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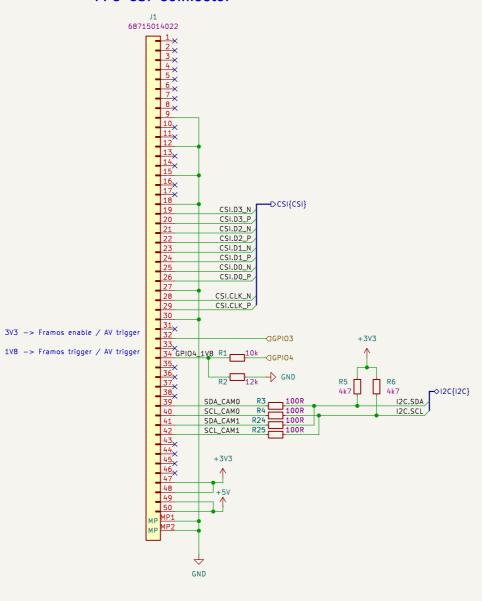
Sheet: /
File: gmsl-serializer.kicad_sch

Title: GSML Serializer

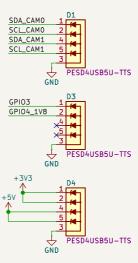
Size: A3 Date: 2024-10-08 Rev: 1.1.0:b2caf

KiCad E.D.A. kicad-cli 7.0.11 Id: 1/5

FFC CSI Connector



TVS diodes





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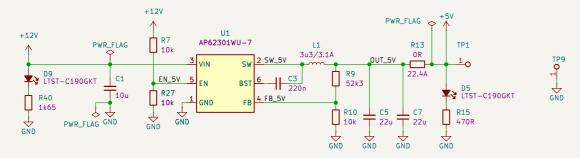
Sheet: /CSI Connector/ File: CSI.kicad_sch

Title: GSML Serializer

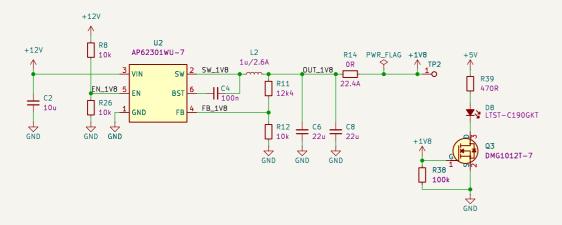
 Size: A3
 Date: 2024-10-08
 Rev: 1.1.0:b2

 KiCad E.D.A. kicad-cli 7.0.11
 Id: 2/5

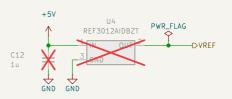
5V BUCK CONVERTER



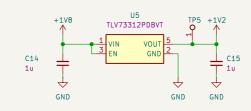
1V8 BUCK CONVERTER

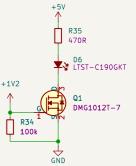


1V25 voltage reference DNP

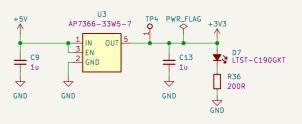


1V8 to 1V2 LDO 300mA





5V to 3V3 LDO 450mA



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Sheet: /Supply/
File: supply.kicad_sch

Title: GSML Serializer

Size: A3 Date: 2024–10–08 Rev: 1.1.0:b2cai

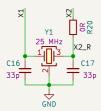
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Crystal

Cinx1 = 3 pF (from MAX96717 data sheet)
Ctrace = 2 pF (estimated)
Cinx2 = 1 pF (from MAX96717 data sheet)
CL = 18 pF (from rrystal 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
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

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

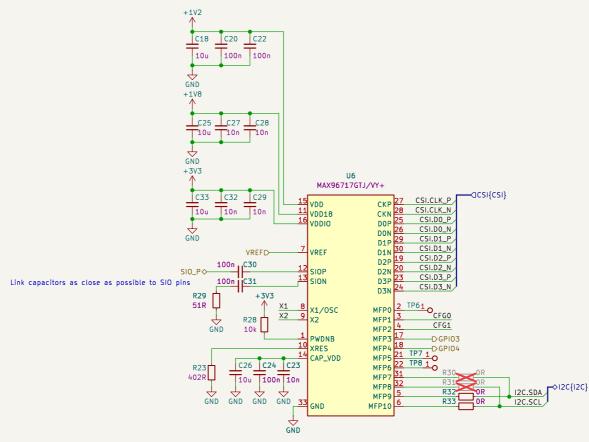
CFG1 - GMSL mode config R1 = 10k, R2 = OPEN mode = COAX 6Gbps; Pixel mode





Serializer

Decoupling capacitors as close as possible to supply pins





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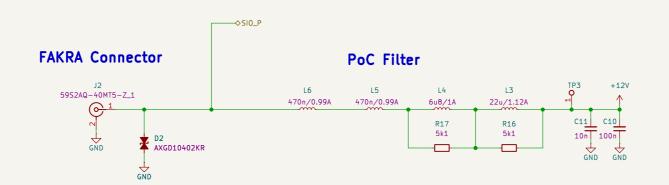
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Sheet: /Serializer/
File: serializer.kicad_sch

Title: GSML Serializer

Size: A3 Date: 2024–10–08 Rev: 1.1.0:b2ca

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Sheet: /GMSL Connector/ File: GMSL.kicad_sch

 Title: GSML Serializer

 Size: A3
 Date: 2024-10-08

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 kicad-cli 7.0.11