





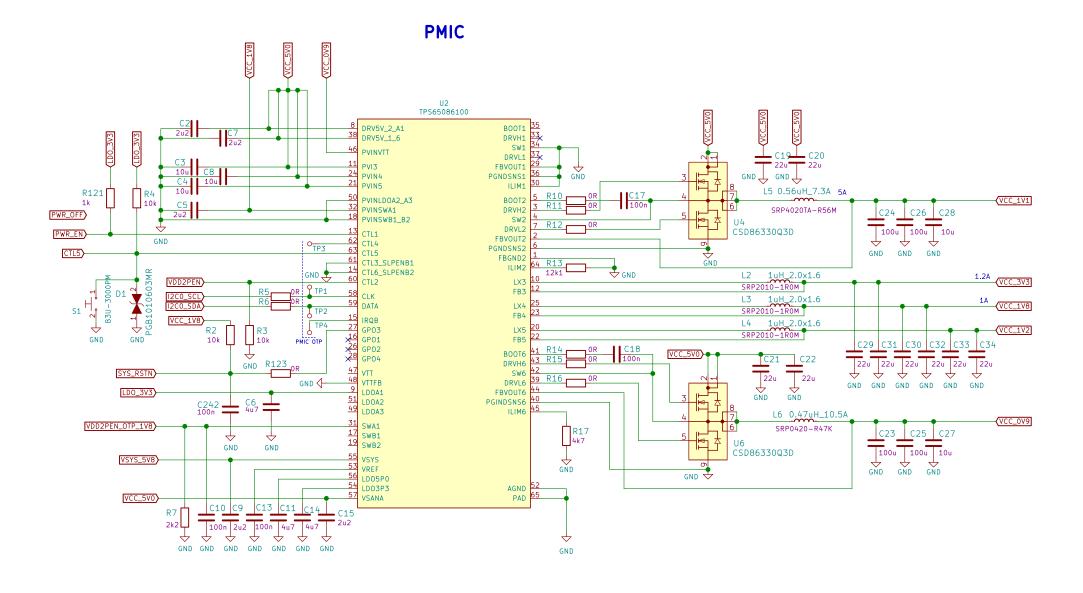
Logo N1 antmicro_log

Logo N2 Logo oshw_logo http://antmicro.com
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Title: ARVSOM

