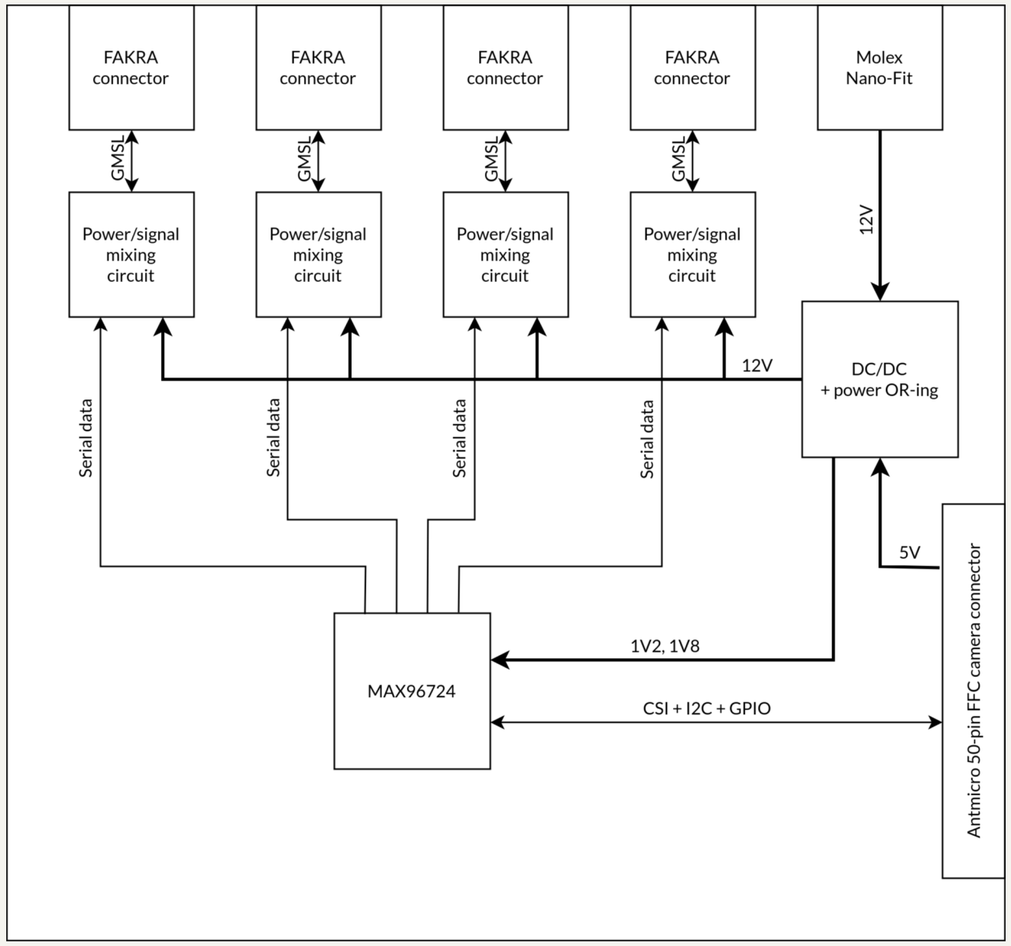

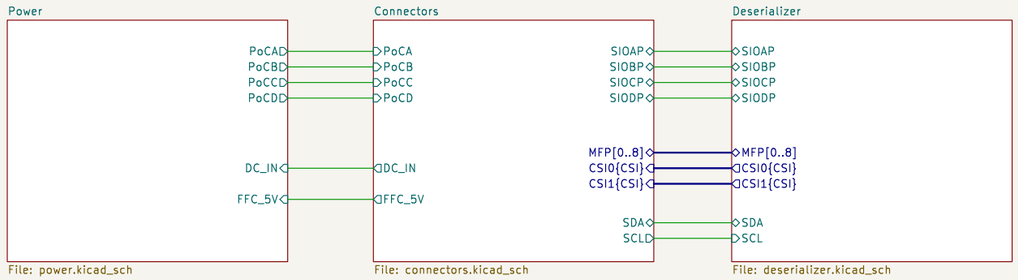

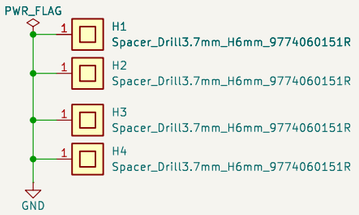

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Sheet: /

File: gmsl-deserializer.kicad_sch

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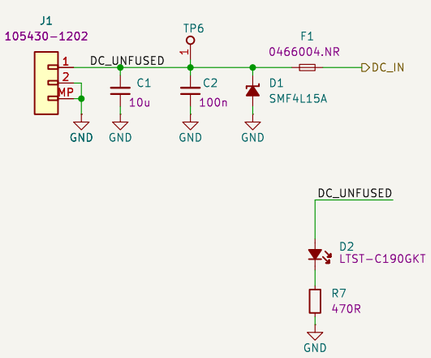
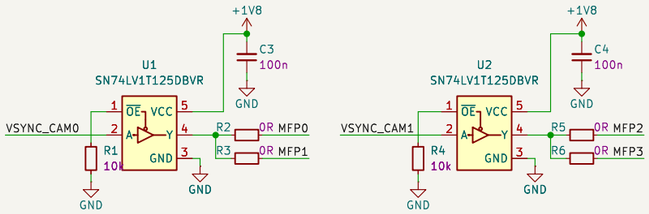
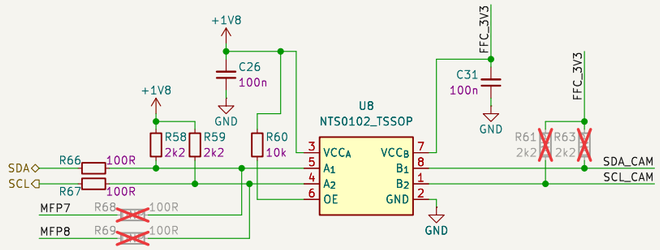
Power connector



