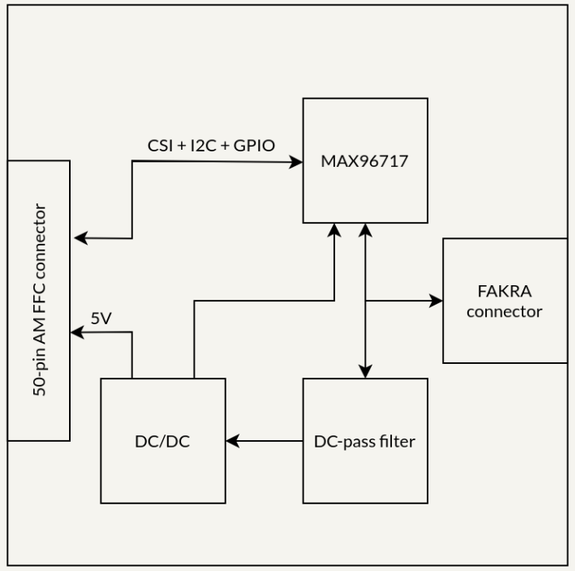

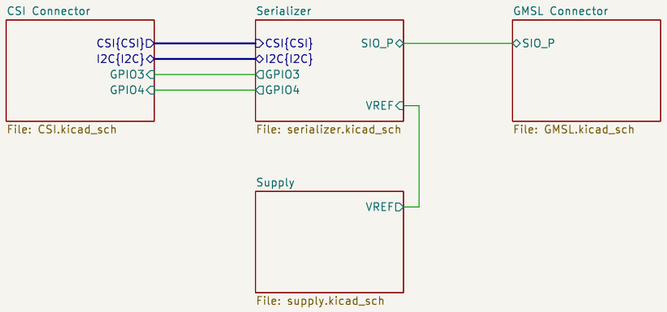

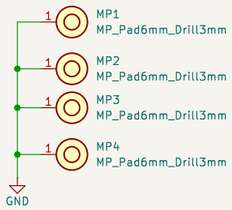

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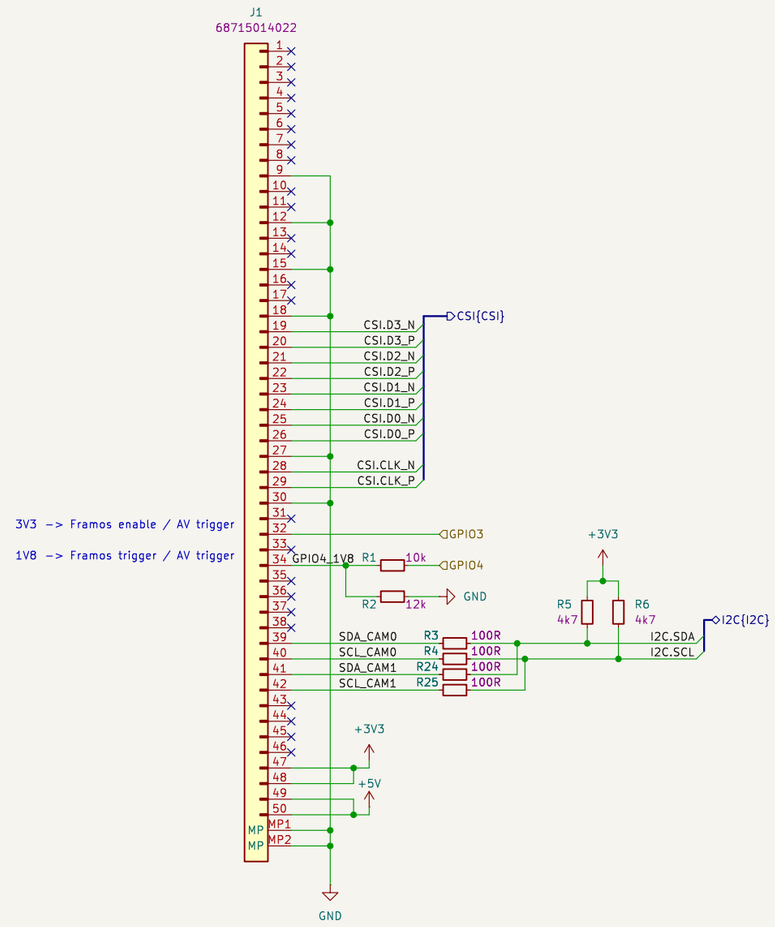
Sheet: /
File: gmsl-serializer.kicad_sch