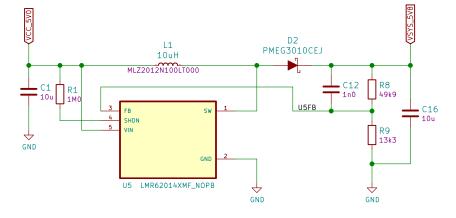
 Size: A4
 Date:
 Rev: 1.0.0

 KiCad E.D.A. kicad 5.1.5+dfsg1-2bpo10+1
 Id: 1/10

3



5V8 boost regulator







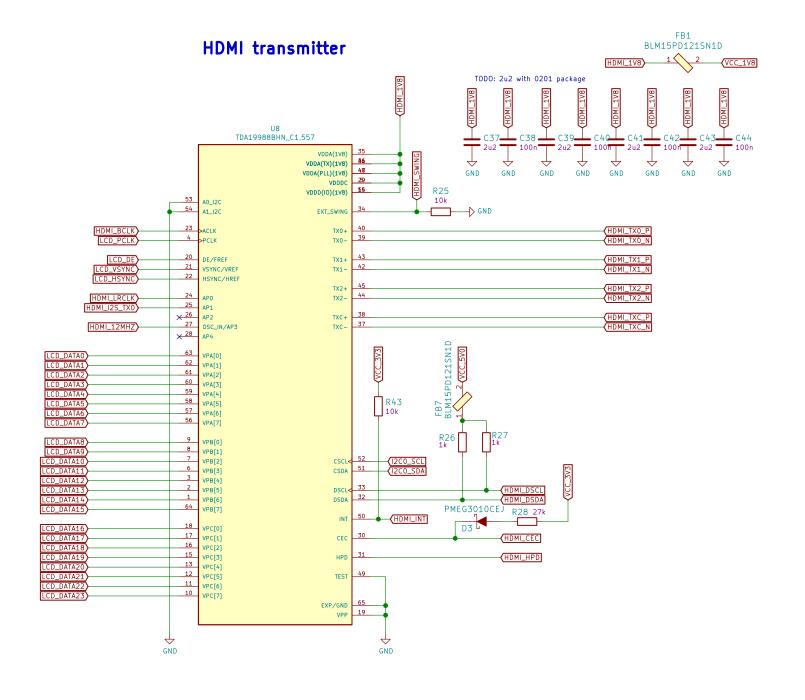
ARV SoM — Power Mangement

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Sheet: /PMIC/
File: PMIC.sch

Title: Power

Title: Power management

Size: A3 Date: KiCad E.D.A. kicad 5.1.5+dfsg1-2bpo10+1







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Sheet: /Interfaces/
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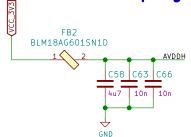
Title: HDMI transmitter

Size: A3 Date: Rev: 1.0.0

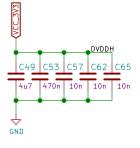
KiCad E.D.A. kicad 5.1.5+dfsg1-2bpo10+1 Id: 3/10

