

PMIC Interfaces Ethernet LPDDR4 B2B connectors

File: PMIC.kicad_sch File: interfaces.kicad_sch File: ethernet.kicad_sch File: lpddr4.kicad_sch File: B2B-connectors.kicad_sch

VIC7100 power VIC7100 config VIC7100 interfaces VIC7100 DDR

File: VIC7100-power.kicad_sch File: VIC7100-config.kicad_sch File: VIC7100-interfaces.kicad_£tite: VIC7100-DDR.kicad_sch

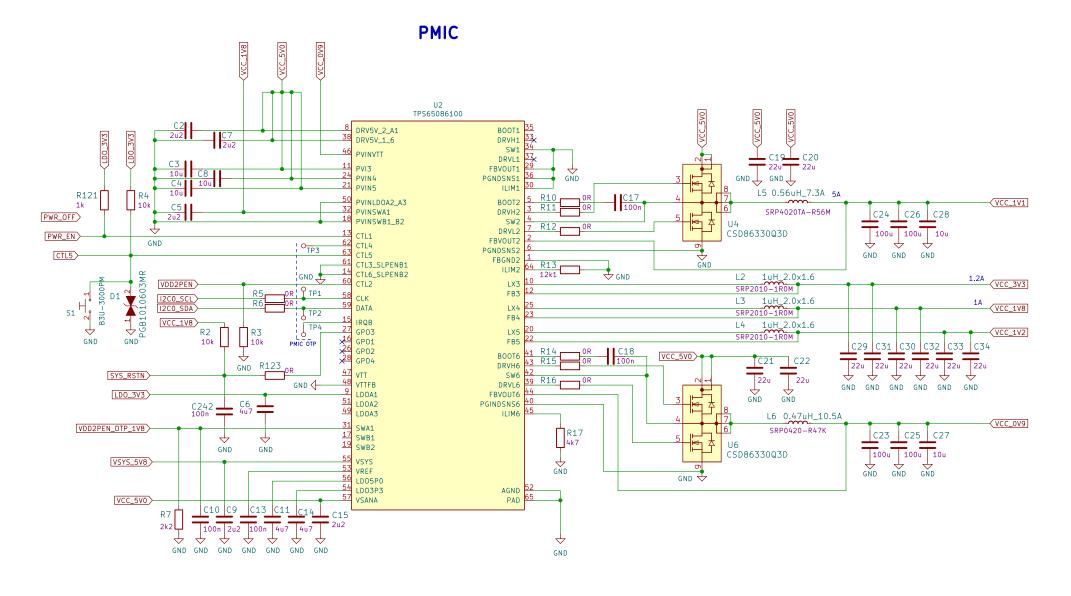




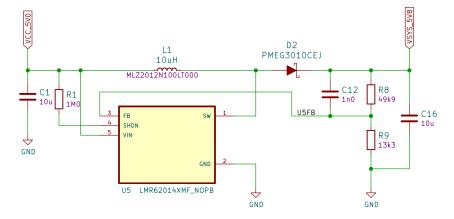
Logo N1 antmicro_logo

₋ogo ^{N2} oshw_logo

3



5V8 boost regulator







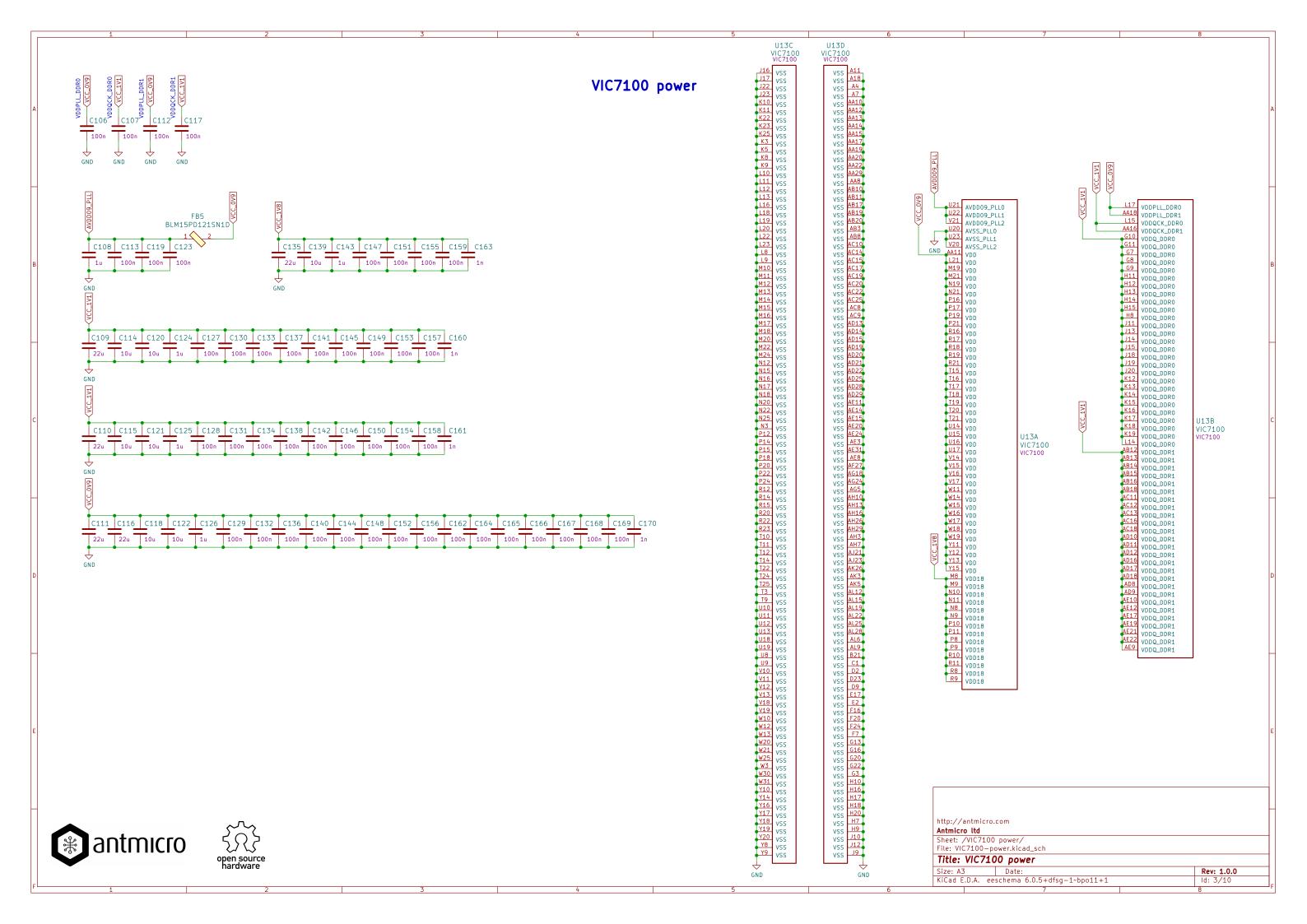
ARV SoM — Power Mangement

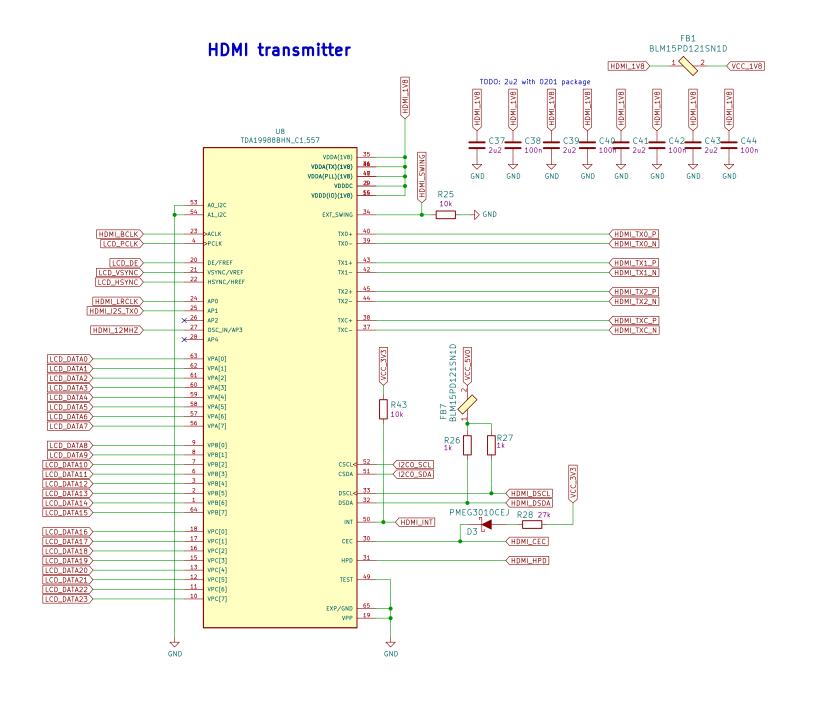
http://antmicro.com
Antmicro ltd

Sheet: /PMIC/
File: PMIC.kicad_sch

Title: Power mangement

