

Olimex Extension DVI v0.1

2025-04-07

Intergalaktik d.o.o.
License: CERN-OHL-S v2
Year: 2024.

Change project informations under:
File>>Schematic Setup>>Text Variables

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Olimex board is delivering MAX 2.5V on connector.
You can use 2.5V output signals for 3.3V.
Be carefull FPGA input only tolerate MAX 2.5V!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
2.5V input is connected over 500mA resetable fuse!
Maximum current for 2.5V is set to 500mA.
It may be possible to drain more current but
you will need add different FUSE and use it at your own risk!
3.3V step up is limited to 300mA
Idea behind limits is that you can use all 3 extensions slots
at once without any risk od draining to much!
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!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
There is same pinout part for 5V step up.
So you can have 5V with just one IC change.
For more details check Power page.
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

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TOP VIEW



Dimension
File: dimension.kicad_sch

Main Sheet
File: main.kicad_sch



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Sheet: /
File: dvi.kicad_sch

Title: Olimex Extension DVI v0.1

Size: A4

Date: 2024-12-02

KiCad E.D.A. 9.0.0

Rev: v0.1

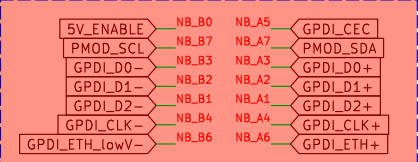
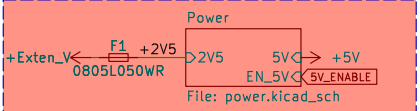
Id: 1/4

Main Page

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Olimex board is delivering MAX 2.5V on connector.
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2V5 over Resettable Fuses – PPTC 0.50A 6V 0805 >3V3

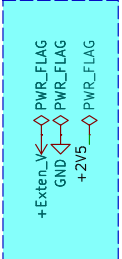
Connections



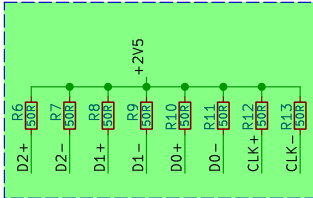
OLIMEX CONNECTOR



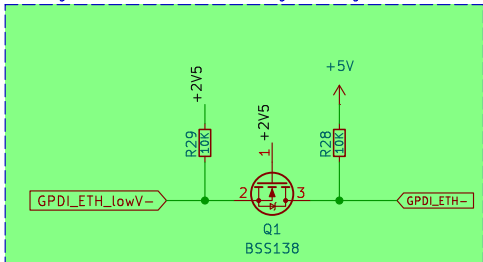
POWER FLAGS



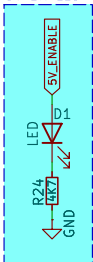
Termination resistors



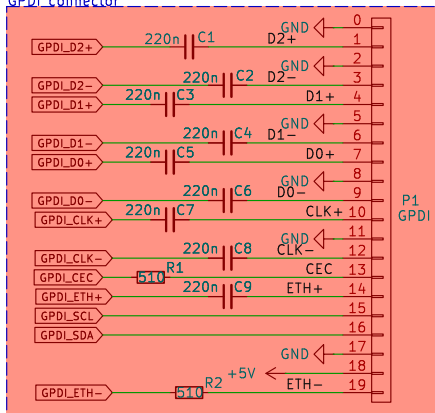
Lowering 5V from monitor to FPGA signal voltage



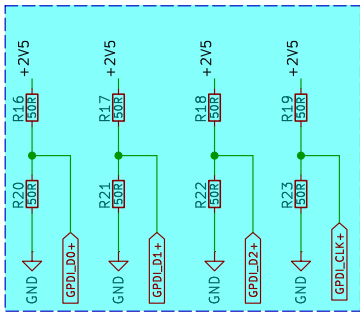
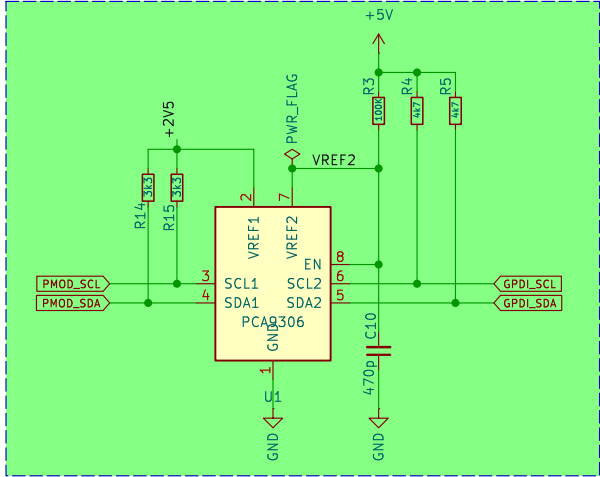
5V EN LED



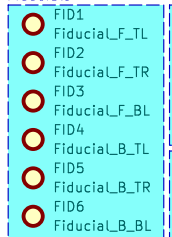
GPD_L connector



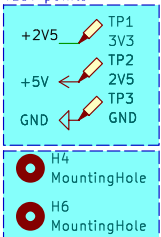
I2C level shifter



Fiducials



TEST points



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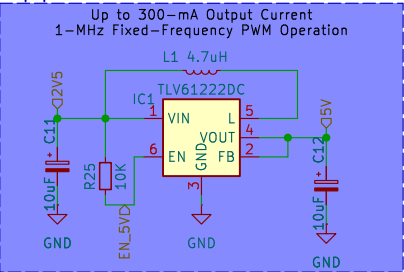
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Power Page

StepUp 2V5>>3V3



Replace with TPS61222DCKT for 2.5V>>5V
Replace with TPS61225DCKT for 2.5V>>3V3

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Sheet: /Main Sheet/Power/

File: power.kicad_sch

Title: Olimex Extension DVI v0.1

Size: A5

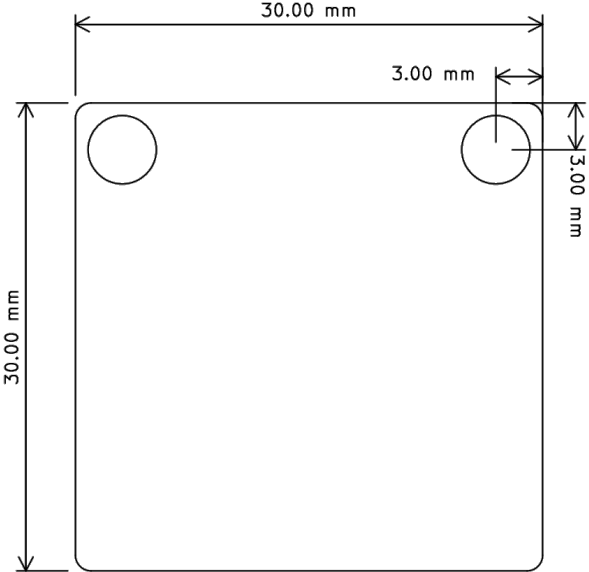
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Dimension Page



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