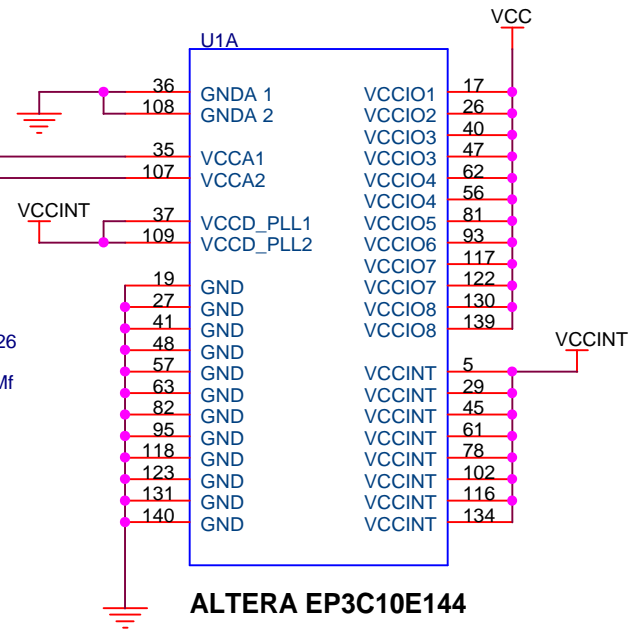
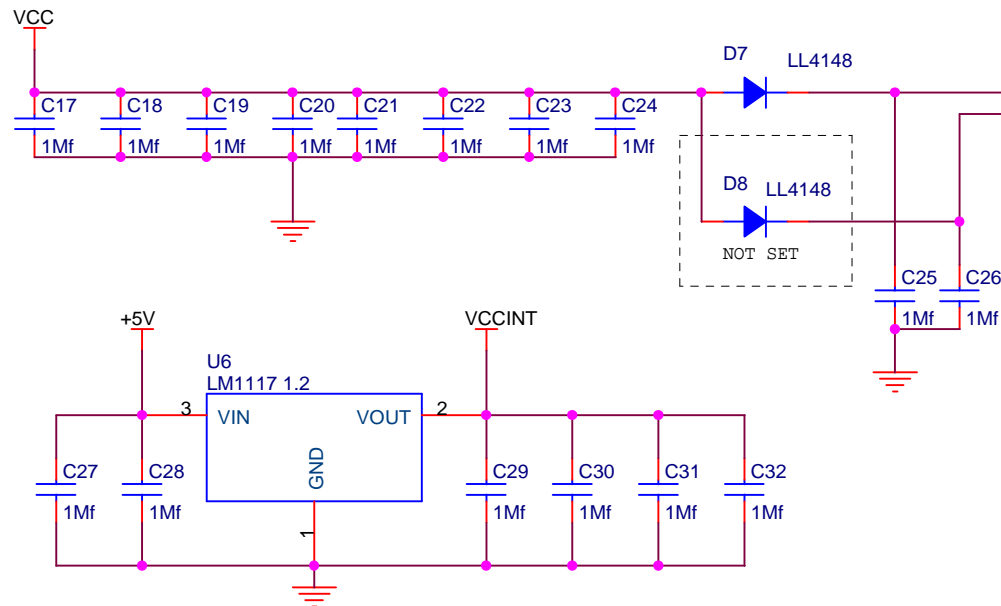
