

PMIC



File: PMIC.kicad_sch

Interfaces



File: interfaces.kicad_sch

Ethernet



File: ethernet.kicad_sch

LPDDR4



File: lpddr4.kicad_sch

B2B connectors



File: B2B-connectors.kicad_sch

VIC7100 power



File: VIC7100-power.kicad_sch

VIC7100 config



File: VIC7100-config.kicad_sch

VIC7100 interfaces



File: VIC7100-interfaces.kicad_sch

VIC7100 DDR



File: VIC7100-DDR.kicad_sch



Logo N1
antmicro_logo

Logo N2
oshw_logo

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Sheet: /

File: arvsom.kicad_sch

Title: ARVSOM

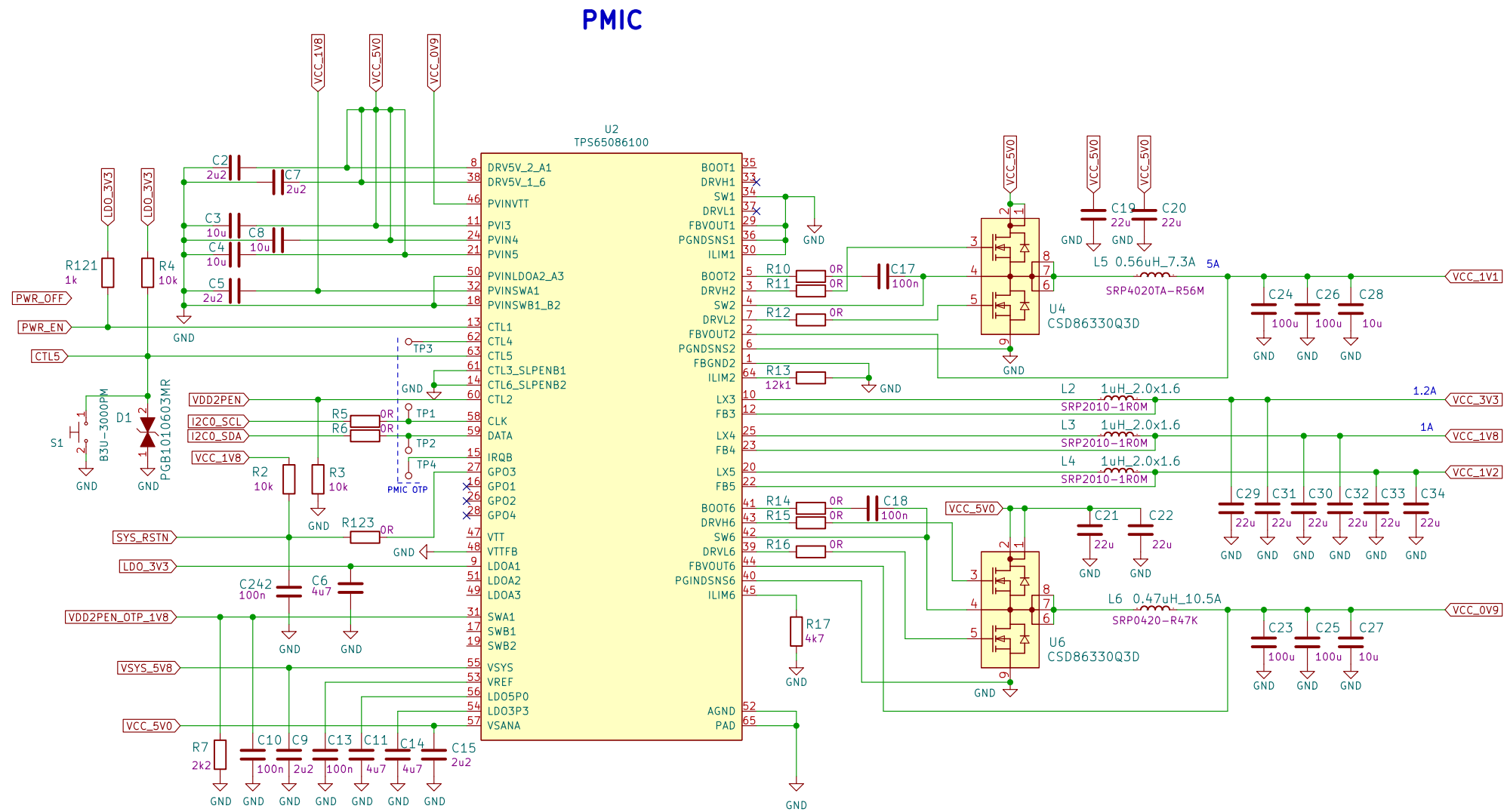
Size: A4

Date:

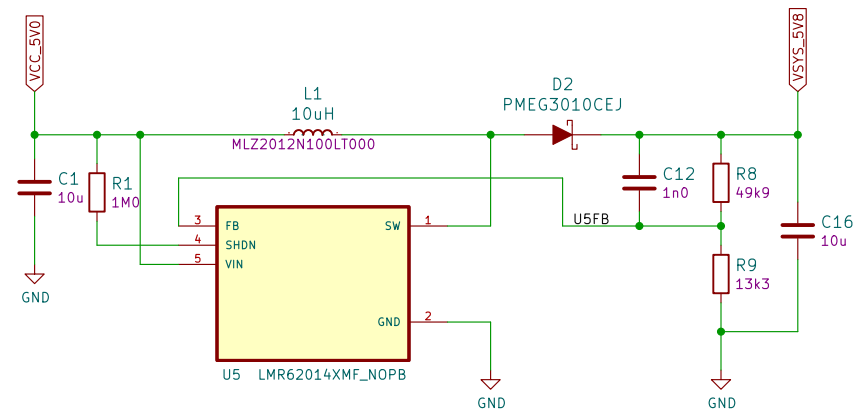
KiCad E.D.A. eeschema 6.0.5+dfsg-1-bpo11+1

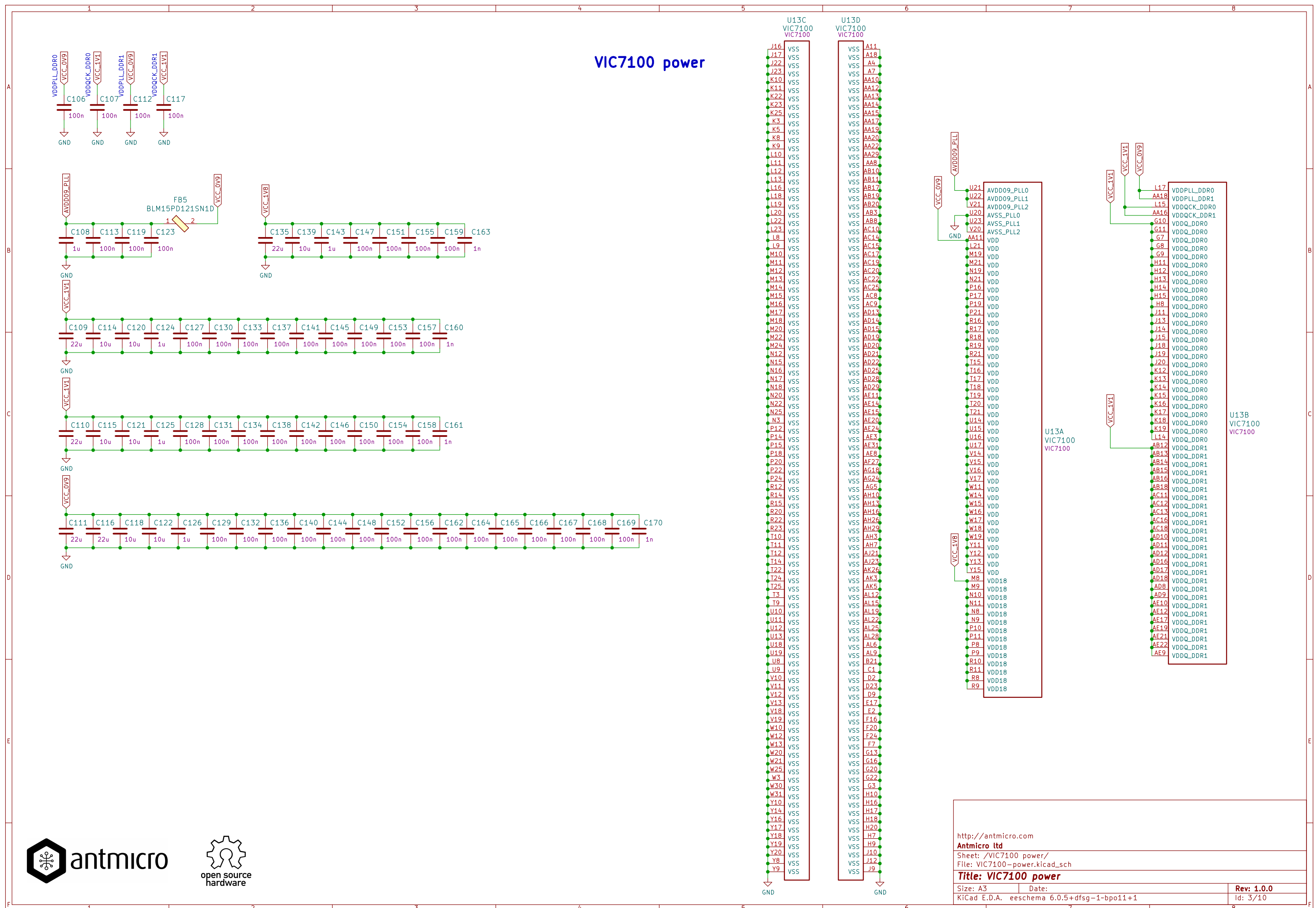