Size: A3 Date: KiCad E.D.A. eeschema 6.0.5+dfsg-1~bpo11+1









http://antmicro.com
Antmicro ttd

Sheet: /Interfaces/
File: interfaces.kicad_sch

Title: HDMI transmitter

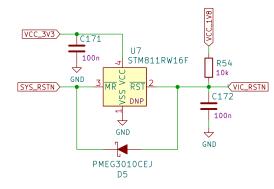
Size: A3 Date: Rev: 1.0.0

KiCad E.D.A. eeschema 6.0.5+dfsg-1-bpo11+1 Id: 4/10

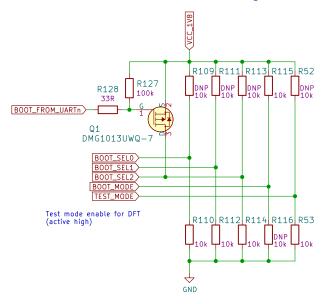
VIC7100 configuration

VDD2PEN_OTP_1V8 TP13O ATEMP_TESTO TP14O ATEMP_TEST1 TP15O ATEMP_VSS TP16O ATEMP_VCAL ANA18_OTP_PENVDD2 ANA18_TEMP_TESTO ANA18_TEMP_TEST1 ANA18_TEMP_VCAL V24 ANA18_TEMP_VSS W23 AVDD18_TS AB21 DVDD18_OTF EXT_RSTN OSCO_XIN U13M VIC7100 VIC7100 OSCO_XOUT OSC1_XIN OSC1_XOUT R25 QSPI_CLK P27 QSPI_CSN0 R26 QSPI_DATA[0] R27 QSPI_DATA[1] P26 QSPI_DATA[1] P25 QSPI_DATA[2] QSPI_DATA[3] M29 TEST_MODE AB22 VSS18_OTP AB22 VSS18_OTP W24 VSS18_TS GND