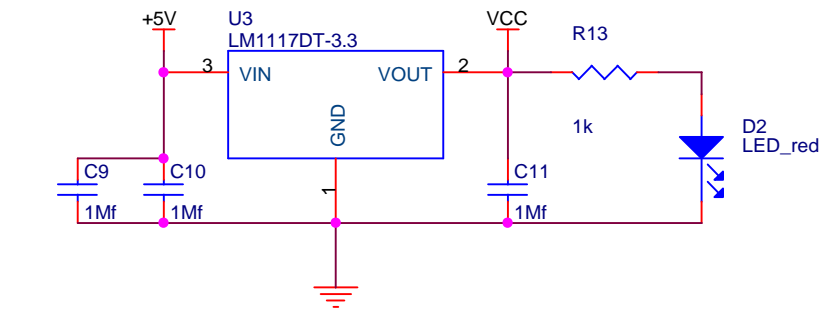
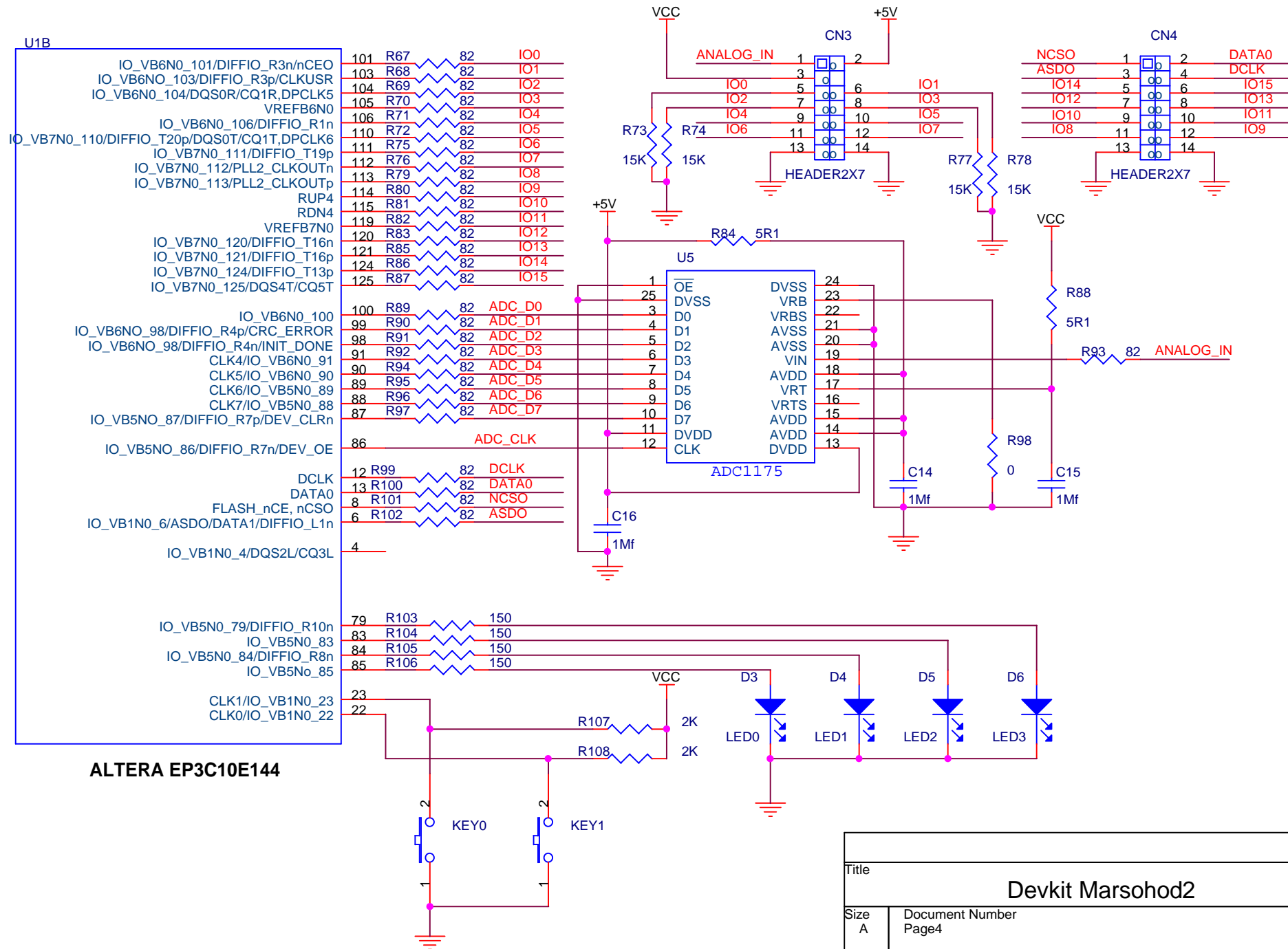