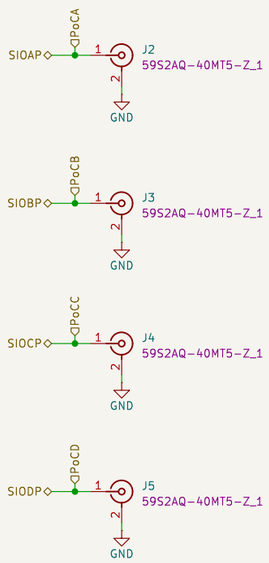
Buffer gates



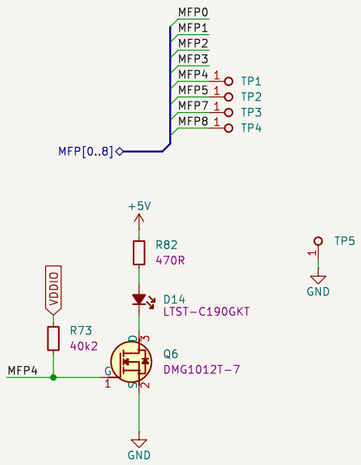
Level shifter



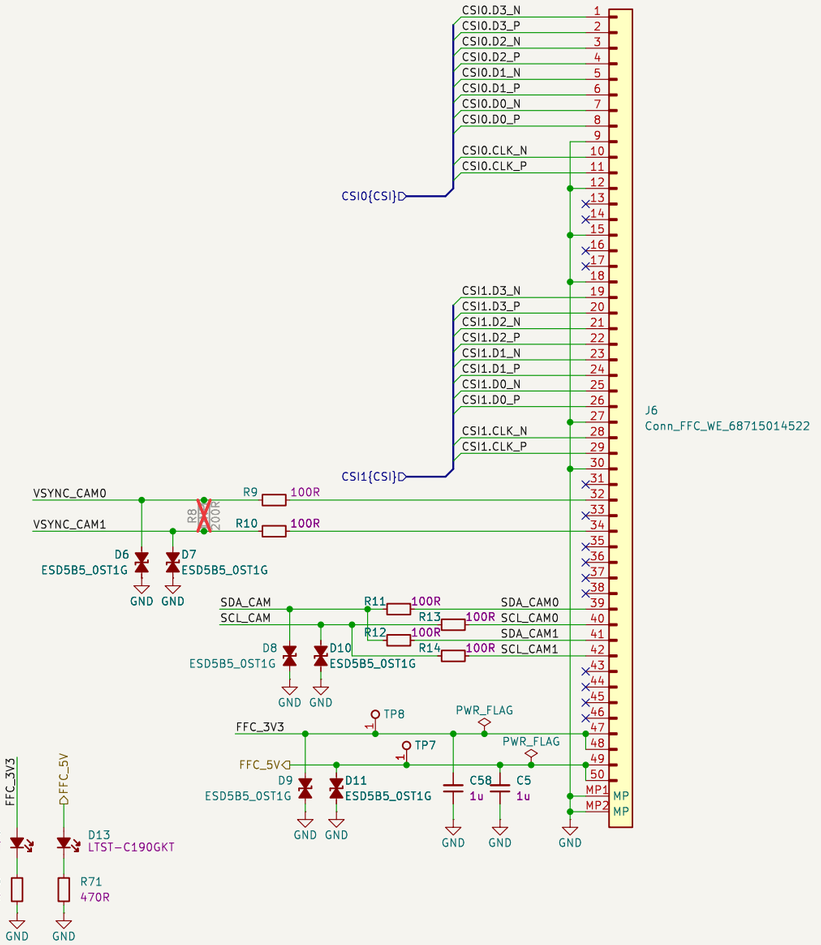
Fakra connectors



Multi-function pins



