

LPDDR4 testbed

Sheet606DB5E5



File: EEPROM.kicad_sch

SODIMM



File: sodim.kicad_sch

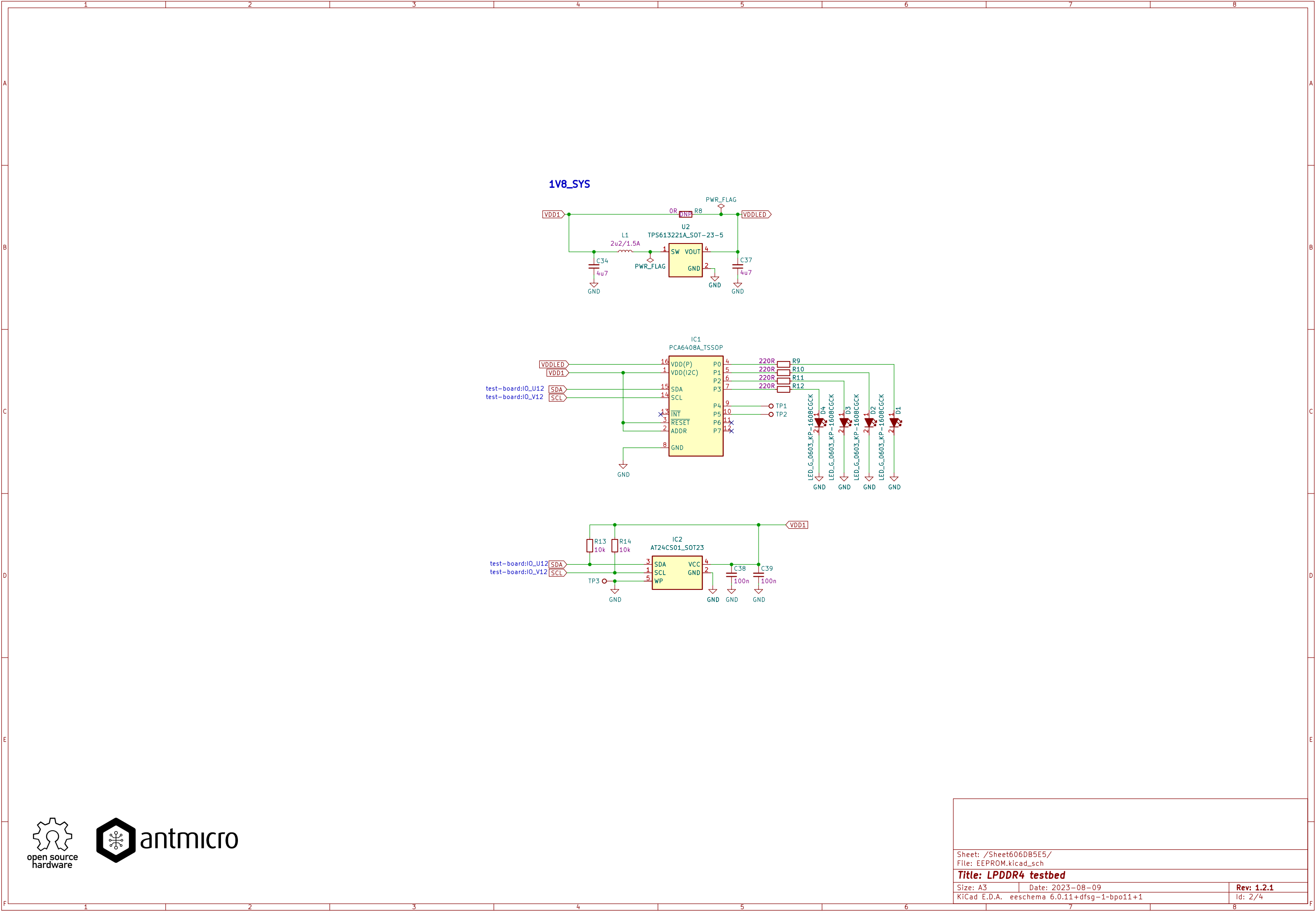
LPDDR4



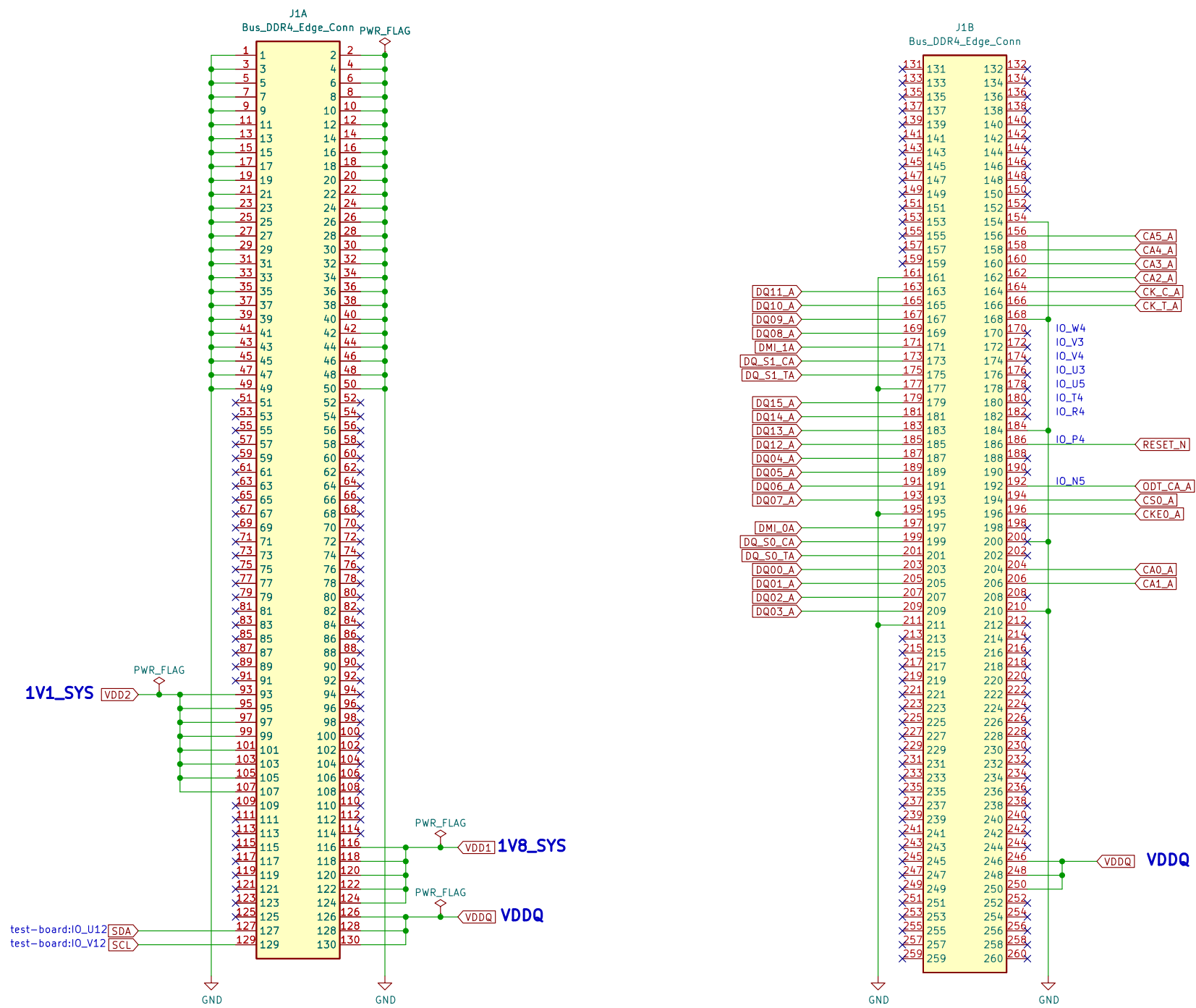
File: lpddr4.kicad_sch



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File: lpddr4-testbed.kicad_sch		
Title: LPDDR4 testbed		
Size: A3	Date: 2023-08-09	Rev: 1.2.1
KiCad E.D.A. eeschema 6.0.11+dfsg-1~bpo11+1		Id: 1/4



SODIMM Connector



LPDDR4

The diagram illustrates the electrical connections for two LPDDR4 memory chips, U1A and U1B, in a testbed configuration. Both chips are MT53E1G32D2NP-046 WT:A.