CYCLONE POWERING



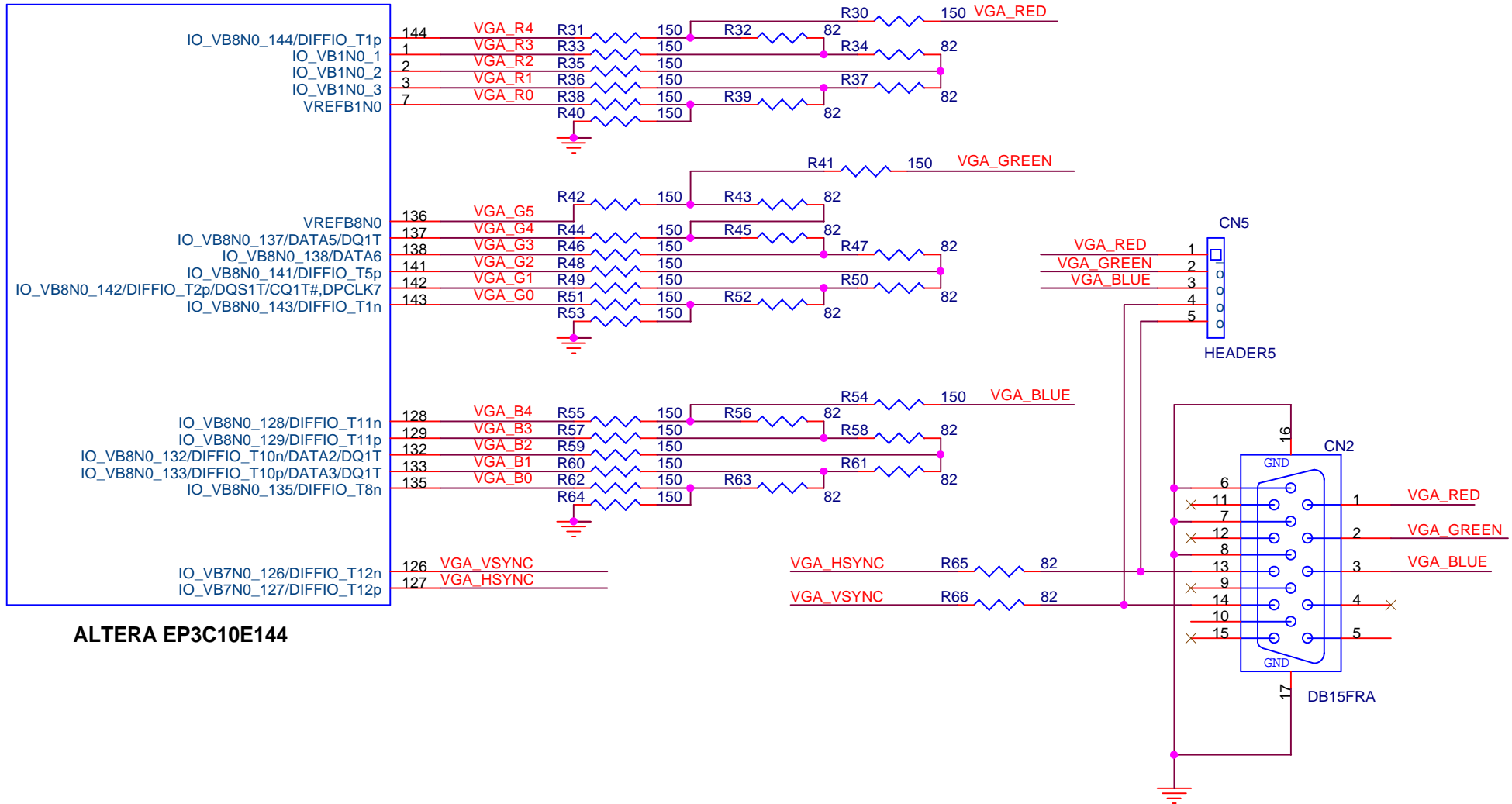
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SHIELD CONNECTOR, KEYS & LEDS



VGA DAC & CONNECTORS

U1B



ALTERA EP3C10E144

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SDR SDRAM INTERFACE

U4: MT48LC4M16A2

U1B: ALTERA EP3C10E144

SDRAM Signals:

- SDRAM_A0 to SDRAM_A11
- SDRAM_BA0 to SDRAM_BA1
- SDRAM_LDQM
- SDRAM_UDQM
- SDRAM_CLK
- SDRAM_RAS
- SDRAM_CAS
- SDRAM_WE
- SDRAM_DQ0 to SDRAM_DQ15
- SDRAM_DQS1B#

Power and Ground Connections:

- VDD, VDDQ, VSS, VSSQ
- VCC, GND
- 1Mf capacitors (C12, C13)

ALTERA EP3C10E144 Signals:

- IO_VB4N0_60/DIFFIO_B16n
- IO_VB4N0_64/DQS2B/CQ3B
- VREFB4N0
- RUP2
- VREFB3N0
- IO_VB3N0_49/DIFFIO_B9p
- IO_VB3N0_50/DIFFIO_B9n
- IO_VB3N0_51/DIFFIO_B10p
- IO_VB3N0_52/DIFFIO_B11p
- IO_VB3N0_53/DIFFIO_B11n
- IO_VB4N0_59/DIFFIO_B16p
- IO_VB4N0_58/DIFFIO_B15p
- IO_VB4N0_55/DIFFIO_B12n
- IO_VB4N0_54/DIFFIO_B12p
- IO_VB4N0_70/DIFFIO_B21p
- IO_VB3N0_43/PLL1_CLKOUTp
- IO_VB3N0_44/PLL1_CLKOUTn
- RDN2
- IO_VB4N0_68/DIFFIO_B20n
- IO_VB4N0_69
- VREFB5N0
- RDN3
- RUP3
- IO_VB5N0_75
- IO_VB5N0_74
- IO_VB5N0_73
- IO_VB4N0_72/DIFFIO_B22p
- IO_VB4N0_71/DIFFIO_B21n
- IO_VB3N0_42/DQS1B/CQ1B#,DPCLK2
- IO_VB3N0_39/DIFFIO_B1n
- IO_VB3N0_38/DIFFIO_B1p
- IO_VB2N0_34
- RDN1
- RUP1
- VREFB2N0
- IO_VB2N0_30/DIFFIO_L8p

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SDR SDRAM INTERFACE

U4: MT48LC4M16A2

U1B: ALTERA EP3C10E144

SDRAM Signals:

- SDRAM_A0 to SDRAM_A11
- SDRAM_BA0 to SDRAM_BA1
- SDRAM_LDQM
- SDRAM_UDQM
- SDRAM_CLK
- SDRAM_RAS
- SDRAM_CAS
- SDRAM_WE
- SDRAM_DQ0 to SDRAM_DQ15
- SDRAM_DQS1B#

Power and Ground Connections:

- VDD, VDDQ, VSS, VSSQ
- VCC, GND
- 1Mf capacitors (C12, C13)

ALTERA EP3C10E144 Signals:

- IO_VB4N0_60/DIFFIO_B16n
- IO_VB4N0_64/DQS2B/CQ3B
- VREFB4N0
- RUP2
- VREFB3N0
- IO_VB3N0_49/DIFFIO_B9p
- IO_VB3N0_50/DIFFIO_B9n
- IO_VB3N0_51/DIFFIO_B10p
- IO_VB3N0_52/DIFFIO_B11p
- IO_VB3N0_53/DIFFIO_B11n
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- IO_VB4N0_69
- VREFB5N0
- RDN3
- RUP3
- IO_VB5N0_75
- IO_VB5N0_74
- IO_VB5N0_73
- IO_VB4N0_72/DIFFIO_B22p
- IO_VB4N0_71/DIFFIO_B21n
- IO_VB3N0_42/DQS1B/CQ1B#,DPCLK2
- IO_VB3N0_39/DIFFIO_B1n
- IO_VB3N0_38/DIFFIO_B1p
- IO_VB2N0_34
- RDN1
- RUP1
- VREFB2N0
- IO_VB2N0_30/DIFFIO_L8p

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PROGRAMMING, PC-CONNECTING & CLOCK