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

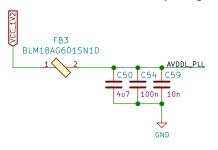
AVDDH decoupling



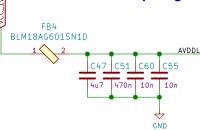
DVDDH decoupling



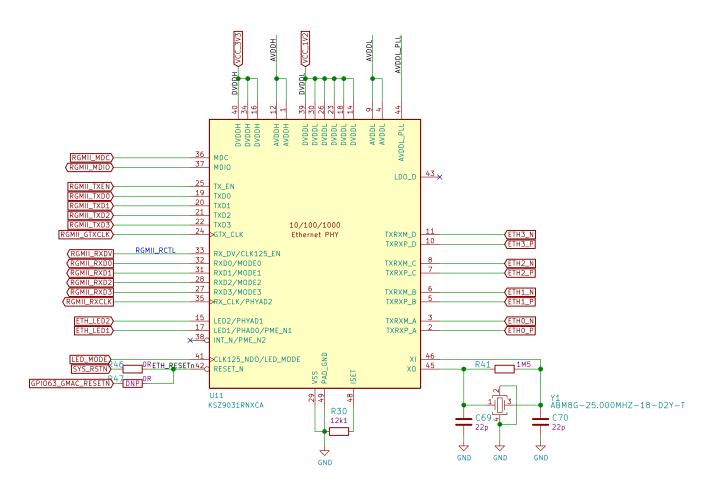
AVDDL_PLL decoupling



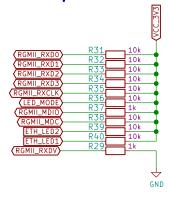
AVDDL decoupling



