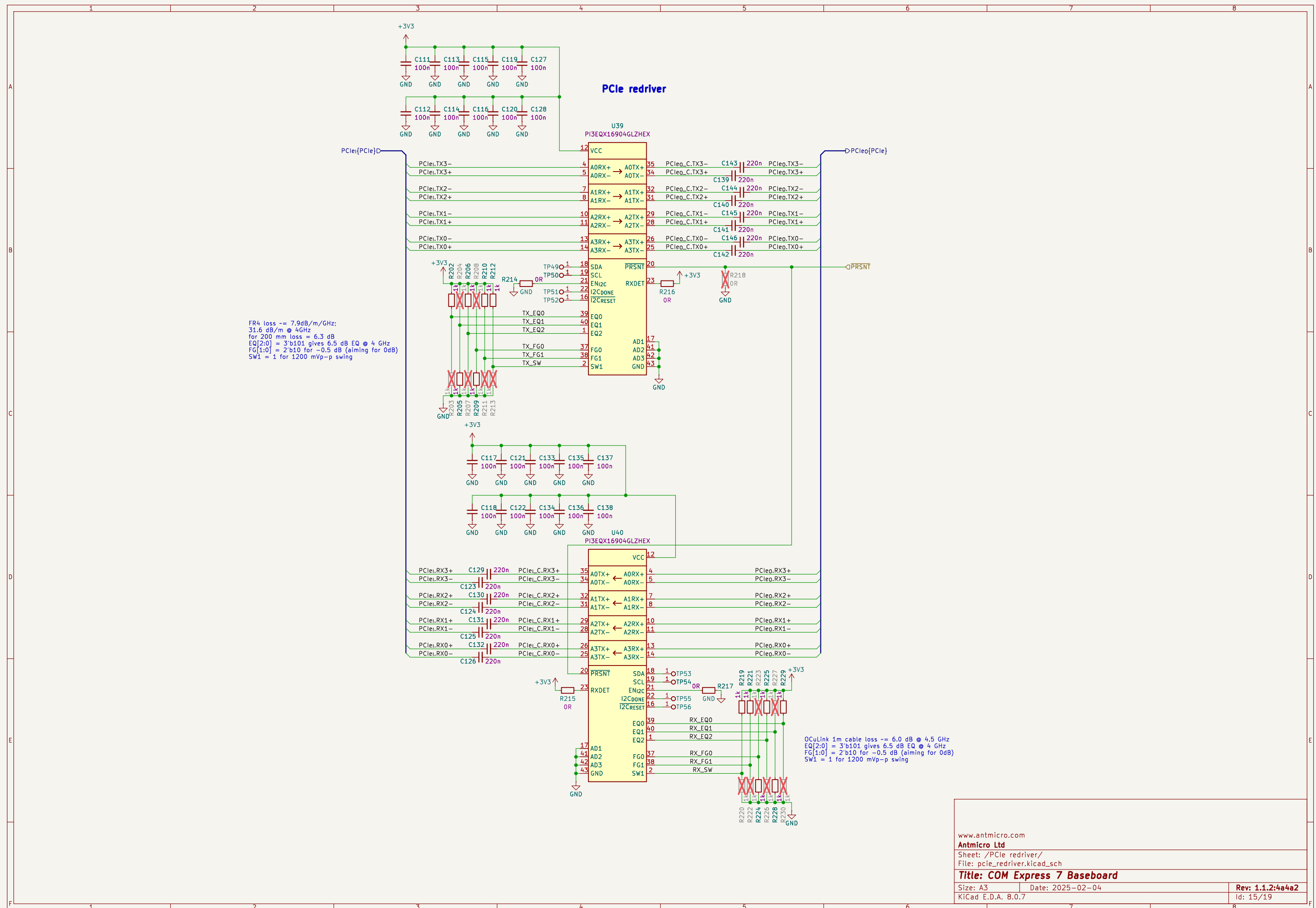
Size: A3

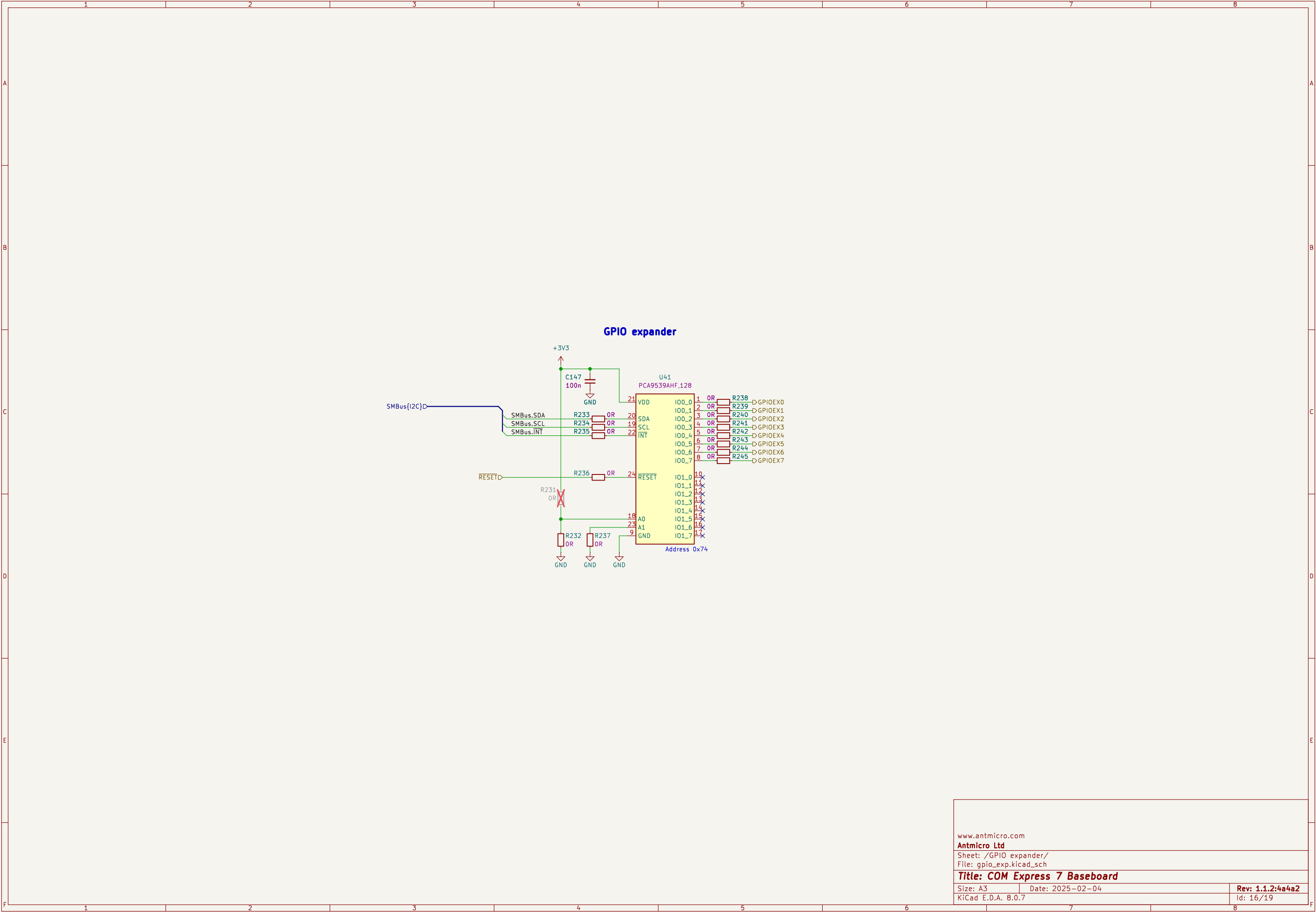
