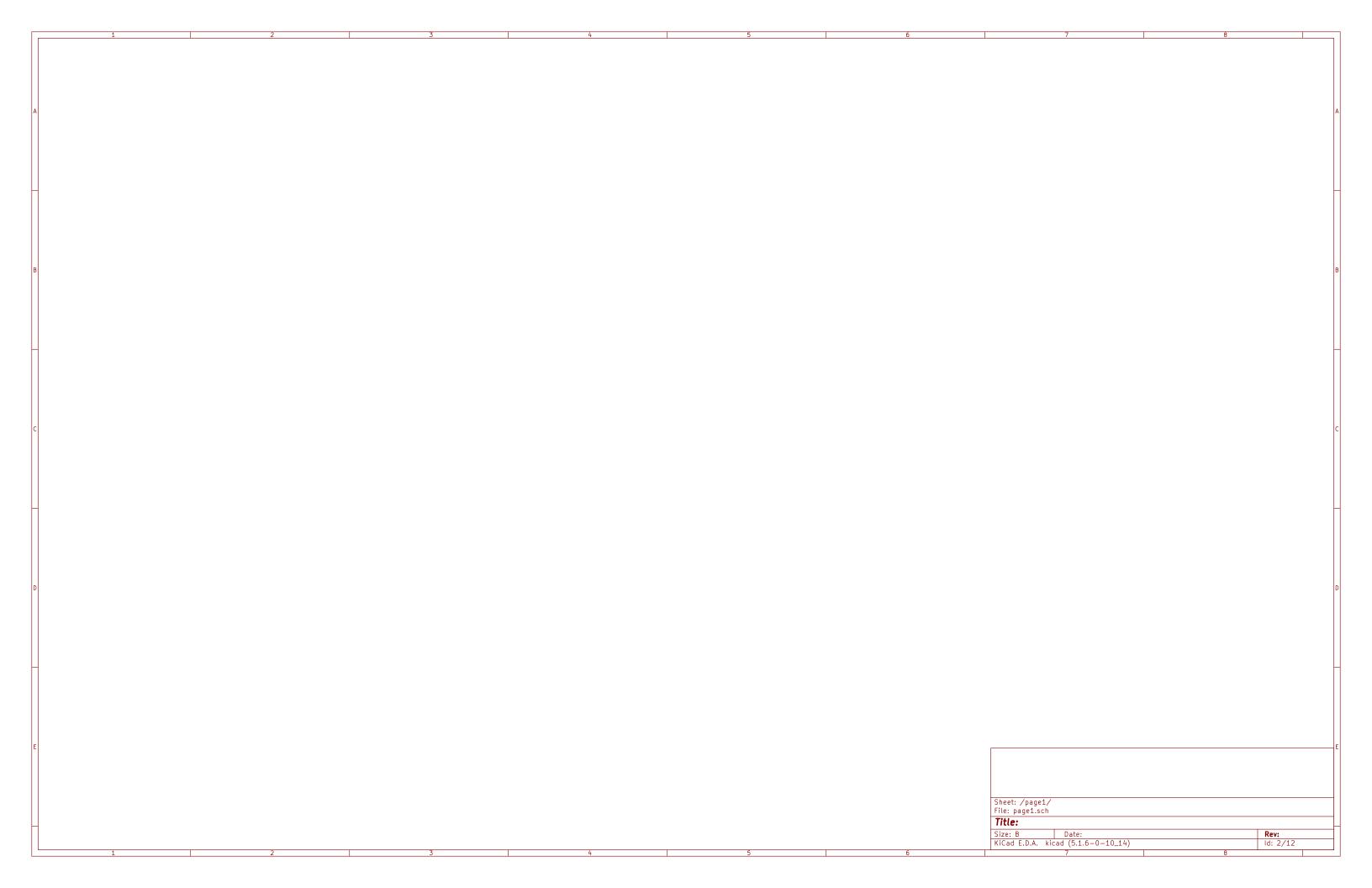


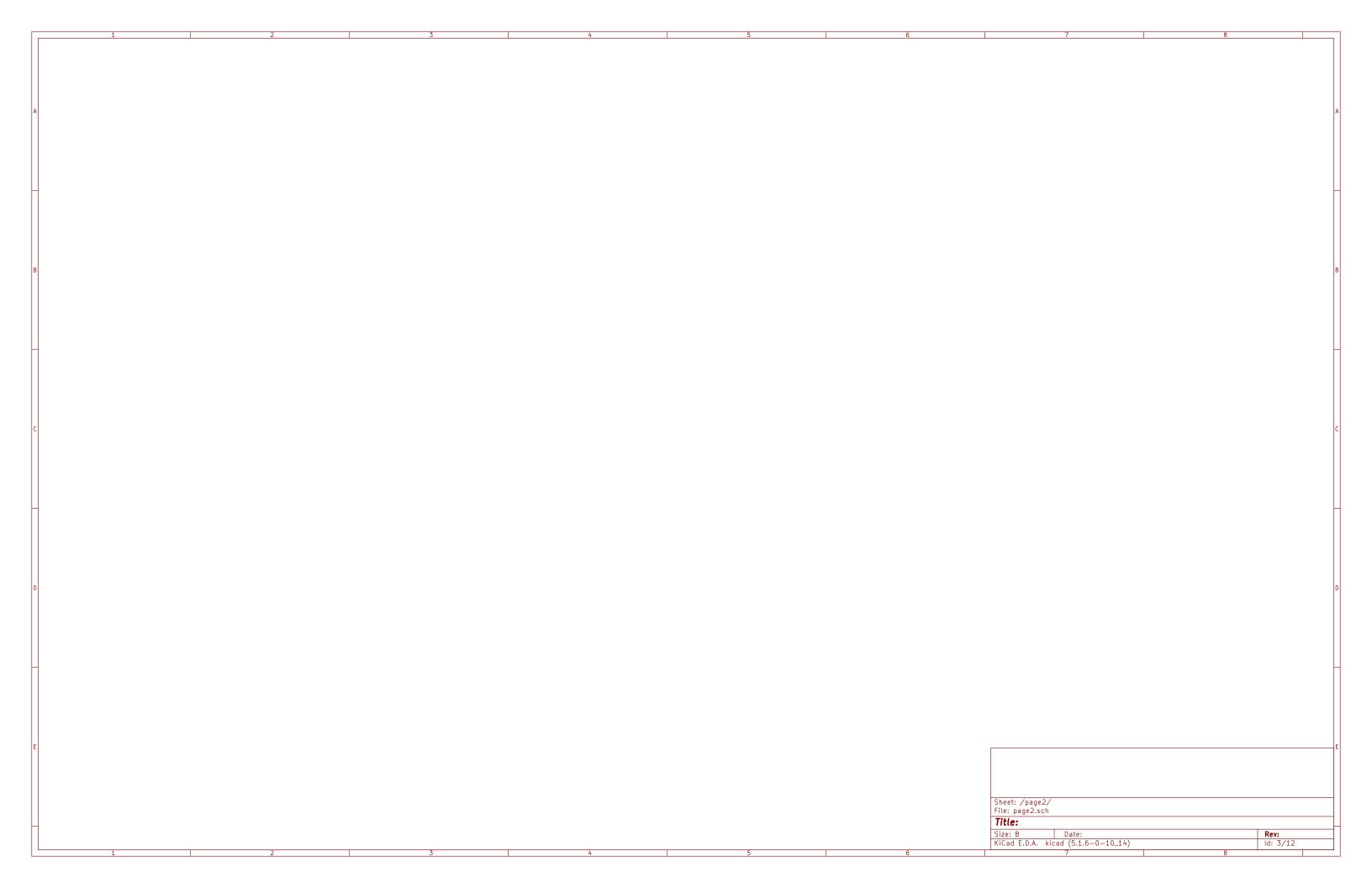
Sheet: page1 File: page1.sch Sheet: page2 File: page2.sch Sheet: page3 File: page3.sch Sheet: page4 File: page4.sch Sheet: page5 File: page5.sch Sheet: page6 File: page6.sch Sheet: page7 File: page7.sch Sheet: page8 File: page8.sch Sheet: page9 File: page9.sch Sheet: page10 File: page10.sch Sheet: page11 File: page11.sch

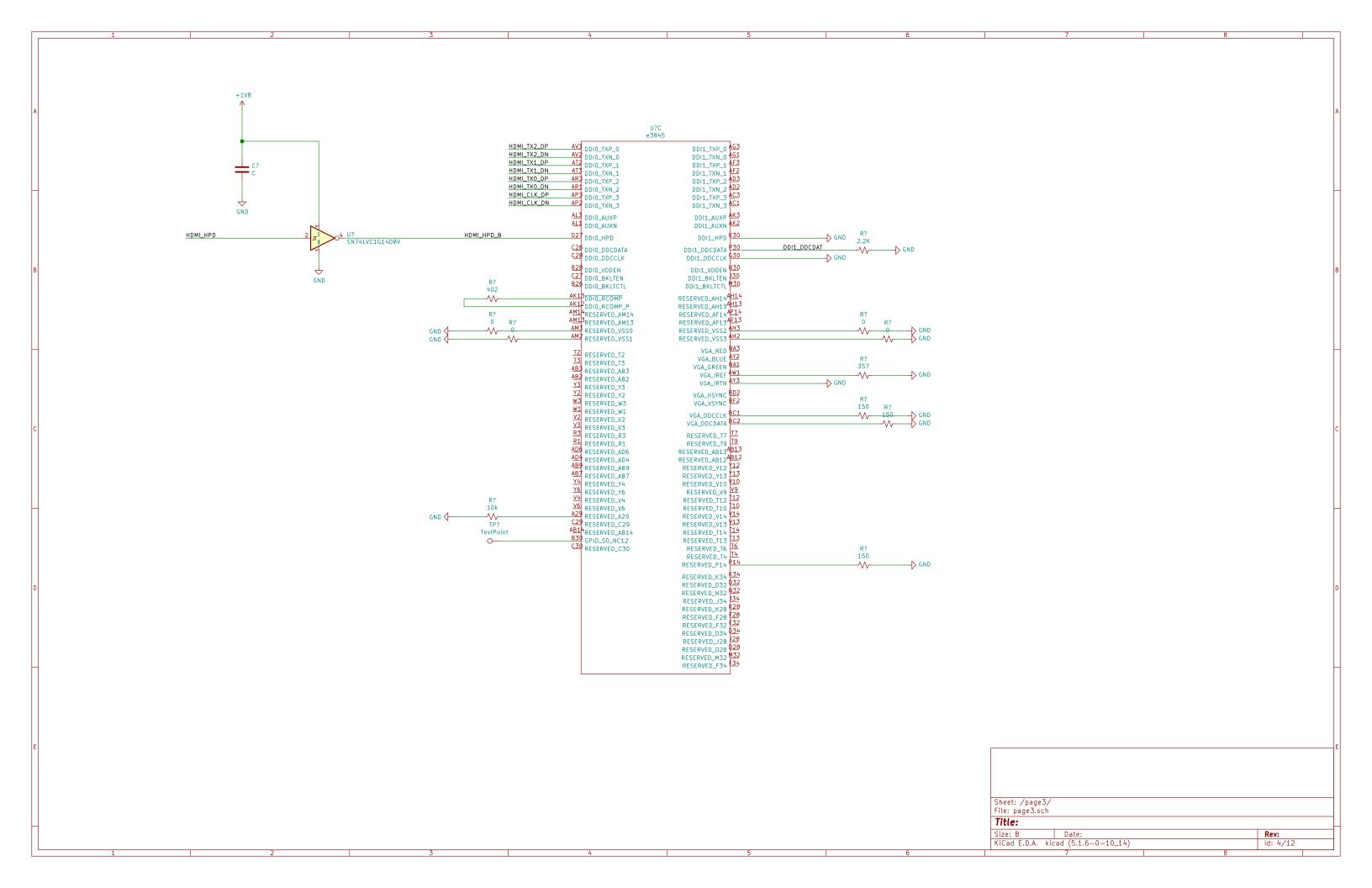
Sheet: / File: MinnowBoard\_port.sch

Title: MinnowBoard Turbot Quad KiCad port.