PHY



Pull up resistors







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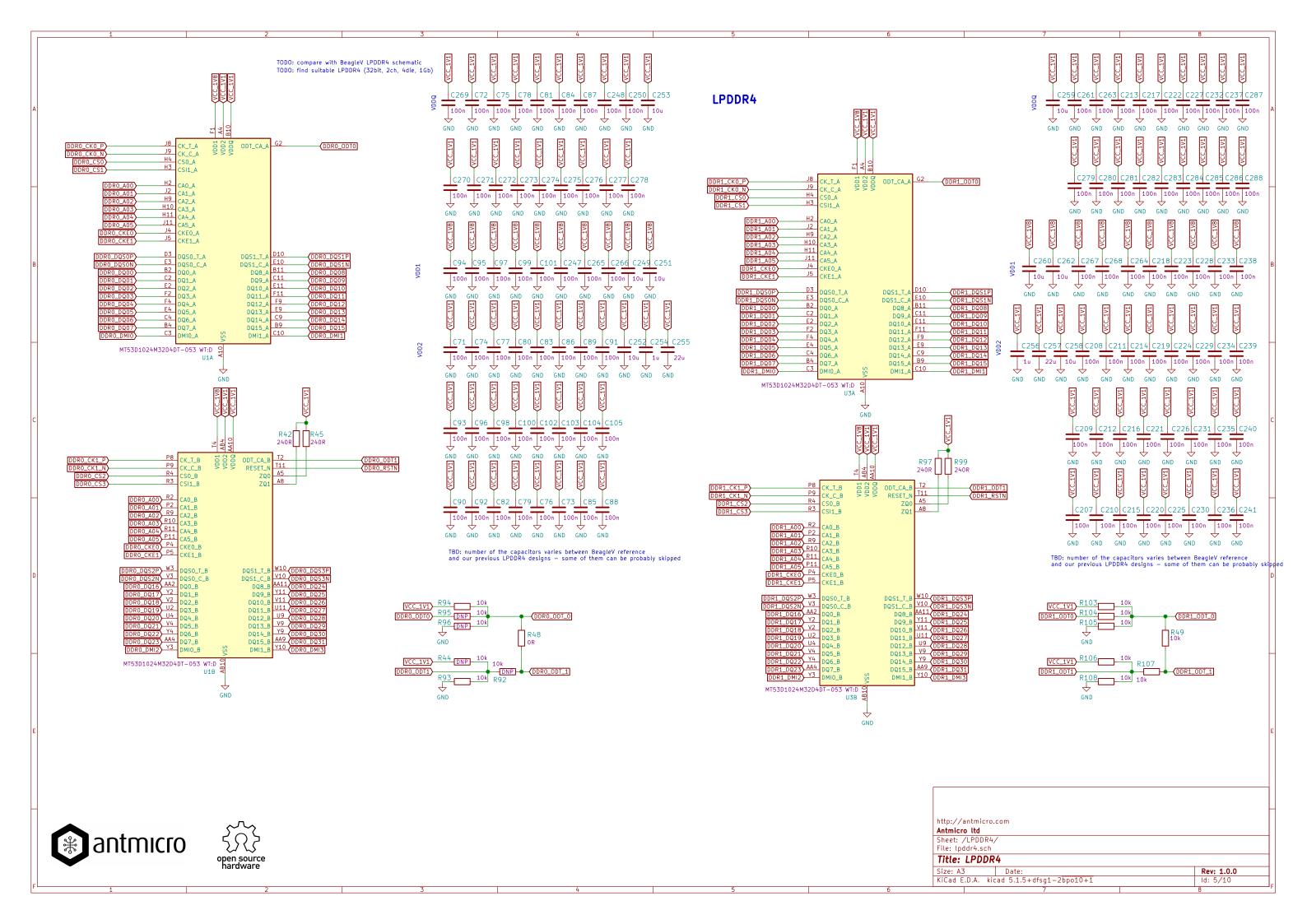
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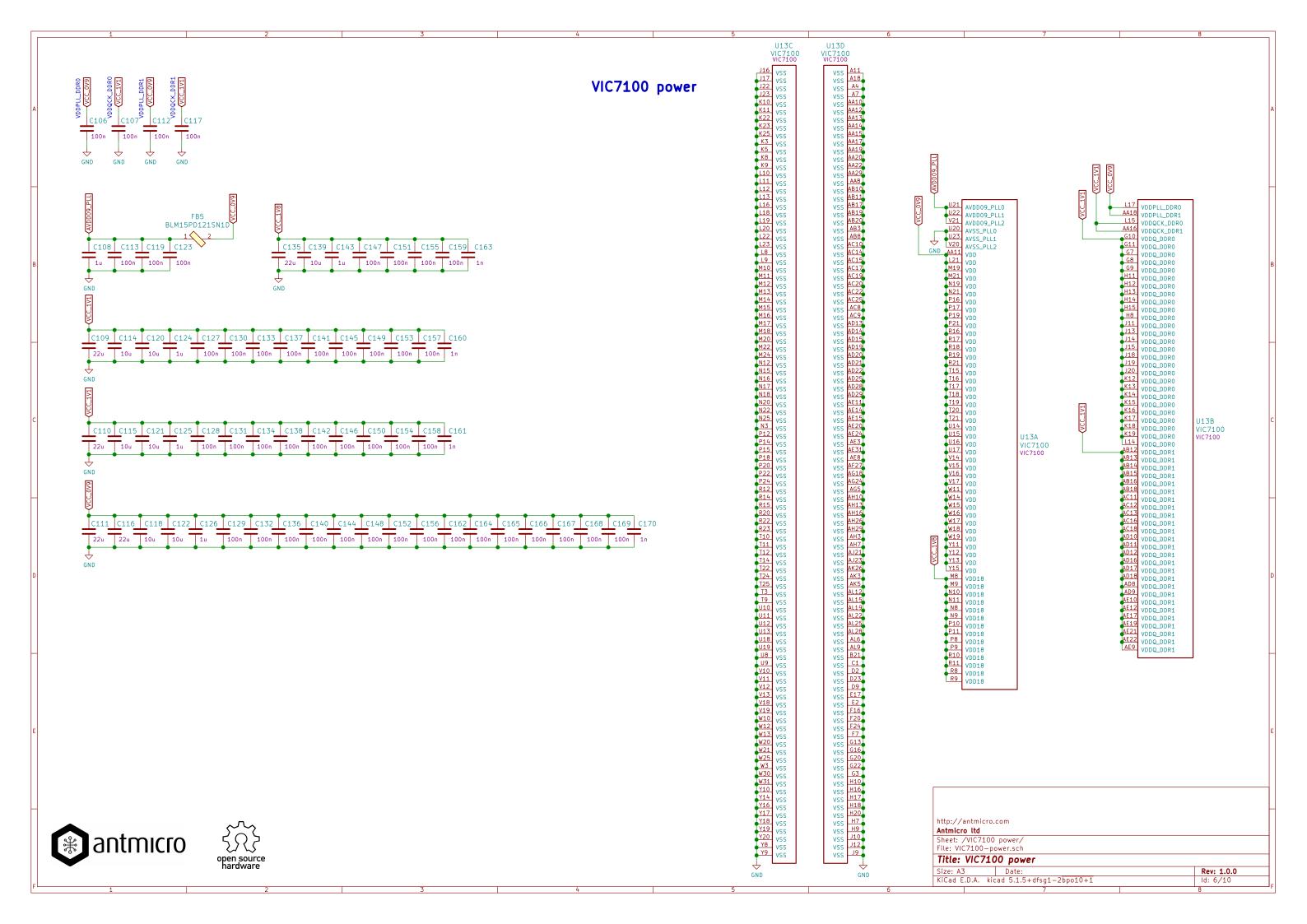
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Title: Ethernet