Rev: 1.0.0

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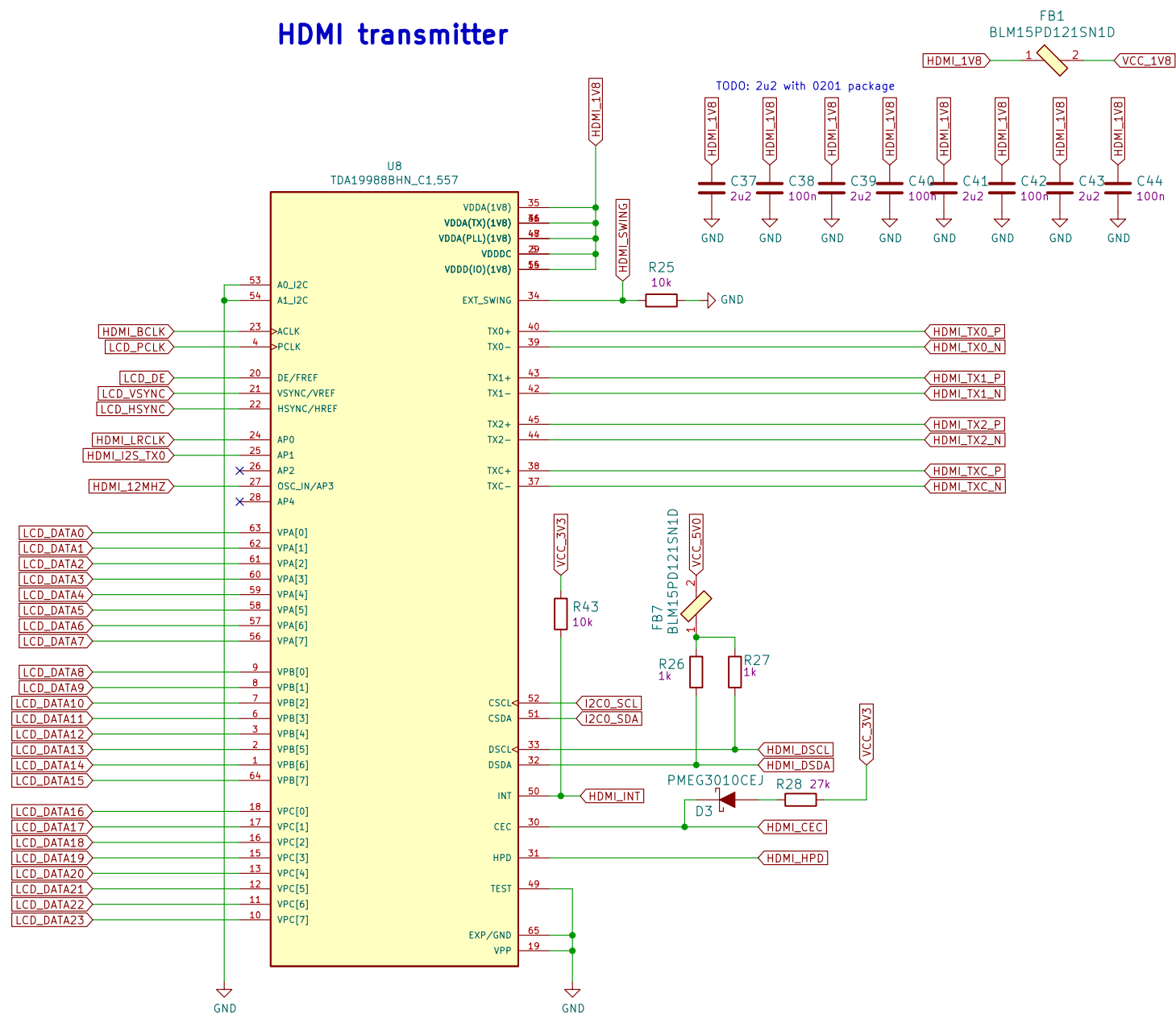