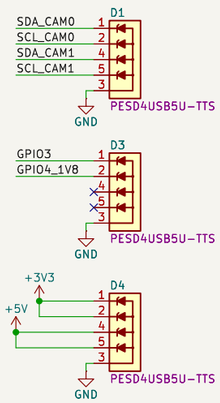
Title: GSML Serializer

Size: A3	Date: 2024-11-27	**Rev: 1.1.1:711d6**
KiCad E.D.A. 8.0.5		Id: 1/5

FFC CSI Connector



TVS diodes



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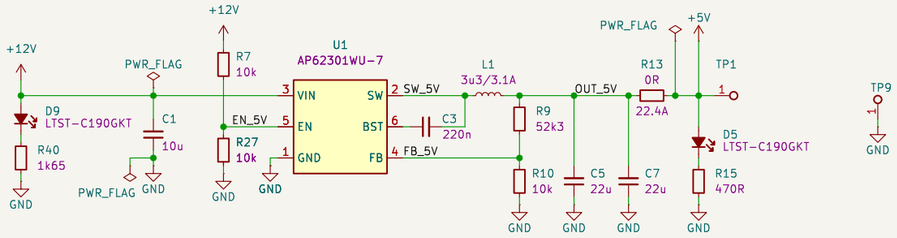
Sheet: /CSI Connector/
File: CSI.kicad_sch

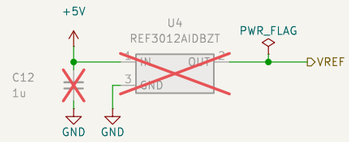
Title: GSML Serializer

Size: A3	Date: 2024-11-27	**Rev: 1.1.1:711d6**
KiCad E.D.A. 8.0.5		Id: 2/5

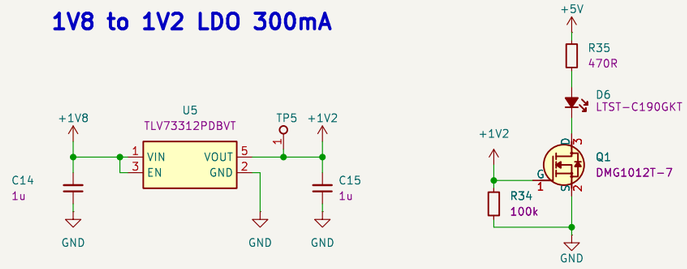
5V BUCK CONVERTER



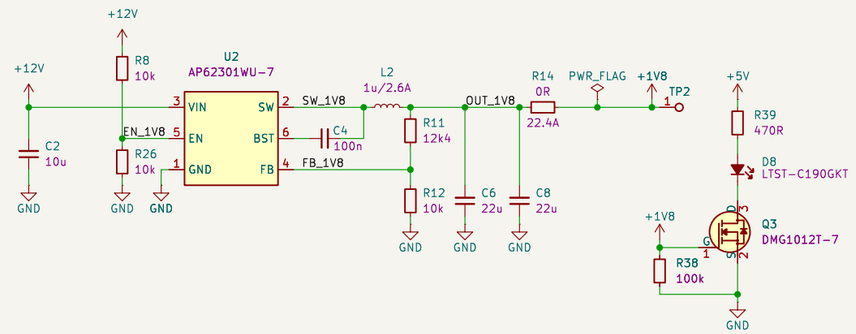
1V25 voltage reference DNP



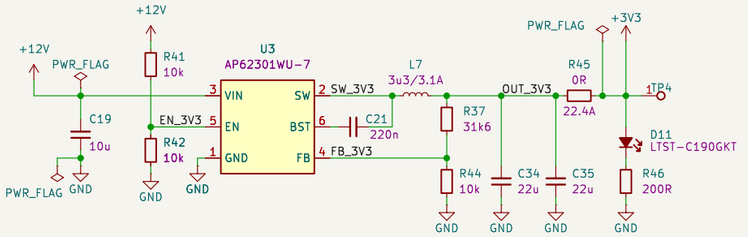
1V8 to 1V2 LDO 300mA



1V8 BUCK CONVERTER



3V3 BUCK CONVERTER



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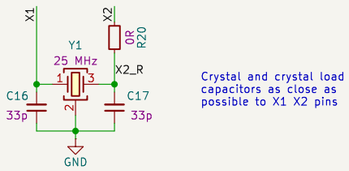
Sheet: /Supply/
File: supply.kicad_sch
Title: GSML Serializer
Size: A3 | Date: 2024-11-27 | **Rev: 1.1.1:711d6**
KiCad E.D.A. 8.0.5 | Id: 3/5