CSI connector



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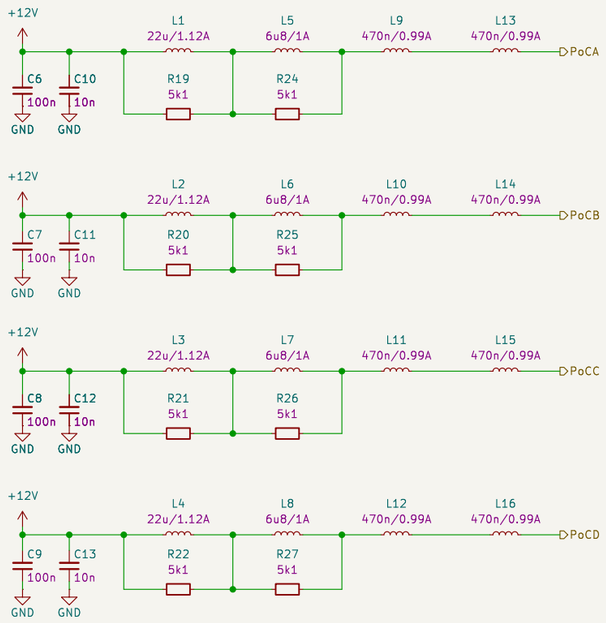
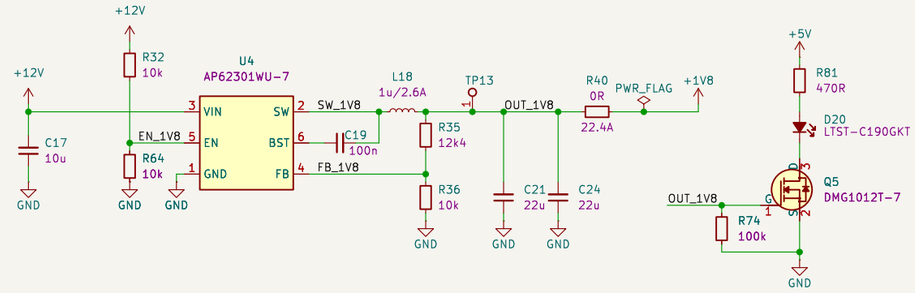
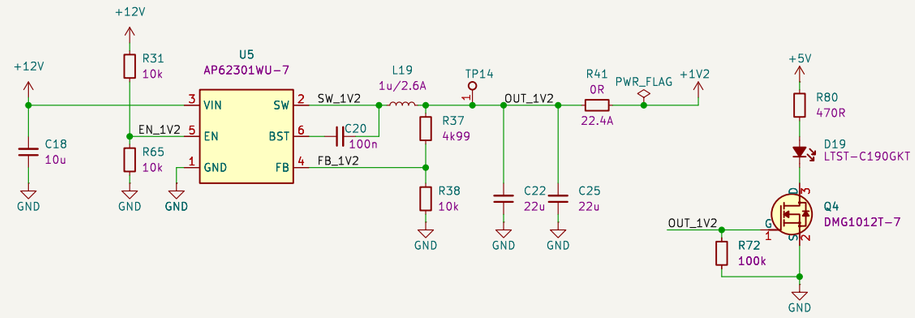
PoC circuit