Date: 2025-02-04

Rev: 1.1.2:4a4a2

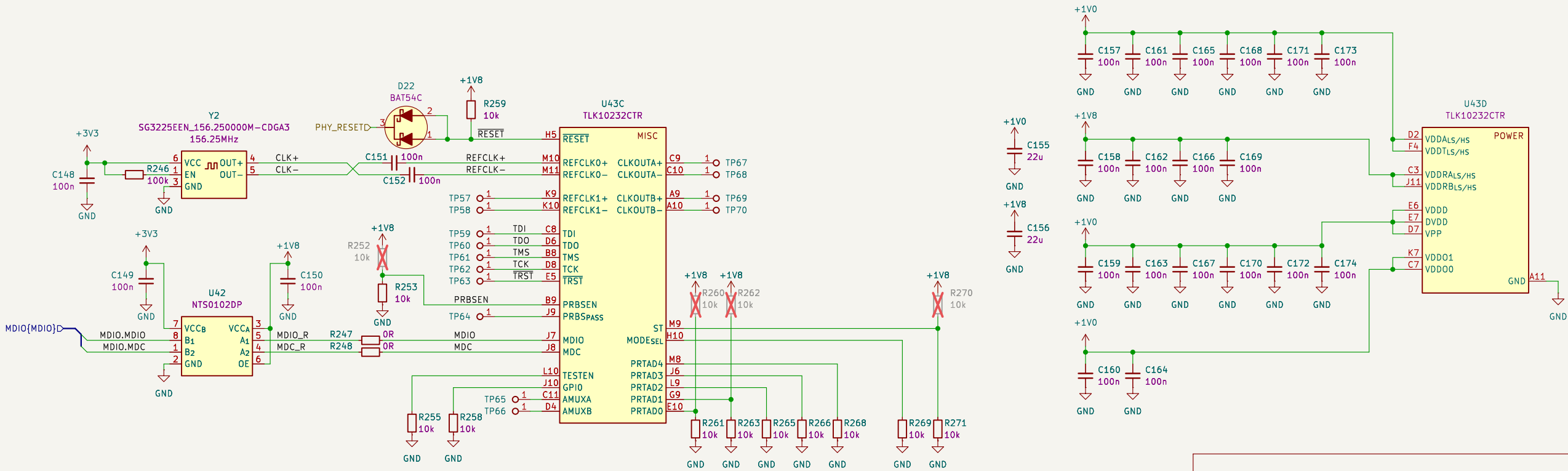