Size: B Date:
KiCad E.D.A. kicad (5.1.6-0-10\_14) **Rev:** ld: 1/12

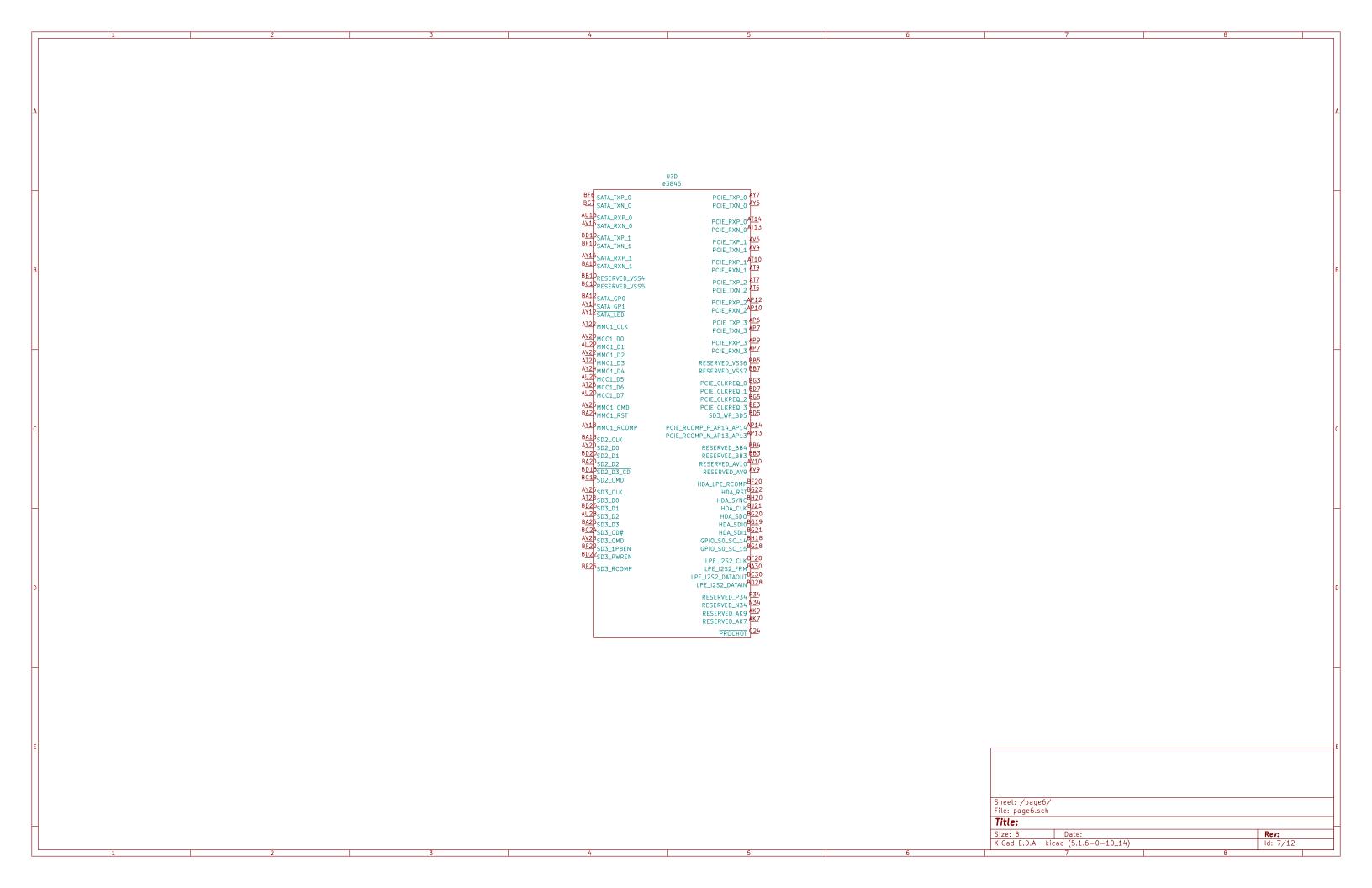


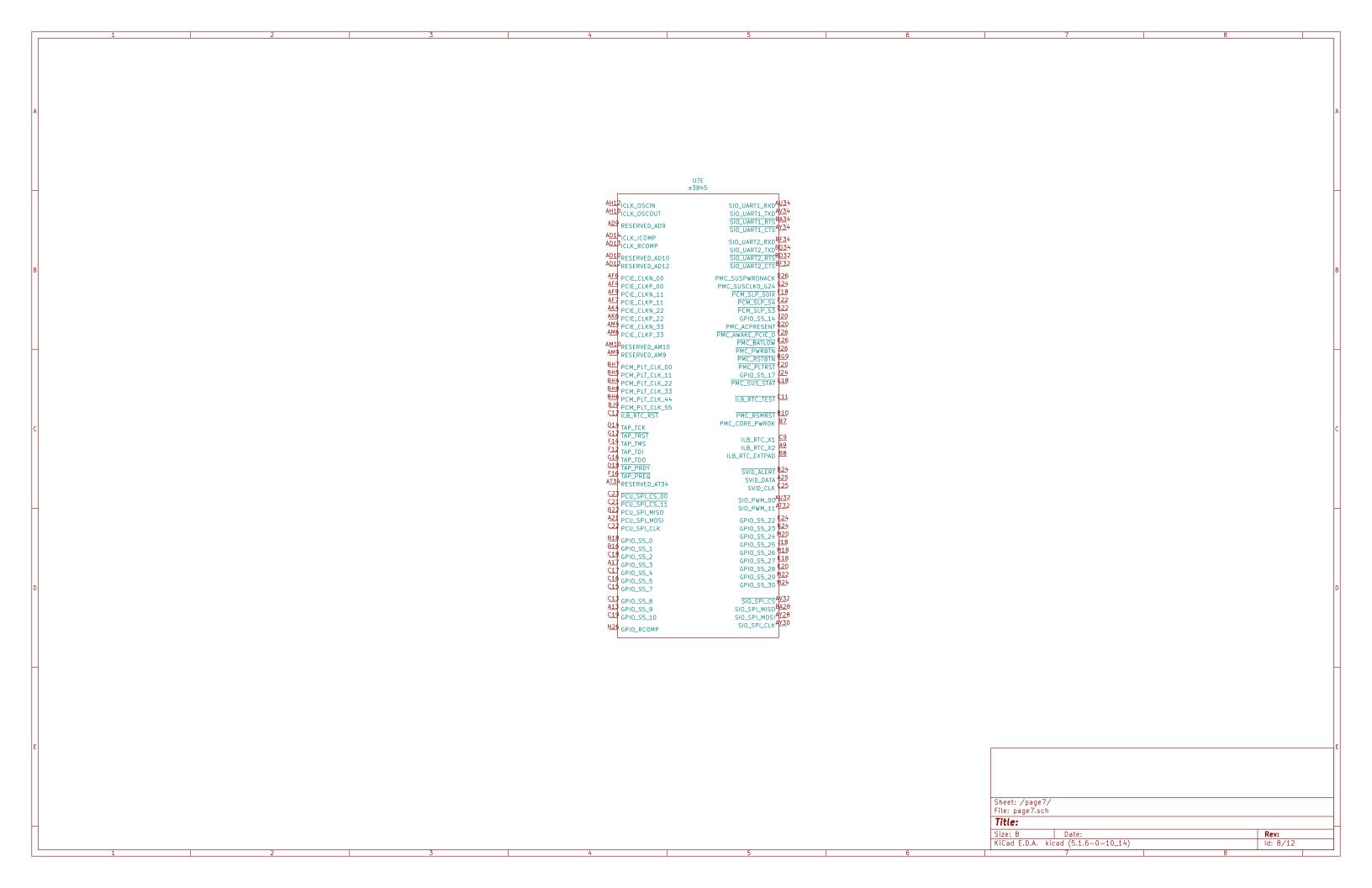


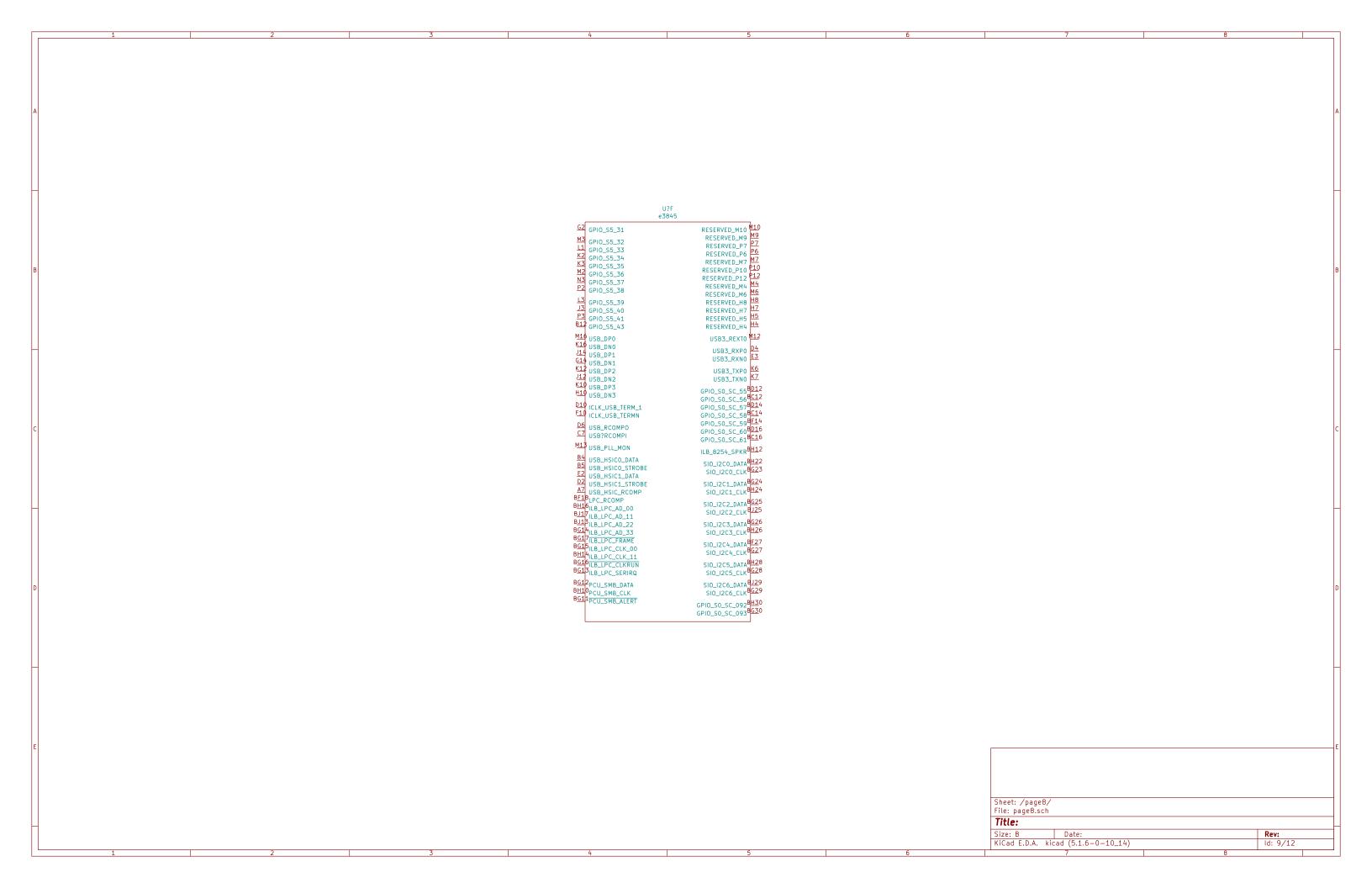


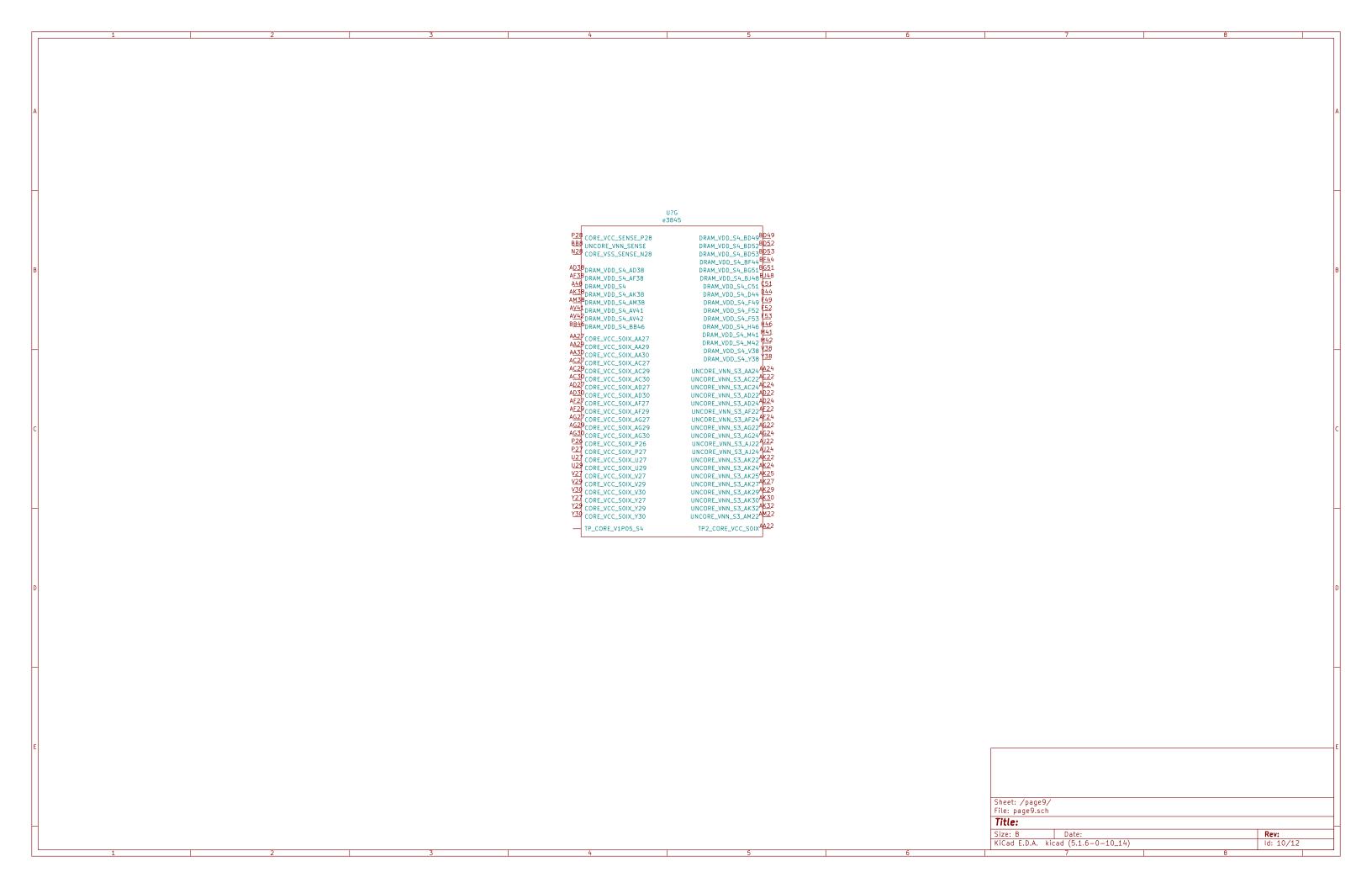
U?A e3845 DRAMO\_DQ\_00 M36 DRAMO\_DQ\_11 J36 DRAMO\_DQ\_22 P40 DRAMO\_DQ\_33 M40 DRAMO\_DQ\_44 P36 DRAMO\_DQ\_56 K40 K45 DRAMO\_MA\_00 H47 DRAMO\_MA\_11 L41 DRAMO\_MA\_22 DRAMO\_MA\_22 H44 DRAMO\_MA\_33 H50 DRAMO\_MA\_44 G53 DRAMO\_MA\_55 H49 DRAMO\_MA\_66 D50 DRAMO\_MA\_77 DRAMO\_DQ\_55
DRAMO\_DQ\_66
V42
DRAMO\_DQ\_77
DRAMO\_DQ\_88 G52 DRAMO\_MA\_88 DRAMO\_DQ\_88 032 DRAMO\_DQ09\_C32 032 DRAMO\_DQ\_1010 033 DRAMO\_DQ\_1111 033 DRAMO\_DQ\_1212 033 E52 DRAMO\_MA\_99 K48 DRAMO\_MA\_1010 E51 DRAMO\_MA\_1010 F47 DRAMO\_MA\_1212 DRAMO\_DQ\_1212 33
DRAMO\_DQ\_1313 433
DRAMO\_DQ\_1313 433
DRAMO\_DQ\_1515 538
DRAMO\_DQ\_1515 538
DRAMO\_DQ\_11717 538
DRAMO\_DQ\_11717 639
DRAMO\_DQ\_1212 544
DRAMO\_DQ\_2220 640
DRAMO\_DQ\_2121 238