5V8 boost regulator

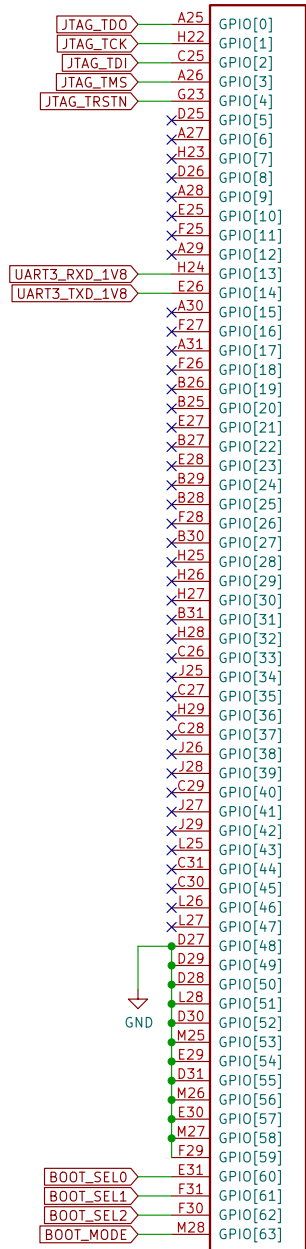




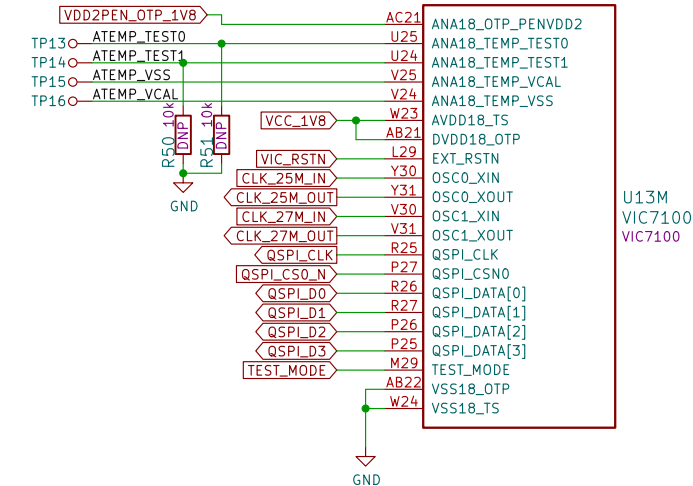
HDMI transmitter



VIC7100 configuration

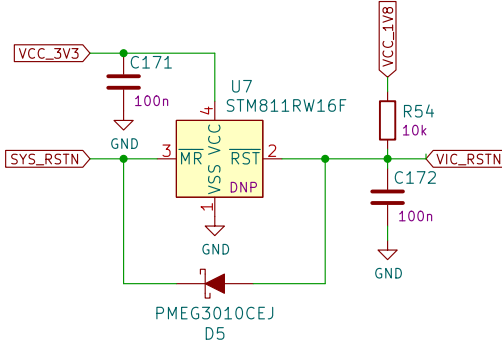


U13L
VIC7100

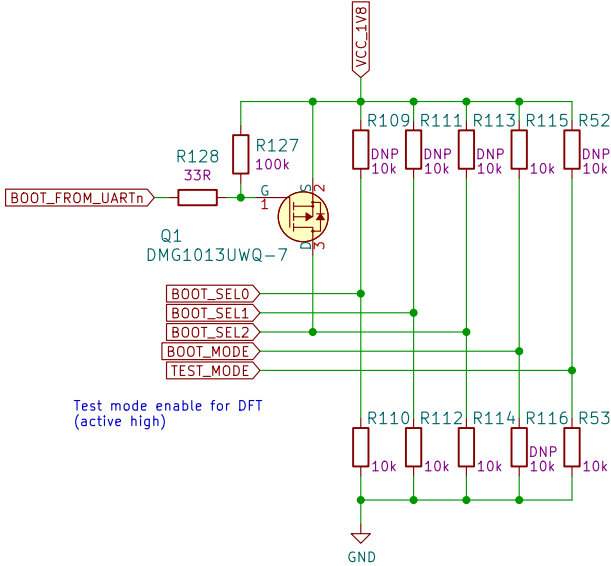


U13M
VIC7100