VIC reset

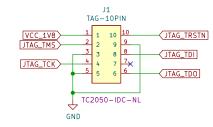


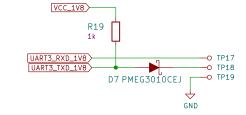
Boot config



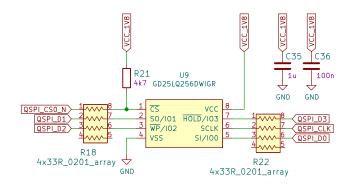
JTAG connector (1V8)

UART3 (1V8)

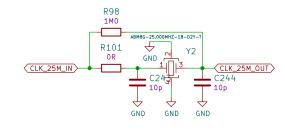


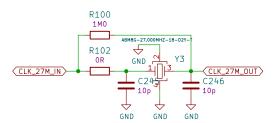


NOR Flash



Clock crystals









GPI0[58] GPI0[59] GPI0[60] GPI0[61] GPI0[62] GPI0[63]

U13L VIC7100 VIC7100

http://antmicro.com
Antmicro ltd

Sheet: /VIC7100 config/
File: VIC7100-config.kicad_sch

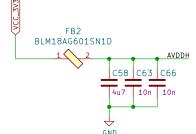
Title: VIC7100 configuration

Size: A3 Date: Rev: 1.0.0

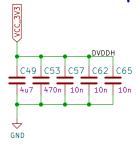
KiCad E.D.A. eeschema 6.0.5+dfsg-1-bpo11+1 Id: 5/10