DRAMO\_DQ\_2222 644 DRAMO\_MA\_1313 B49 DRAMO\_MA\_1414 B50 DRAMO\_MA\_1515 G36 DRAMO\_DM\_00 B36 DRAMO\_DM\_11 F38 DRAMO\_DM\_22 B42 DRAMO\_DM\_33 DRAMO\_DM\_44 V42 DRAMO\_DM\_55 V50 DRAMO\_DM\_66 V52 DRAMO\_DM\_77 DRAMO\_DQ\_2121 DRAMO\_DQ\_2222 DRAMO\_DQ\_2323 DRAMO\_DQ\_2424 41 DRAMO\_DQ\_2525 41 DRAMO\_DQ\_2626 445 DRAMO\_DQ\_2727
DRAMO\_DQ\_2828
46
DRAMO\_DQ\_2828 M45 DRAMO\_RAS M44 DRAMO\_CAS H51 DRAMO\_WE DRAMO\_DQ\_2929 840 DRAMO\_DQ\_3030 848 K47 DRAMO\_BS\_00 DRAMO\_DQ\_3131 847 K44 DRAMO\_BS\_11 D52 DRAMO\_BS\_22 DRAMO\_DQ\_3232 52 P44 DRAMO\_CS\_0 P45 DRAMO\_CS\_2 DRAMO\_DQ\_3636 51 C47 DRAMO\_CKE\_00 D48 RESERVED\_D48 F44 DRAMO\_CKE\_22 E46 RESERVED\_E46 DRAMO\_DQ\_3737 DRAMO\_DQ\_3737 | 53 DRAMO\_DQ\_3838 | 851 DRAMO\_DQ\_3838 | 853 DRAMO\_DQ\_4040 | 147 DRAMO\_DQ\_4040 | 147 DRAMO\_DQ\_4141 | 145 DRAMO\_DQ\_4142 | 140 DRAMO\_DQ\_4343 | 148 DRAMO\_DQ\_4444 | 148 DRAMO\_DQ\_4444 | 148 DRAMO\_DQ\_4545 | 150 T41 DRAMO\_ODT\_0 P42 DRAMO\_ODT\_2 M50 DRAMO\_CKP\_0 M48 DRAMO\_CKN\_0 DRAMO\_DQ\_4545 50
DRAMO\_DQ\_4646 '42
DARMO\_DQ\_4747'840
DRAMO\_DQ\_4747'840
DRAMO\_DQ\_45050^A048