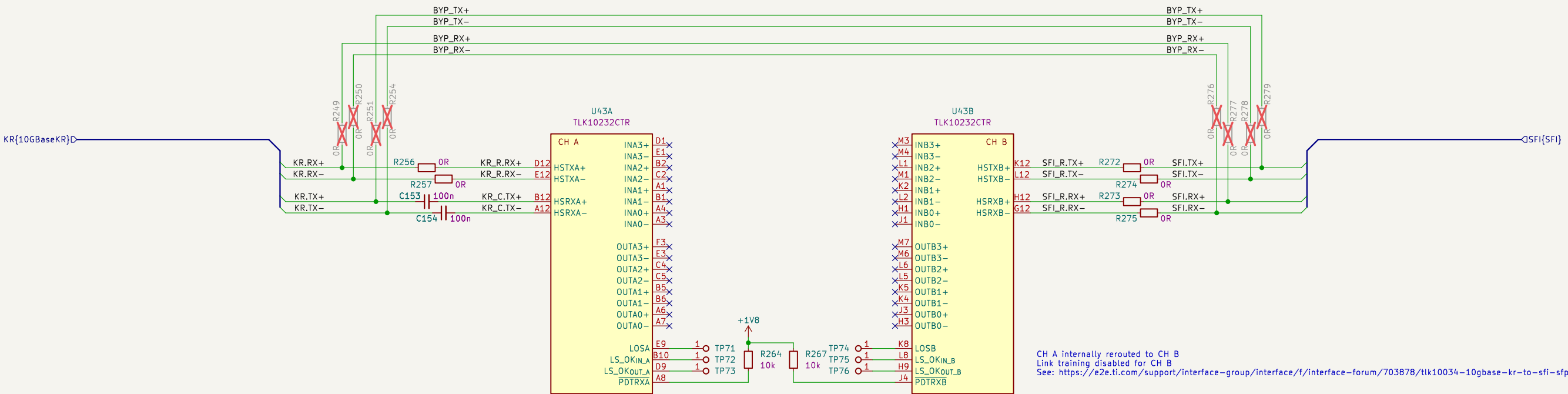
KiCad E.D.A. 8.0.7

Id: 14/19





10GKR to SFI



10GKR to SFI