DVDDL decoupling C45 C46 C48 C52 C56 C61 C64 C67 C68 4u7 470n 470n 470n 10n 10n 10n 10n 10n

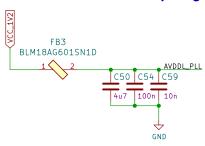
AVDDH decoupling



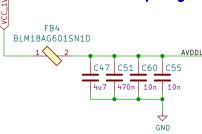
DVDDH decoupling



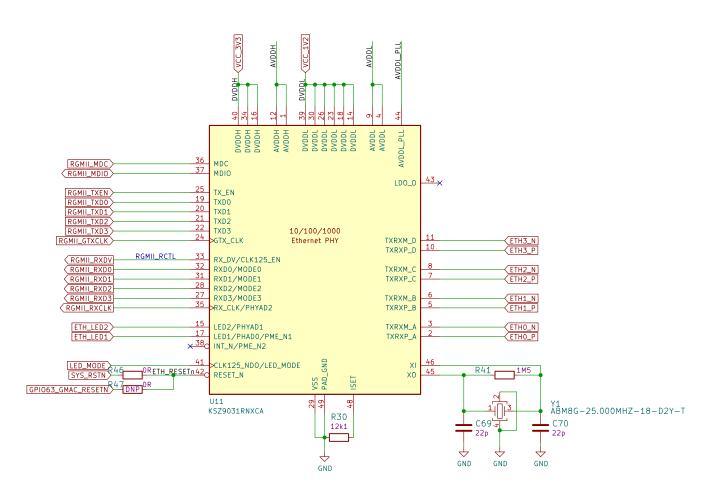
AVDDL_PLL decoupling



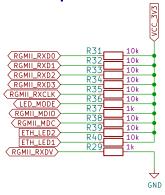
AVDDL decoupling



PHY



Pull up resistors

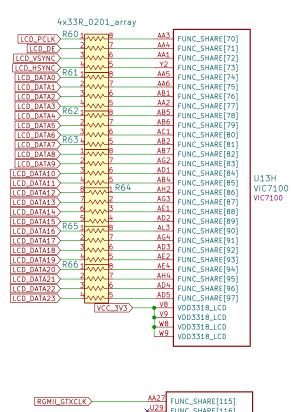


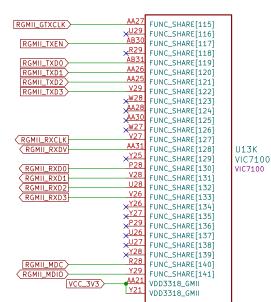


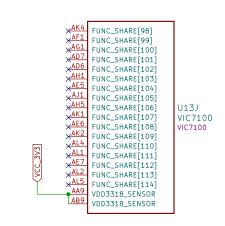


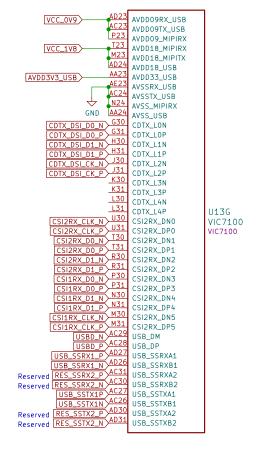
http://antmicro	a com	
Antmicro ltd	J.COIII	
Sheet: /Etherne	et/	
File: ethernet.k	icad_sch	
Title: Ether	net	
Size: A3	Date:	Rev: 1.0.0
KiCad E.D.A. e	eschema 6.0.5+dfsq-1~bpo11+1	ld: 6/10