DRAMO\_DQ\_5550^A048
DRAMO\_DQ\_55151 050
DRAMO\_DQ\_5553 450
DRAMO\_DQ\_5555 445
DRAMO\_DQ\_5555 445
DRAMO\_DQ\_5555 450
DRAMO\_DQ\_5555 450
DRAMO\_DQ\_5555 450
DRAMO\_DQ\_5555 450
DRAMO\_DQ\_5555 450
DRAMO\_DQ\_5555 650
DRAMO\_DQ\_ P50 DRAMO\_CKP\_2 P48 DRAMO\_CKN\_2 P41 DRAMO\_DRAMRST AF44DRAM\_VREF AH42 CLK\_DRAM\_TERM\_1 CLK\_DRAM\_TERMN\_AF42 AD42 DRAM\_VDD\_S4\_PWROK AB42 DRAM\_CORE\_PWROK AD44DRAM\_RCOMP\_00 AF45DRAM\_RCOMP\_11 AD45DRAM\_RCOMP\_22 DRAMO\_DQ\_6969 V53
DRAMO\_DQ\_6161 V51
DRAMO\_DQ\_6262^AD52 AF40 RESERVED\_AF40 AF41 RESERVED\_AF41 AD40 RESERVED\_AD40 DRAMO\_DQSP\_00 DRAMO\_DQSP\_00 K38 DRAMO\_DQSP\_11 C35 DRAMO\_DQSP\_11 B34 AD41 RESERVED\_AD41 DRAMO\_DQSP\_22 DRAMO\_DQSP\_22 DRAMO\_DQSN\_22 DRAMO\_DQSP\_33 DRAMO\_DQSP\_33
DRAMO\_DQSP\_44
DRAMO\_DQSP\_44 DRAMO\_DQSN\_44 M52 DRAMO\_DQSN\_44 L2 DRAMO\_DQSP\_55
DRAMO\_DQSP\_66 DRAMO\_DQSP\_66 V48
DRAMO\_DQSN\_66 P52
DRAMO\_DQSP\_77
DRAMO\_DQSN\_77 Sheet: /page4/ File: page4.sch Title: Size: B Date: KiCad E.D.A. kicad (5.1.6-0-10\_14) ld: 5/12