Chip U1A Connections:

- Power:** VDDQ is connected to pins B10, T11, F1, A4, J8, J9, H4, J11, J4, G2, A5, and A10. VDD1 is connected to pins F1, A4, J8, J9, H4, J11, J4, G2, A5, and A10. VDD2 is connected to pins F1, A4, J8, J9, H4, J11, J4, G2, A5, and A10.
- Control:** RESET_N is connected to pin B10. CK_T_A is connected to pin J8. CK_C_A is connected to pin J9. CS0_A is connected to pin H4. CA0_A is connected to pin H2. CA1_A is connected to pin J2. CA2_A is connected to pin H9. CA3_A is connected to pin H10. CA4_A is connected to pin H11. CA5_A is connected to pin J11. CKE0_A is connected to pin J4.
- Data:** DQS0_T_A is connected to pin D3. DQS0_C_A is connected to pin E3. DQ0_A is connected to pin B2. DQ1_A is connected to pin C2. DQ2_A is connected to pin F2. DQ3_A is connected to pin F4. DQ4_A is connected to pin F4. DQ5_A is connected to pin E4. DQ6_A is connected to pin C4. DQ7_A is connected to pin B4. DMIO_A is connected to pin C3. DQS1_T_A is connected to pin D10. DQS1_C_A is connected to pin E10. DQ8_A is connected to pin B11. DQ9_A is connected to pin C11. DQ10_A is connected to pin F11. DQ11_A is connected to pin F9. DQ12_A is connected to pin F9. DQ13_A is connected to pin C9. DQ14_A is connected to pin B9. DQ15_A is connected to pin C10. DM1_A is connected to pin C10.
- Other:** ODT_CA_A is connected to pin G2. ZQ0 is connected to pin A5. VSS is connected to pin A10.

Chip U1B Connections:

- Power:** VDDQ is connected to pins AA10, T4, AB4, P8, P9, R4, R2, P2, R9, R10, R11, P11, P4, T2, and AB10. VDD1 is connected to pins AA10, T4, AB4, P8, P9, R4, R2, P2, R9, R10, R11, P11, P4, T2, and AB10. VDD2 is connected to pins AA10, T4, AB4, P8, P9, R4, R2, P2, R9, R10, R11, P11, P4, T2, and AB10.
- Control:** CS0_B is connected to pin R4. CA0_B is connected to pin R2. CA1_B is connected to pin P2. CA2_B is connected to pin R9. CA3_B is connected to pin R10. CA4_B is connected to pin R11. CA5_B is connected to pin P11. CKE0_B is connected to pin P4.
- Data:** DQS0_T_B is connected to pin W3. DQS0_C_B is connected to pin V3. DQ0_B is connected to pin AA2. DQ1_B is connected to pin Y2. DQ2_B is connected to pin Y2. DQ3_B is connected to pin U2. DQ4_B is connected to pin U4. DQ5_B is connected to pin V4. DQ6_B is connected to pin Y4. DQ7_B is connected to pin AA4. DMIO_B is connected to pin Y3. DQS1_T_B is connected to pin W10. DQS1_C_B is connected to pin V10. DQ8_B is connected to pin AA11. DQ9_B is connected to pin Y11. DQ10_B is connected to pin V11. DQ11_B is connected to pin U11. DQ12_B is connected to pin U9. DQ13_B is connected to pin Y9. DQ14_B is connected to pin AA9. DQ15_B is connected to pin Y10. DM1_B is connected to pin Y10.
- Other:** ODT_CA_B is connected to pin T2. VSS is connected to pin AB10.

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