VIC reset

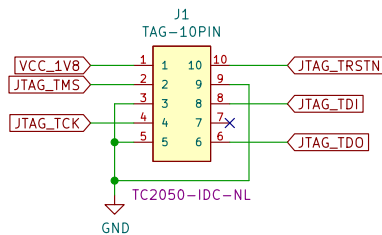


Boot config

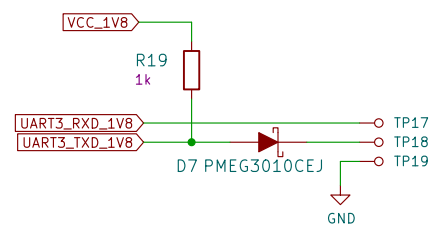


Test mode enable for DFT
(active high)

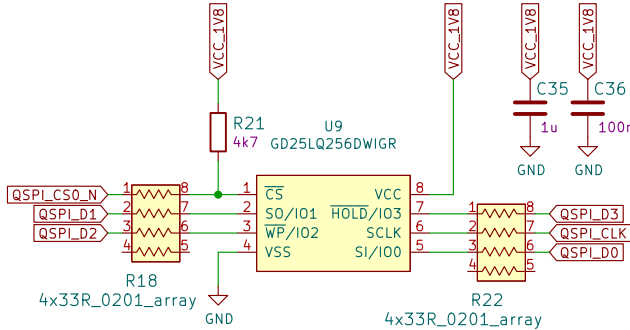
JTAG connector (1V8)



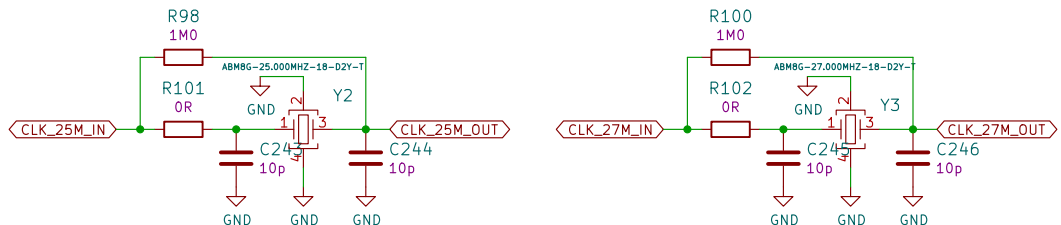
UART3 (1V8)