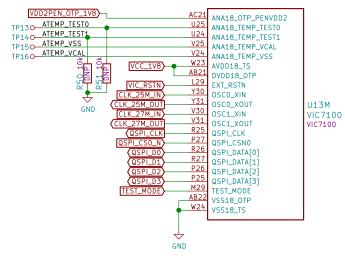
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KiCad E.D.A. kicad 5.1.5+dfsg1-2bpo10+1 Id: 4/10

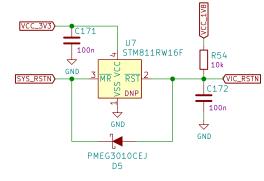




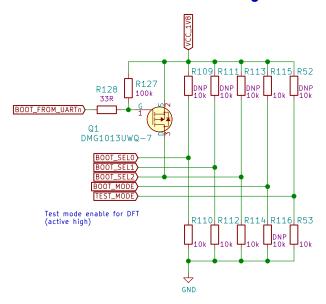
VIC7100 configuration



VIC reset

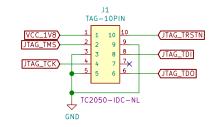


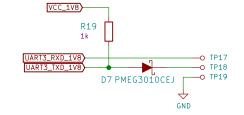
Boot config



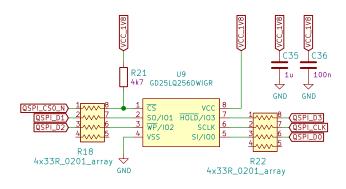
JTAG connector (1V8)

UART3 (1V8)

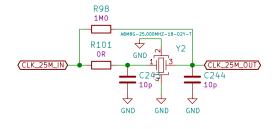


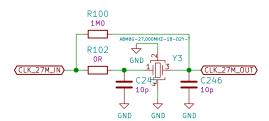


NOR Flash



Clock crystals









GPIO[4]
GPIO[5]
GPIO[6]
GPIO[6]
GPIO[7]
GPIO[8]
GPIO[10]
GPIO[10]
GPIO[10]
GPIO[11]
GPIO[12]
GPIO[14]
GPIO[15]
GPIO[15]
GPIO[14]
GPIO[15]
GPIO[15]
GPIO[16]
GPIO[17]
GPIO[18]
GPIO[17]
GPIO[18]
GPIO[20]
GPIO[20]
GPIO[21]
GPIO[23]
GPIO[24]
GPIO[25]
GPIO[26]
GPIO[27]
GPIO[28]
GPIO[27]
GPIO[28]
GPIO[29]
GPIO[30]
GPIO[40]
GPIO[50]

D25

A27

A28

A28

A29

A30

F26

A30

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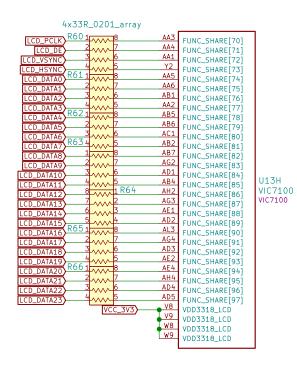
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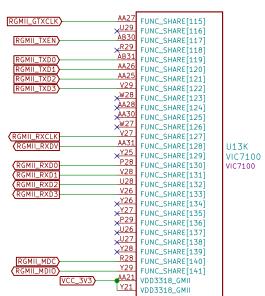
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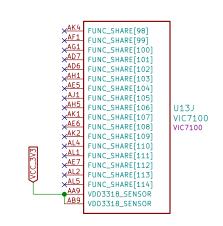
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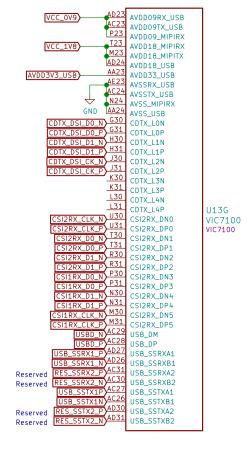
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VIC7100 interfaces

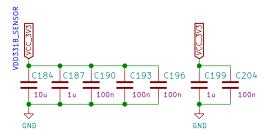




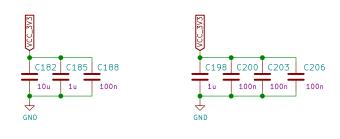




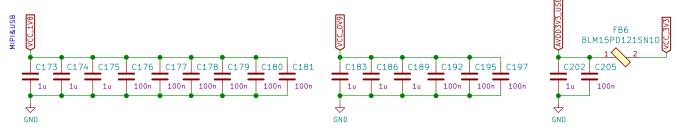
VIC 3V3 GPIO



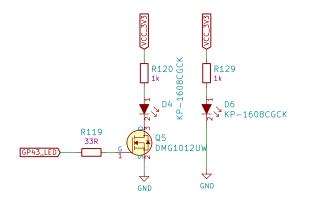
VIC LCD&RGMII

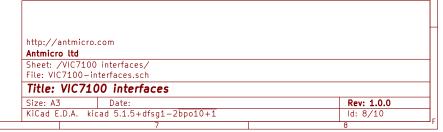


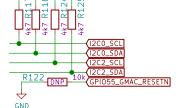
VIC MIPI&USB



ACK LED







TINC SHARE[0]