VIC7100 interfaces

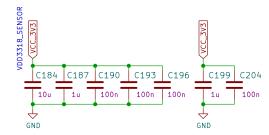




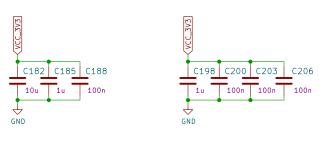




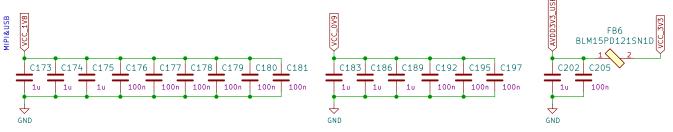
VIC 3V3 GPIO



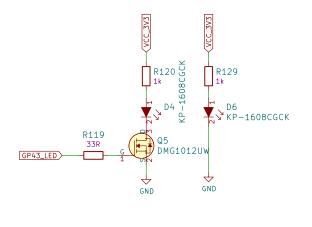
VIC LCD&RGMII

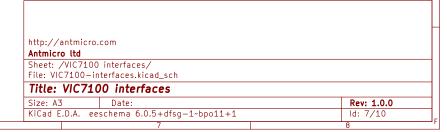


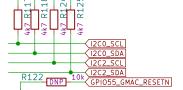
VIC MIPI&USB



ACK LED







FUNC_SHARE[0]

UNC_SHARE[1]

UNC_SHARE[2

FUNC_SHARE[3]

FUNC_SHARE[

FUNC_SHARE[5

FUNC SHARE

UNC_SHARE[6

UNC_SHARE[8]

UNC SHARE 9

FUNC_SHARE[10]

FUNC_SHARE[11

FUNC SHARE 12

UNC_SHARE[13]

FUNC SHARE[14]

UNC_SHARE[15]

FUNC SHARE[16]

FUNC_SHARE[17]

FUNC_SHARE[18] FUNC_SHARE[19]

UNC_SHARE[20

FUNC SHARE[21]

UNC_SHARE 123

UNC_SHARE[24]

FUNC_SHARE[25] FUNC_SHARE[26]

UNC_SHARE[27]

TINC SHARE[28]

UNC_SHARE[29]

UNC SHARE[30

UNC_SHARE[31]

FUNC_SHARE[32] FUNC_SHARE[33]

UNC_SHARE[34]

UNC SHARE[35]

UNC_SHARE[36]

UNC SHARE[37]

UNC_SHARE[38]

FUNC_SHARE[39] FUNC_SHARE[40]

FUNC_SHARE[41] FUNC_SHARE[42]

UNC_SHARE[43]

UNC SHARF[44]

UNC_SHARE[45]

FUNC_SHARE[46] UNC_SHARE[47] FUNC_SHARE[48] FUNC_SHARE[49]

FUNC_SHARE[50

FUNC SHARE[51]

UNC_SHARE[52]

UNC_SHARE[54]

FUNC_SHARE[55] FUNC_SHARE[56]

FUNC_SHARE[57

FUNC_SHARE 158

UNC_SHARE[59]

UNC_SHARE[61]

UNC SHARE[62]

FUNC_SHARE[63]

FUNC_SHARE[64] FUNC_SHARE[65]

UNC_SHARE[66]

FUNC SHARE[67] UNC_SHARE[68] UNC SHARF[69] N13 VDD3318_CHIPLINK VDD3318_CHIPLINK

VDD3318 CHIPLINK VDD3318_CHIPLINK

VDD3318 CHIPLINK

FUNC SHARETAN

FUNC SHARE[53

VIC7100 VIC7100

UNC_SHARE[22]