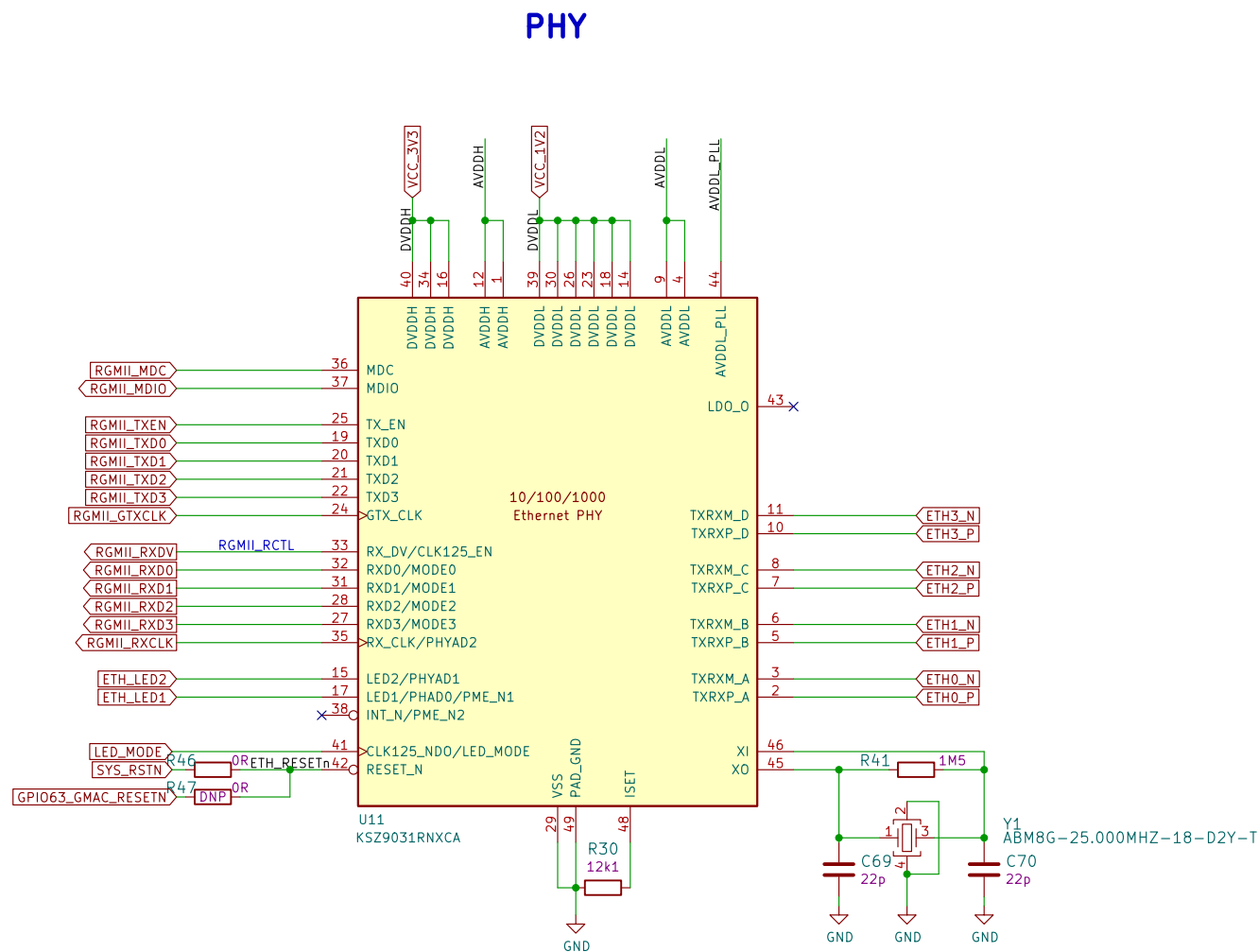
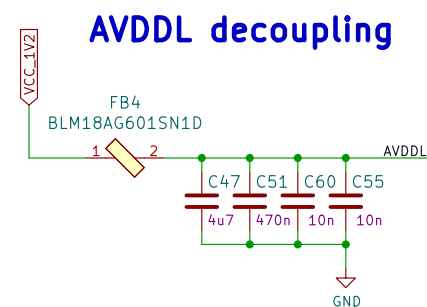
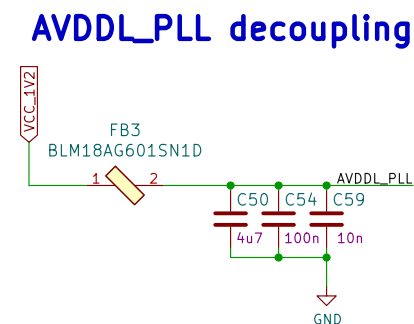
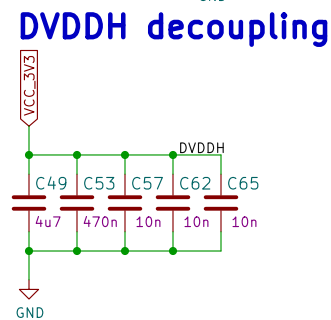
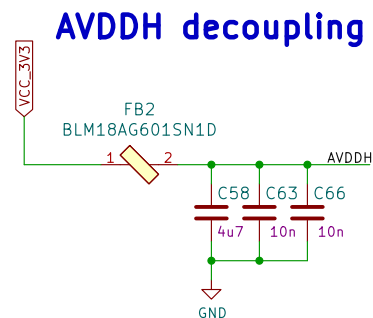
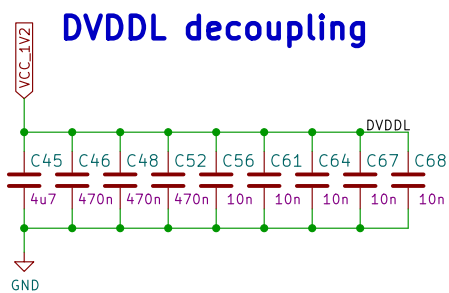


NOR Flash

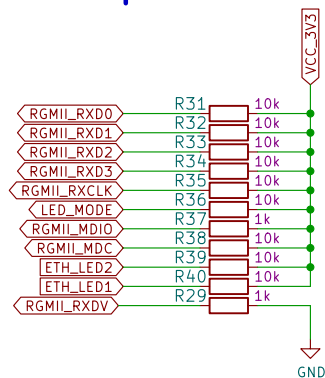


Clock crystals





Pull up resistors



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Sheet: /Ethernet/

File: ethernet.kicad_sch

Title: Ethernet

Size: A3

Date:

Rev: 1.0.0

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Id: 6/10

VIC7100 interfaces

VIC 3V3 GPIO

VIC LCD&RGMII

VIC MIPI&USB

ACK LED

Legend:

- U13H VIC7100
- U13G VIC7100
- U13K VIC7100
- U13J VIC7100
- U13I VIC7100

Title: VIC7100 interfaces

Size: A3 Date: Rev: 1.0.0

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Sheet: /VIC7100 interfaces/ File: VIC7100-interfaces.kicad_sch		
Title: VIC7100 interfaces		
Size: A3	Date:	Rev: 1.0.0
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TODO: compare with BeagleV LPDDR4 schematic
TODO: find suitable LPDDR4 (32bit, 2ch, 4die, 1Gb)

LPDDR4

TBD: number of the capacitors varies between BeagleV reference
and our previous LPDDR4 designs – some of them can be probably skipped

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Sheet: /LPDDR4/

File: lpddr4.kicad_sch

Title: LPDDR4

Size: A3

Date:

Rev: 1.0.0

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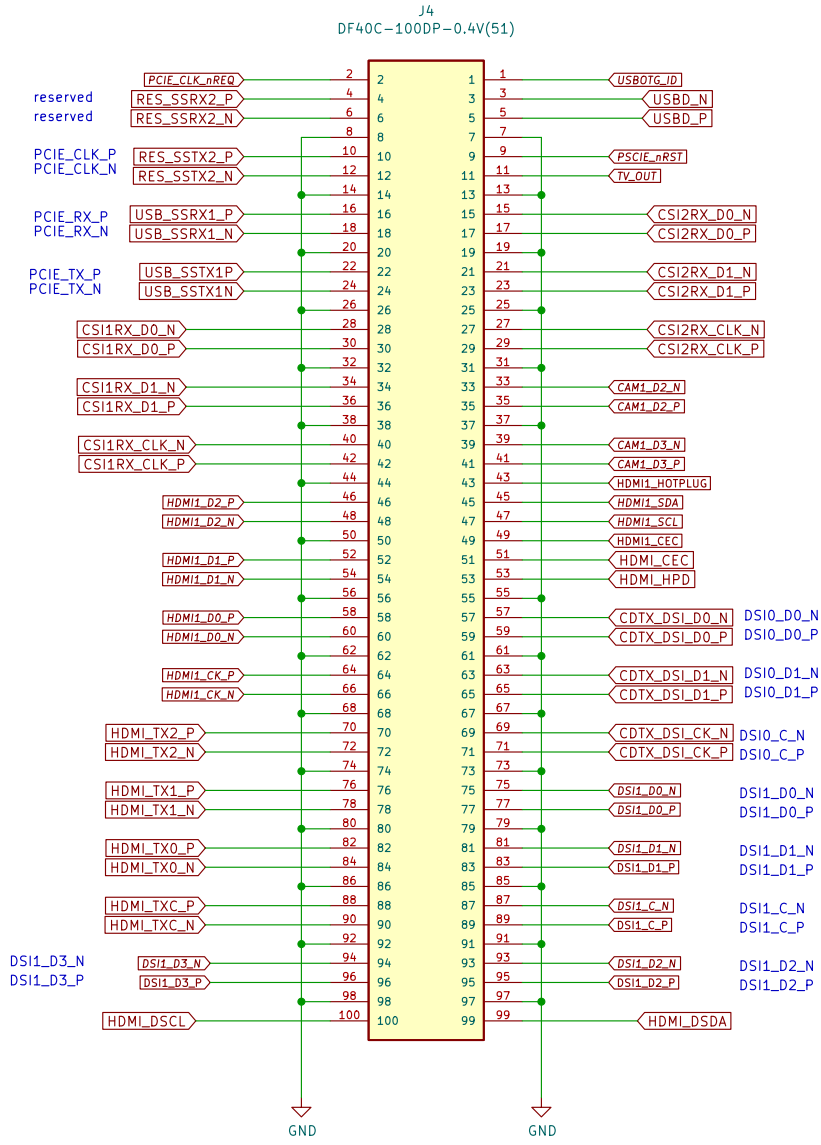
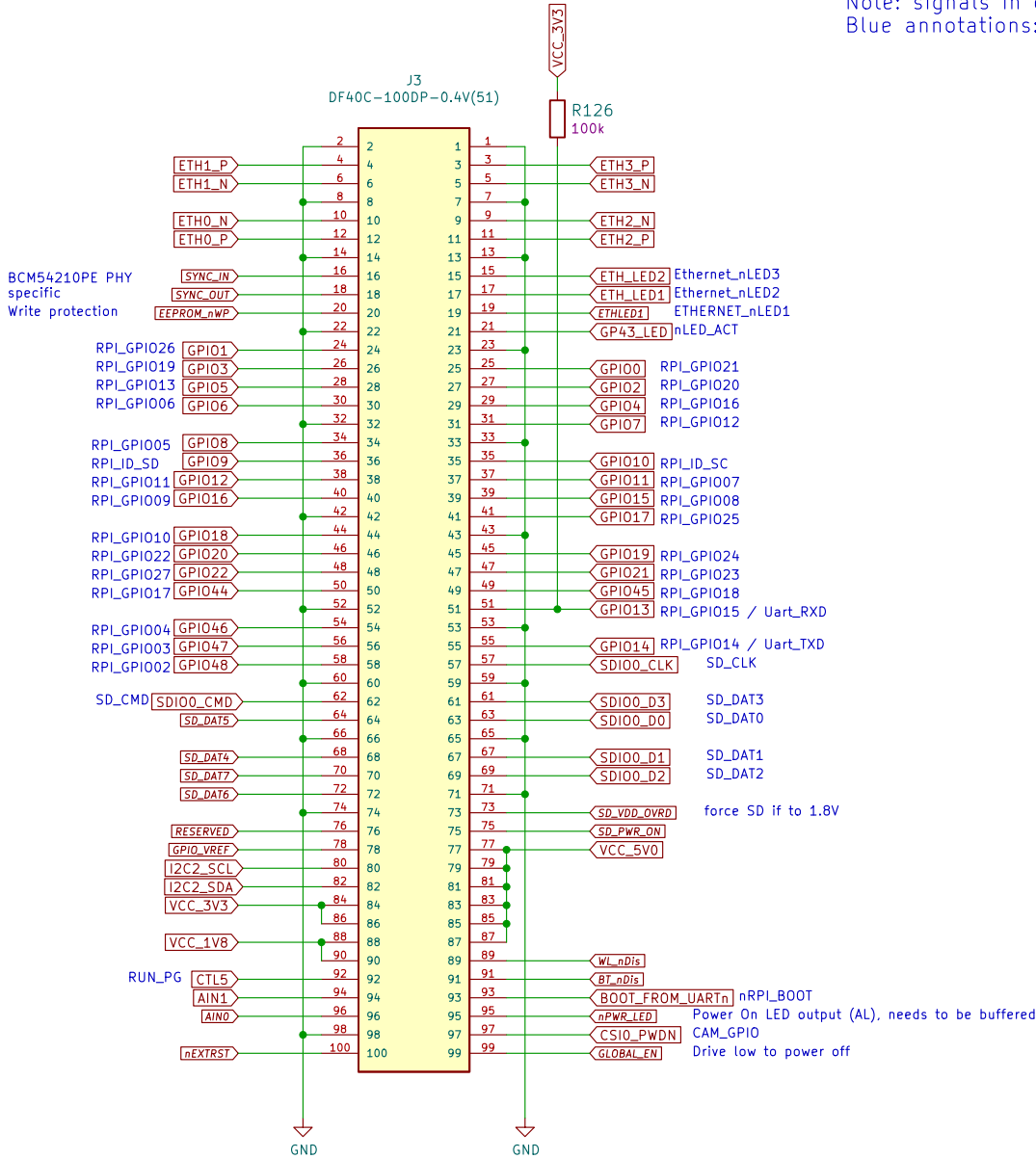
Id: 8/10

VIC7100 DDR



B2B connectors

Note: signals in cursive are NOT mapped on the SoM
Blue annotations: CM pin reference



- MP1
PCB_Mount_Hole_2.5
- MP2
PCB_Mount_Hole_2.5
- MP3
PCB_Mount_Hole_2.5
- MP4
PCB_Mount_Hole_2.5

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Sheet: /B2B connectors/ File: B2B-connectors.kicad_sch		
Title: SoM board-to-board connectors		
Size: A3	Date:	Rev: 1.0.0
KiCad E.D.A. eeschema 6.0.5+dfsg-1-bpo11+1		Id: 10/10