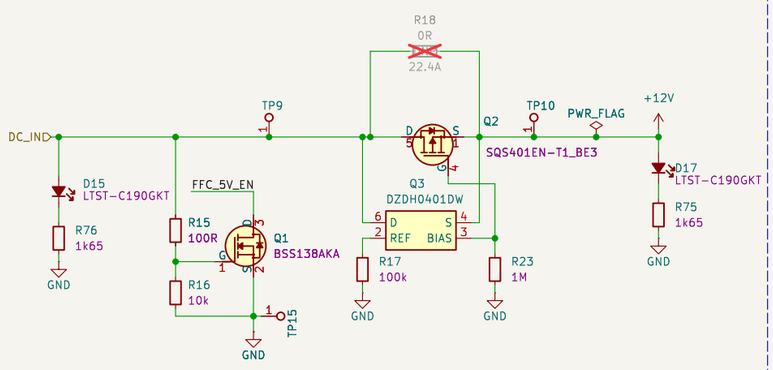
Buck converter 12V to 1.8V



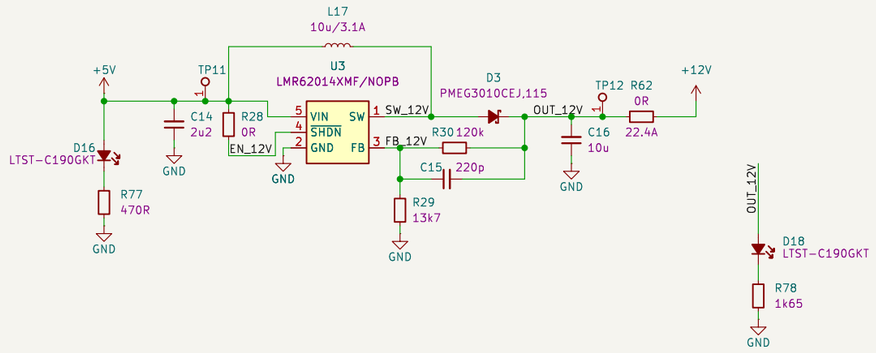
Buck converter 12V to 1.2V



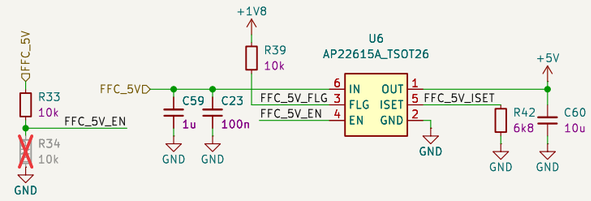
Power arbiter



Boost converter 5V to 12V



FFC 5V current limit



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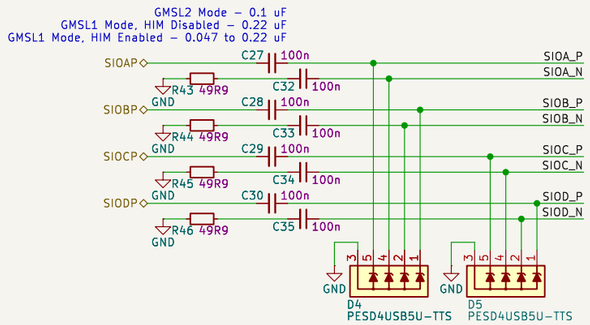
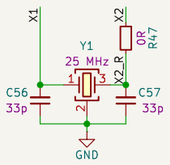
Link–Isolation capacitors and ESD diodes