AY45 DRAM1\_MA\_00 BB47 DRAM1\_MA\_11 AW41 DRAM1\_MA\_22 DRAM1\_DQ\_00 B G38
DRAM1\_DQ\_11 B C40
DRAM1\_DQ\_21 B M42
DRAM1\_DQ\_22 B M42
DRAM1\_DQ\_33 B D42
DRAM1\_DQ\_44 B C38
DRAM1\_DQ\_44 B C38
DRAM1\_DQ\_66 B H42
DRAM1\_DQ\_77 B C44
DRAM1\_DQ\_66 B H32
DRAM1\_DQ\_101 B G36
DRAM1\_DQ\_1101 B G36
DRAM1\_DQ\_1111 B J37
DRAM1\_DQ\_1113 B J33
DRAM1\_DQ\_11313 B J33
DRAM1\_DQ\_11515 B H38
DRAM1\_DQ\_11515 B H38
DRAM1\_DQ\_11515 B H38
DRAM1\_DQ\_11515 B H38
DRAM1\_DQ\_1212 A W36
DRAM1\_DQ\_1212 A W36
DRAM1\_DQ\_1222 A W40
DRAM1\_DQ\_1222 B M36
DRAM1\_DQ\_2222 A W40
DRAM1\_DQ\_2222 B M36
DRAM1\_DQ\_2228 B M36
DRAM1\_DQ\_2323 A W36
DRAM1\_DQ\_2323 A W36
DRAM1\_DQ\_2323 B M36
DRAM1\_DQ\_2323 B M36
DRAM1\_DQ\_2323 B M36
DRAM1\_DQ\_2323 B M36
DRAM1\_DQ\_3333 A W361
DRAM1\_DQ\_3333 A W361
DRAM1\_DQ\_3333 A W365
DRAM1\_DQ\_33333 A W365
DRAM1 AW41 PRAM1\_MA\_22 BB44 PRAM1\_MA\_33 BB50 PRAM1\_MA\_44 BC53 PRAM1\_MA\_55 BB49 PRAM1\_MA\_66 BF50 PRAM1\_MA\_77 BC52 PRAM1\_MA\_99 AY48 PRAM1\_MA\_1010 BE51 PRAM1\_MA\_1011 BU47 PRAM1\_MA\_1212 BA51 PRAM1\_MA\_1212 BA51 PRAM1\_MA\_1313 BH49 PRAM1\_MA\_1414 BH50 PRAM1\_MA\_1515 B038 BH36 PRAM1\_DM\_11 BC36 BH42 PRAM1\_DM\_33 AT51 DRAM1\_DM\_44 AM42 PRAM1\_DM\_55 AK50 DRAM1\_DM\_66 AK52 PRAM1\_DM\_77 AV45 DRAM1\_RAS AV44 DRAM1\_CAS BB51 DRAM1\_WE AY47 DRAM1\_BS\_00 AY44 DRAM1\_BS\_11 BF52 DRAM1\_BS\_22 DRAM1\_DQ\_3333 XY51
DRAM1\_DQ\_33333 XY51
DRAM1\_DQ\_3434 AP52
DRAM1\_DQ\_3535 AP51
DRAM1\_DQ\_3535 AP51
DRAM1\_DQ\_3636 AW51
DRAM1\_DQ\_3636 AR51
DRAM1\_DQ\_3636 AR51
DRAM1\_DQ\_3636 AR51
DRAM1\_DQ\_44040 AP47
DRAM1\_DQ\_44141 AP45
DRAM1\_DQ\_44141 AP45
DRAM1\_DQ\_4444 AM41
DRAM1\_DQ\_4444 AM41
DRAM1\_DQ\_4464 AK42
DRAM1\_DQ\_4464 AK42
DRAM1\_DQ\_4646 AK42
DRAM1\_DQ\_4646 AK42
DRAM1\_DQ\_4646 AK42
DRAM1\_DQ\_4646 AK42
DRAM1\_DQ\_4646 AK42
DRAM1\_DQ\_4646 AK42
DRAM1\_DQ\_5656 AF48
DRAM1\_DQ\_5552 AM48
DRAM1\_DQ\_5554 AM48
DRAM1\_DQ\_5555 AK45
DRAM1\_DQ\_5555 AK45
DRAM1\_DQ\_5656 AM52
DRAM1\_DQ\_5656 AM52
DRAM1\_DQ\_5656 AM52
DRAM1\_DQ\_5656 AM52 AT44 DRAM1\_CS\_0 AT45 DRAM1\_CS\_2 BG47 DRAM1\_CKE\_00 BE46 RESERVED\_BE46 BD44DRAM1\_CKE\_22 BF48RESERVED\_BF48 AP41 DRAM1\_ODT\_0 AT42 DRAM1\_ODT\_2 A<u>V5</u>0 DRAM1\_CKP\_0 A<u>V4</u>8 DRAM1\_CKN\_0 A<u>T50</u> DRAM1\_CKP\_2 A<u>T48</u> DRAM1\_CKN\_2 AT41 DRAM1\_DRAMRST DRAM1\_DQ\_5555AK459
DRAM1\_DQ\_5656A M52
DRAM1\_DQ\_5656A M52
DRAM1\_DQ\_5757 AL51
DRAM1\_DQ\_5858 AG53
DRAM1\_DQ\_6960 AL53
DRAM1\_DQ\_66161 AK51
DRAM1\_DQ\_666262 AF52
DRAM1\_DQ\_6363 AF51 DRAM1\_DQSP\_00 BF40
DRAM1\_DQSN\_008D40
DRAM1\_DQSP\_11 BH34
DRAM1\_DQSN\_12 BH34
DRAM1\_DQSP\_22 BA38
DRAM1\_DQSN\_22 AY38
DRAM1\_DQSN\_23 BH44 DRAM1\_DQSP\_33BH14 DRAM1\_DQSD\_33BG43 DRAM1\_DQSP\_44\_AU53 DRAM1\_DQSP\_44\_PV53 DRAM1\_DQSP\_55AP44 DRAM1\_DQSP\_55AP44 DRAM1\_DQSP\_66AK47 DRAM1\_DQSP\_66AK47 DRAM1\_DQSP\_67AH52 DRAM1\_DQSP\_77AH52 DRAM1\_DQSP\_77AH52 Sheet: /page5/ File: page5.sch Title: Size: B Date: KiCad E.D.A. kicad (5.1.6-0-10\_14) ld: 6/12