Crystal

Cinx1 = 3 pF (from MAX96717 data sheet)
Ctrace = 2 pF (estimated)
Cinx2 = 1 pF (from MAX96717 data sheet)
CL = 18 pF (from crystal data sheet)
Cx1total = Cinx1 + CL1 + Ctrace
Cx2total = Cinx2 + CL2 + Ctrace
CL = (Cx1total * Cx2total) / (Cx1total + Cx2total)

CL1 = 33 pF
Cl2 = 33 pF
CX1total = 38 pF
Cx2total = 36 pF
CL = 18.5 pF (meets the requirements)

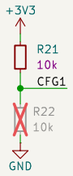


Crystal and crystal load capacitors as close as possible to X1 X2 pins

Config pins

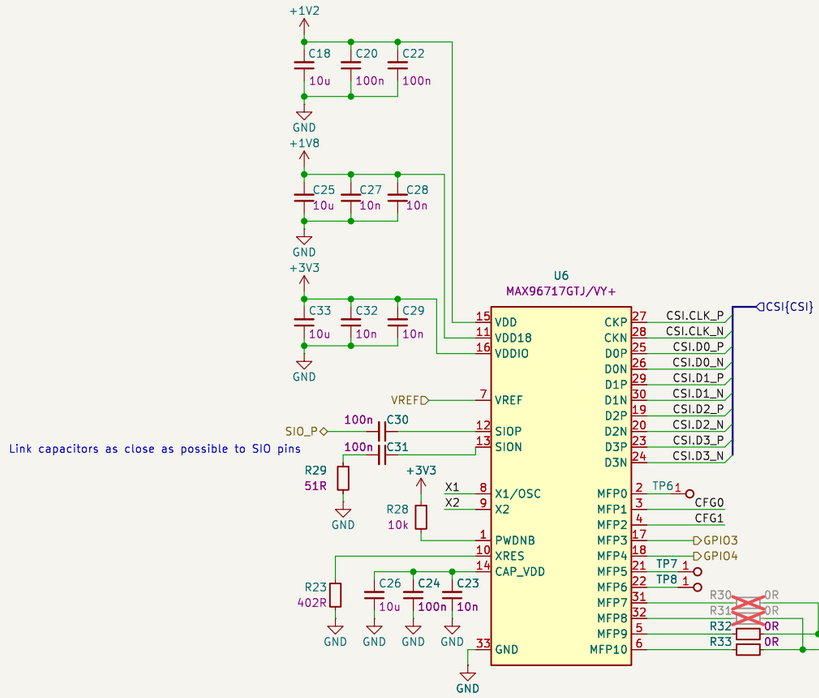
CFG0 – I2C address config
R1 = OPEN, R2 = 10k
I2C: Address = 0x40 (7-bit);
Clock= RoR

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



Serializer

Decoupling capacitors as close as possible to supply pins



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Sheet: /Serializer/
File: serializer.kicad_sch

Title: GSML Serializer

Size: A3	Date: 2024-11-27	**Rev: 1.1.1:711d6**
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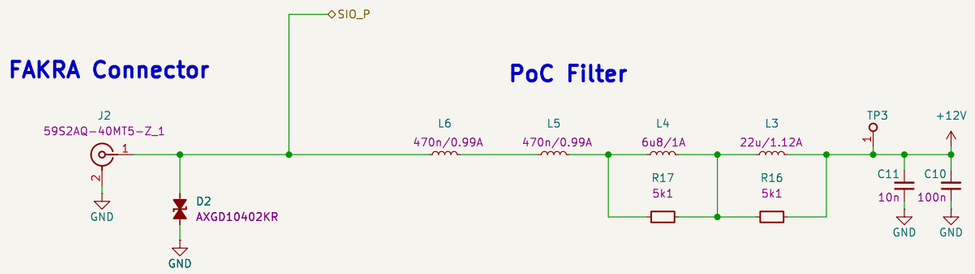

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Sheet: /GMSL Connector/
File: GMSL.kicad_sch

Title: GSML Serializer

Size: A3	Date: 2024-11-27	**Rev: 1.1.1:711d6**
KiCad E.D.A. 8.0.5		Id: 5/5