UNC_SHARE[1]

UNC SHARE[2

UNC_SHARE[3]

UNC_SHARE[

UNC_SHARE [5

UNC_SHARE[6

UNC SHARE [7

UNC_SHARE[8]

UNC SHARE [9

UNC_SHARE[10]

FUNC_SHARE[11] FUNC_SHARE[12]

UNC_SHARE[13]

UNC SHARE[14]

UNC_SHARE[15]

FUNC_SHARE[16] FUNC_SHARE[17]

FUNC_SHARE[18] FUNC_SHARE[19]

UNC_SHARE[20

UNC SHARE[21]

UNC_SHARE[22]

UNC_SHARE 123

UNC_SHARE[24]

UNC_SHARE[25]

FUNC_SHARE[27] FUNC_SHARE[28]

UNC_SHARE[29]

TINC SHARE[30

UNC_SHARE[31]

FUNC_SHARE[32] FUNC_SHARE[33]

FUNC_SHARE[34] FUNC_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 SHARE[44]

UNC_SHARE[45]

UNC_SHARE[46]

UNC_SHARE[47]

FUNC_SHARE[48] FUNC_SHARE[49]

UNC_SHARE[50

UNC SHARE[51]

UNC_SHARE[52]

UNC_SHARE[53

UNC_SHARE[54]

FUNC_SHARE[55] FUNC_SHARE[56]

FUNC_SHARE[57] FUNC_SHARE[58]

UNC_SHARE[59]

TINC SHARE 60

UNC_SHARE[61]

UNC SHARE[62]

UNC_SHARE[63]

FUNC_SHARE[64] FUNC_SHARE[65]

UNC_SHARE[66]