Crystal

Cinx1 = 3 pF (from MAX96724 data sheet)
Ctrace = 2 pF (estimated)
Cinx2 = 1 pF (from MAX96724 data sheet)
CL = 18 pF (from crystal data sheet)
Cx1total = Cinx1 + CL1 + Ctrace
Cx2total = Cinx2 + CL2 + Ctrace
CL = (Cx1total * Cx2total) / (Cx1total + Cx2total)

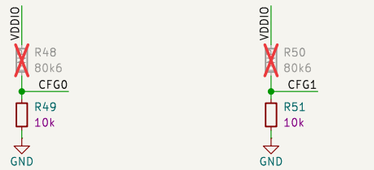
CI1 = CI2 = 33 pF
Cx1total = 38 pF, Cx2total = 36 pF
CL = 18.5 pF



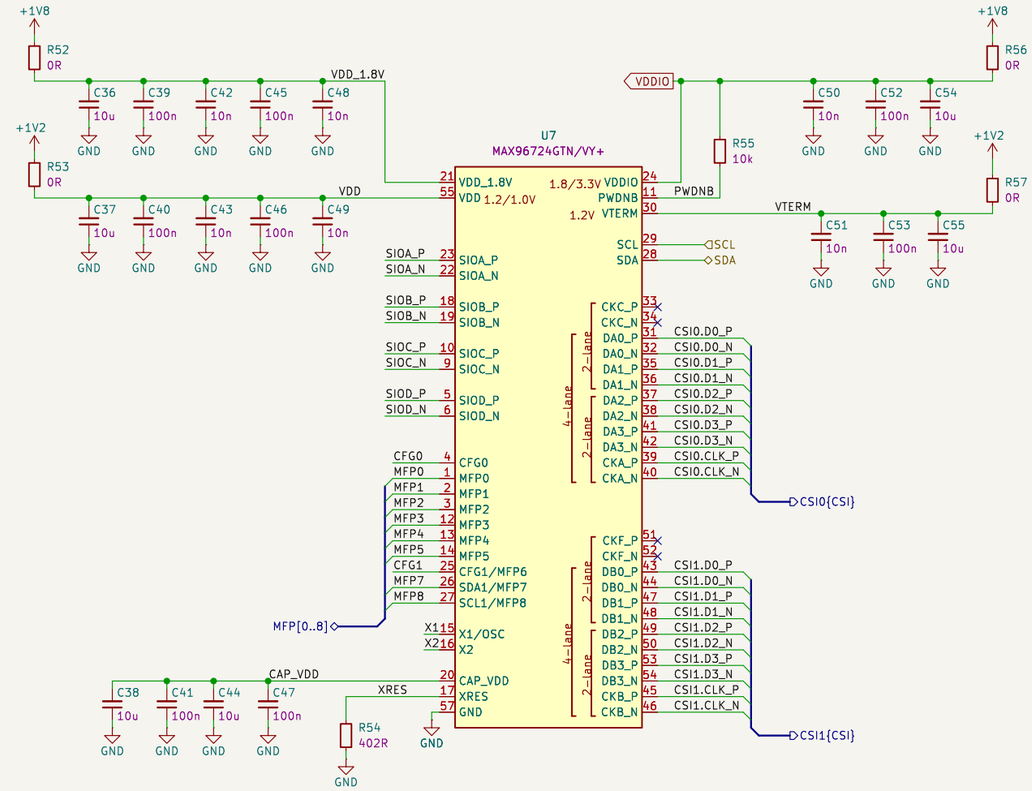
Config pins

CFG0 – I2C address config
R1 = OPEN, R2 = 10k
address = 0x4E

CFG1 – GMSL mode config
R1 = OPEN, R2 = 10k
mode = COAX GMSL2 6Gbps



Deserializer IC with passives



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