GPI012 K7

× M7 × M4 × M3 × M5

× N7 × M2 × M1

WIFI_SDIO1_CMD WIFI_SDIO1_D1 WIFI_SDIO1_D3

WIFI_SDIO1_CLK WIFI_SDIO1_D2

WIFI_SDIO1_D0

VCC_3V3 >

CSI1_PWDN V2

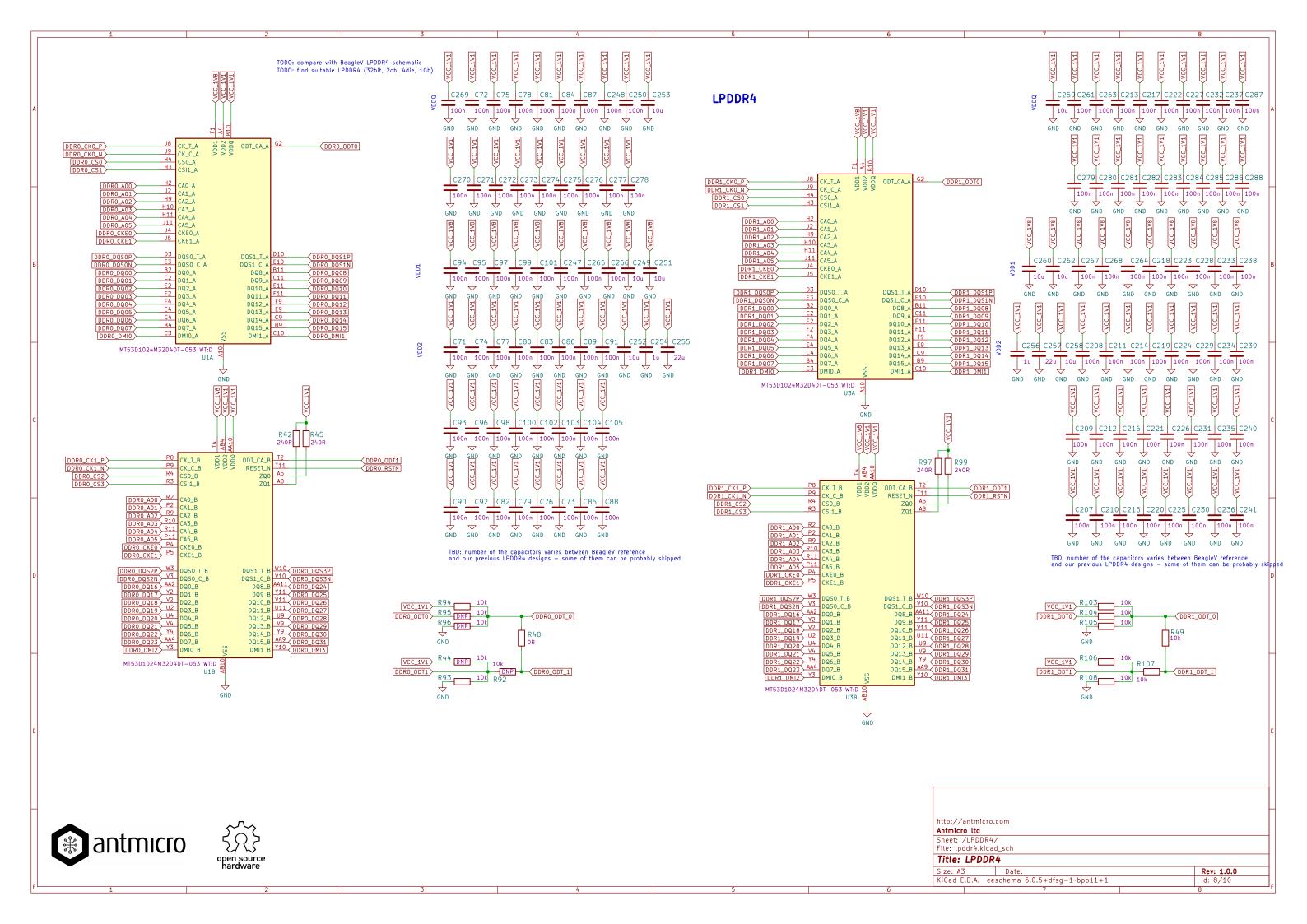
HDMI_INT R58 33R

BT_RSTN

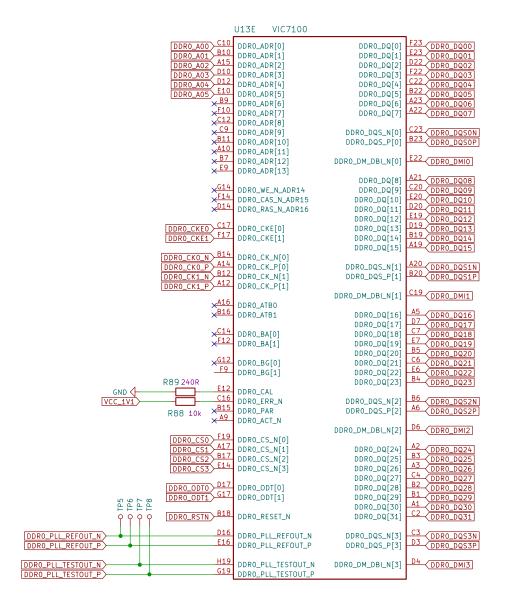
WIFI_EN

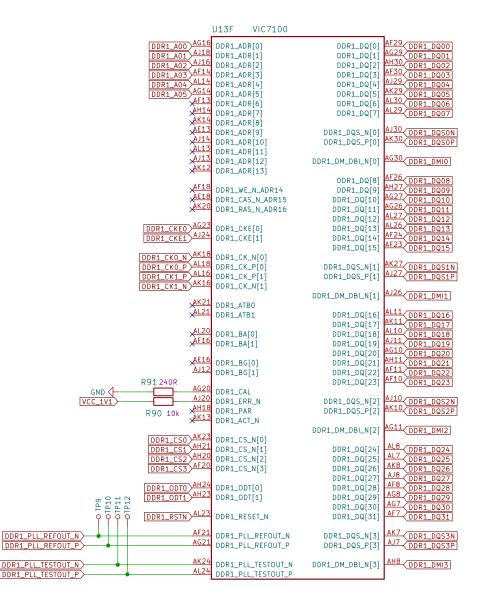






VIC7100 DDR









http://antmicro.com

Antmicro ltd

Sheet: /VIC7100 DDR/
File: VIC7100 -DDR.kicad_sch

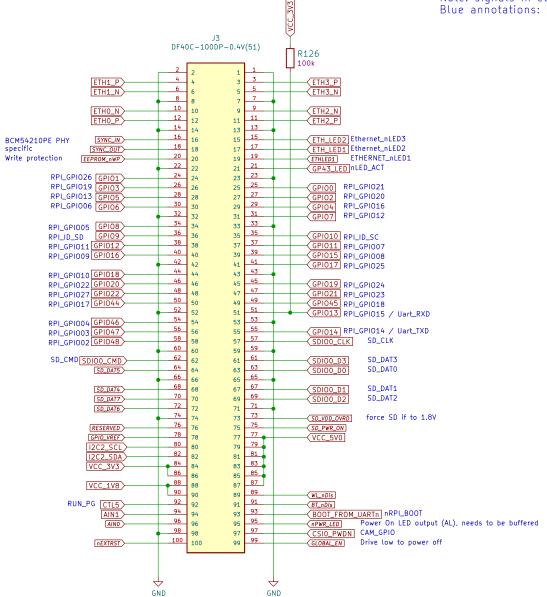
Title: VIC7100 DDR