FUNC_SHARE[67] FUNC_SHARE[68] FUNC_SHARE[69] VDD3318_CHIPLINK VDD3318_CHIPLINK VDD3318_CHIPLINK VDD3318_CHIPLINK

VDD3318 CHIPLINK

VIC7100 VIC7100

× M7 × M4 × M3 × M5

× N7 × M2 × M1

× N2 × N4 × R7 × R6 × P1

Not mapped on B2B DAC_PWML Not mapped on B2B DAC_PWMR HDMI_12MHZ 1 NOT B

WIFI_SDIO1_CMD WIFI_SDIO1_D1 WIFI_SDIO1_D3

WIFI_SDIO1_CLK WIFI_SDIO1_D2

BT_RSTN WIFI_SDIO1_D0

BT_UART_CTS

BT UART RXD

BT_UART_TXD

BT_UART_RTS

GP43_LED

GPI063_GMAC_RESETN V7

HDMI_INT R58 33R

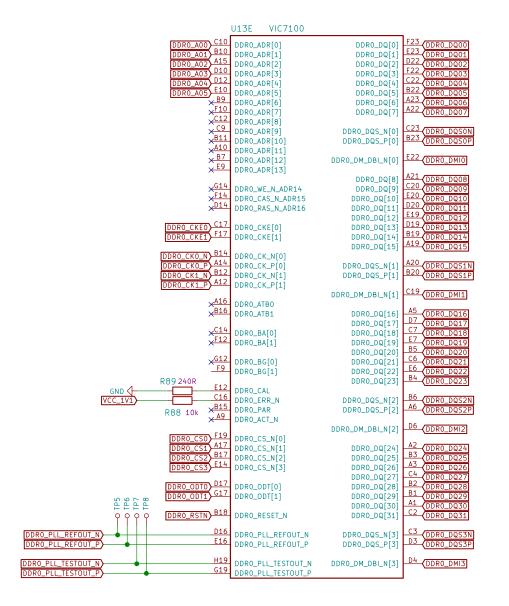
WIFI_EN

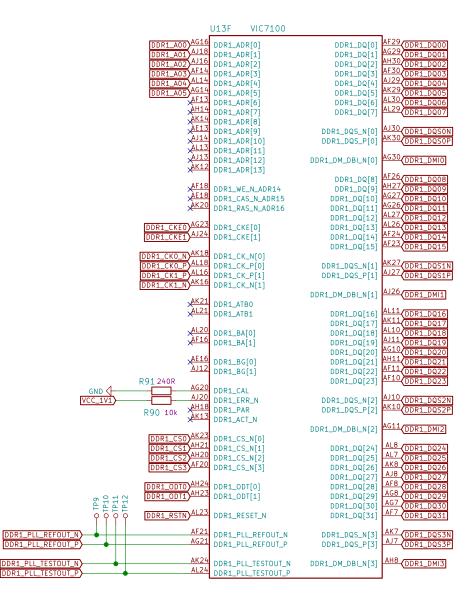
BT WAKE





VIC7100 DDR





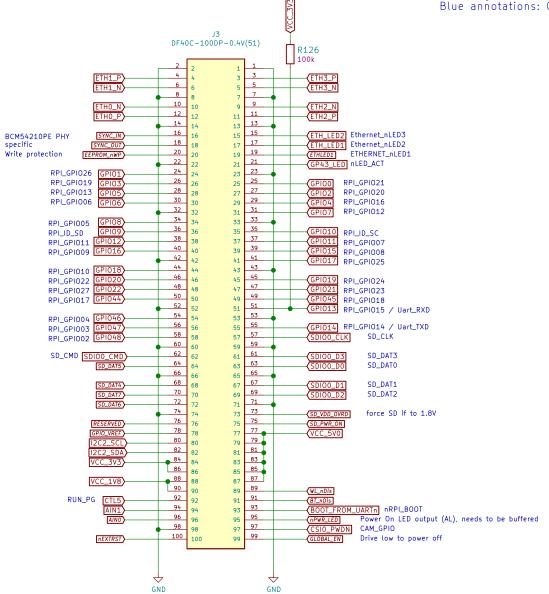


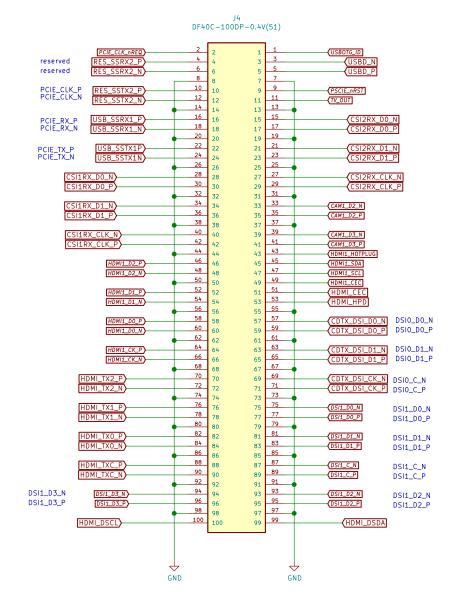


1		
http://antmi	cro.com	
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Title: VICT	7100 DDR	
Size: A3	Date:	Rev: 1.0.0
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	7	8

B2B connectors

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











MP3 PCB_Mount_Hole_2.5

MP4
PCB_Mount_Hole_2.5

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Antmicro Itd	
Sheet: /B2B connectors/ File: B2B-connectors.sch	
Title: SoM board-to-board connectors	
Size: A3 Date:	Rev: 1.0.0
KiCad E.D.A. kicad 5.1.5+dfsg1-2bpo10+1	ld: 10/10