V32 SVID\_V1P0\_S3\_V32
BJ6 V6A\_V1P0\_S3\_BJ6
AD35 DRAM\_V1P0\_S0IX\_AD35
AE35 DRAM\_V1P0\_S0IX\_AF35
AE36 DRAM\_V1P0\_S0IX\_AF36
AA35 DRAM\_V1P0\_S0IX\_AA36
AJ35 DRAM\_V1P0\_S0IX\_AJ36
AK35 DRAM\_V1P0\_SOIX\_AJ36
AK36 DRAM\_V1P0\_SOIX\_AJ36
AK36 DRAM\_V1P0\_SOIX\_AJ36 DRAM\_V1P35\_S0IX\_F1\_AD36AD36 HDA\_LPE\_V1P5V1P8\_S3\_AM32AM32 UNCORE\_V1P8\_S3\_AM30AM30 UNCORE\_V1P8\_S3\_AN32AN32 LPC\_V1P8V3P3\_S3\_AM37AM27AM27 AK36 DRAM\_V1PU\_SUIX\_AK35 AK36 DRAM\_V1PU\_SUIX\_AK36 Y35 DRAM\_V1PU\_SUIX\_Y35 Y36 DRAM\_V1PU\_SUIX\_Y36 AK19DDI\_V1PO\_SOIX\_AK19
AK21DDI\_V1PO\_SOIX\_AK21
AJ18DDI\_V1PO\_SOIX\_AJ18 AM16DDI\_V1P0\_S0IX\_AM16 U22 UNCORE\_V1PO\_G3\_U22
V22 UNCORE\_V1PO\_G3\_V22
AN29 UNCORE\_V1PO\_SOIX\_AN29
AN30 UNCORE\_V1PO\_SOIX\_AN30
AF16 UNCORE\_V1PO\_S3\_AF16
AF18 UNCORE\_V1PO\_S3\_AF18
Y18 UNCORE\_V1PO\_S3\_F18
G1 UNCORE\_V1PO\_S3\_G1
AM21\*POLEV1PO\_S3\_G1 UNCORE\_V1P8\_G3\_AA18\_AA18 RTC\_VCC\_P22 P22 US8\_V1P8\_G3\_N20 N20 PMU\_V1P8\_G3\_U25 V25 CORE\_V1P05\_S3\_AG33^AS3 CORE\_V1P05\_S3\_AG33^AS3 CORE\_V1P05\_S3\_U35 V35 CORE\_V1P05\_S3\_U35 V35 CORE\_V1P05\_S3\_U35 N35 CORE\_V1P05\_S3\_U35 N35 CORE\_V1P05\_S3\_U35 N35 VSS\_A3\_A3 A3 VSS\_A49\_A49 VSS\_A5\_A5\_A5 AM21 PCIE\_V1P0\_S3\_AM21 AN21 PCIE\_V1P0\_S3\_AN21 AND PCIE\_V1PO\_S3\_AN21