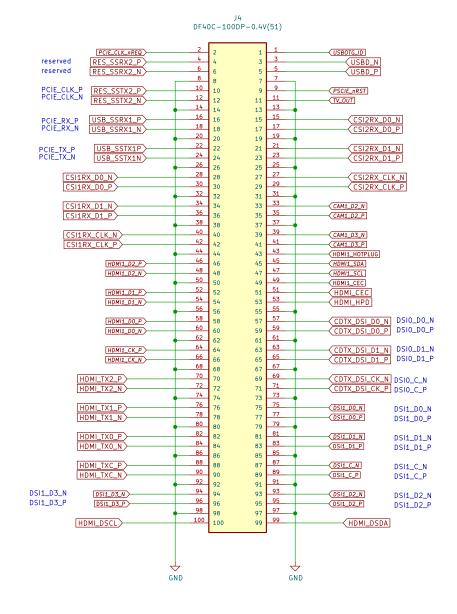
Size: A3 Date: Rev: 1.0.0

KiCad E.D.A. eeschema 6.0.5+dfsg-1-bpo11+1 Id: 9/10

B2B connectors

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











MP3
PCB_Mount_Hole_2.5

Antmicro ltd
Sheet: /B2B of File: B2B-cor

MP4
PCB_Mount_Hole_2.5

o://antmicro.com	
micro ltd	
et: /B2B connectors/	
: B2B-connectors.kicad_sch	
le: SoM board-to-board connectors	
e: A3 Date:	Rev: 1.0.0
ad E.D.A. eeschema 6.0.5+dfsg-1~bpo11+1	ld: 10/10