AN18 PCIE\_SATA\_V1PO\_S3\_AN18

AN19 SATA\_V1PO\_S3\_AN19

AA33 CORE\_V1POS\_S3\_AA33

AF24 UNCORE\_V1PO\_SOIX\_AF21

AG21 UNCORE\_V1PO\_SOIX\_AG21

V24 UNCORE\_V1PO\_SOIX\_V24

Y22 UNCORE\_V1PO\_SOIX\_V24

Y24 UNCORE\_V1PO\_SOIX\_Y24

M14 USB\_V1PO\_S3\_U19

AN25 GPIO\_V1PO\_S3\_U19

AN25 GPIO\_V1PO\_S3\_U19

AN25 GPIO\_V1PO\_S3\_U19

C3 USB3\_V1PO\_G3\_V19

C3 USB3\_V1PO\_G3\_C5

B6 UNCORE\_V1PO\_G3\_C5

B6 UNCORE\_V1PO\_G3\_B6

AC32
CORE\_V1POS\_S3\_AC32

V33 CORE\_V1POS\_S3\_AC32

V34 UNCORE\_V1PO\_S3\_AC32

V35 UNCORE\_V1PO\_S3\_AC36

B01 UNCORE\_V1P35\_SOIX\_F5\_AA25

AG32 UNCORE\_V1P35\_SOIX\_F5\_AA25

AG42 UNCORE\_V1P35\_SOIX\_F5\_AA25

AG51 UNCORE\_V1P35\_SOIX\_F5\_AA25

AG51 UNCORE\_V1P35\_SOIX\_F5\_AA25

AG51 UNCORE\_V1P35\_SOIX\_F5\_COIX\_F6

AG51 UNCORE\_V1P35\_SOIX\_F5

AG51 UNCORE\_V1P35\_SOIX\_F6

AG51 UNCORE\_V1P35\_SOIX\_F6 VSS\_A49\_A49
VSS\_A5\_A5
VSS\_A5\_A5
VSS\_A51\_A51
VSS\_A62\_A62
VSS\_B2\_B2
VSS\_B2\_B2
VSS\_B52\_B52
VSS\_B53\_B53
VSS\_B61\_B61
VSS\_B61\_B61
VSS\_B61\_B61 VSS\_BH53\_BH53\_BH53 VSS\_BJ2\_BJ2\_BJ2 VSS\_BJ5\_BJ5\_BJ5 VSS\_BJ49\_BJ49 VSS\_BJ52\_BJ52 VSS\_C53\_C53 VSS\_C53\_C53 VSS\_E1.E1 VSS\_E53\_E53 VSS\_E53\_E53 E1 PCIE\_V1P0\_S3\_AK18\_AK18 PCIE\_V1P0\_S3\_AM18\_AM18 AF19 UNCORE\_V1P35\_SOIX\_F6 AG19 UNCORE\_V1P35\_SOIX\_F1\_AG19 AJ19 ICLK\_V1P35\_S3\_F1\_AJ19 AG1BICLK\_V1P35\_S3\_F2 AN16 VSSA\_AN16 U16 USB\_VSSA\_U16 Sheet: /page10/ File: page10.sch Title: Size: B Date: KiCad E.D.A. kicad (5.1.6-0-10\_14) ld: 11/12

