

```

*PADS-PCB*
*NET*
*SIGNAL* CLK-A_1
  FPGA. C12 R15. 1
*SIGNAL* CLK-B_1
  FPGA. B12 R17. 1
*SIGNAL* CLK-C_1
  FPGA. A11 R16. 2
*SIGNAL* CLK-D_1
  FPGA. B11 R18. 2
*SIGNAL* CLK-EXT0_1
  CN2. 65 R15. 2
*SIGNAL* CLK-EXT1_1

  CN2. 66 R17. 2
*SIGNAL* CLK-EXT2_1
  CN1. 65 R16. 1
*SIGNAL* CLK-EXT3_1
  CN1. 66 R18. 1
*SIGNAL* CX0_2
  R19. 2 R20. 2 U8. 3
*SIGNAL* CX1_2
  R23. 2 U9. 3
*SIGNAL* GCLKO_2

  FPGA. AB12 R19. 1 TP1. 1
*SIGNAL* GCLK1_2
  FPGA. AA12 R23. 1 TP3. 1
*SIGNAL* GCLK3_2
  FPGA. AA11 R20. 1 TP2. 1
*SIGNAL* GND
  C1. 2
  C2. 2 C3. 2 C4. 2 C5. 2 C6. 2 C7. 2 C8. 2 C9. 2 CN1. 5 CN1. 6 CN1. 15 CN1. 16 CN1. 25
  CN1. 26 CN1. 35 CN1. 36 CN1. 45 CN1. 46 CN1. 55 CN1. 56 CN2. 5 CN2. 6 CN2. 15 CN2. 16
  CN2. 25 CN2. 26 CN2. 35 CN2. 36 CN2. 45 CN2. 46 CN2. 55 CN2. 56 CN3. 2 CN4. 5 CN5. 4
  CN6. 2 CN6. 10 D1. 1 FPC1. 2 FPC2. 2 FPC3. 2 FPC4. 2 FPC5. 2 FPC6. 2 FPC7. 2 FPC8. 2
  FPC9. 2 FPC10. 2 FPC11. 2 FPC12. 2 FPC13. 2 FPC14. 2 FPC16. 2 FPC18. 2 FPC19. 2
  FPC20. 2 FPC21. 2 FPC22. 2 FPC23. 2 FPC24. 2 FPC25. 2 FPC26. 2 FPC27. 2 FPC28. 2
  FPC29. 2 FPC30. 2 FPC31. 2 FPC32. 2 FPC33. 2 FPC34. 2 FPC35. 2 FPC36. 2 FPC37. 2
  FPC39. 2 FPC40. 2 FPC41. 2 FPC42. 2 FPC43. 2 FPC44. 2 FPC46. 2 FPC47. 2 FPC48. 2
  FPC49. 2 FPC50. 2 FPC51. 2 FPC52. 2 FPC53. 2 FPC54. 2 FPC55. 2 FPGA. A1 FPGA. A22
  FPGA. AA2 FPGA. AA21 FPGA. AB1 FPGA. AB22 FPGA. B2 FPGA. B21 FPGA. C9 FPGA. C14
  FPGA. J3 FPGA. J9 FPGA. J10 FPGA. J11 FPGA. J12 FPGA. J13 FPGA. J14 FPGA. J20
  FPGA. K9 FPGA. K10 FPGA. K11 FPGA. K12 FPGA. K13 FPGA. K14 FPGA. L9 FPGA. L10
  FPGA. L11 FPGA. L12 FPGA. L13 FPGA. L14 FPGA. M9 FPGA. M10 FPGA. M11 FPGA. M12
  FPGA. M13 FPGA. M14 FPGA. N9 FPGA. N10 FPGA. N11 FPGA. N12 FPGA. N13 FPGA. N14
  FPGA. P3 FPGA. P9 FPGA. P10 FPGA. P11 FPGA. P12 FPGA. P13 FPGA. P14 FPGA. P20
  FPGA. Y9 FPGA. Y14 JP1. 1 JP1. 3 JP1. 5 JP2. 2 R1. 2 R3. 2 R33. 1 R35. 1 R37. 1 R38. 1
  R41. 1 R43. 1 R44. 1 R46. 1 TPG1. 1 U1. 3 U2. 5 U3. 2 U4. 2 U5. 11 U6. 11 U7. 6 U7. 12
  U7. 28 U7. 41 U7. 46 U7. 52 U7. 54 U8. 2 U9. 2
*SIGNAL* HSWAP_EN_1
  FPGA. B3 JP2. 1 RA2. 8
*SIGNAL* IOA0_1
  CN2. 7 FPGA. M17
*SIGNAL* IOA1_1

  CN2. 8 FPGA. M18
*SIGNAL* IOA2_1
  CN2. 9 FPGA. M19
*SIGNAL* IOA3_1
  CN2. 10 FPGA. M20
*SIGNAL* IOA4_1
  CN2. 11 FPGA. N17
*SIGNAL* IOA5_1
  CN2. 12
  FPGA. N18
*SIGNAL* IOA6_1
  CN2. 13 FPGA. N21
*SIGNAL* IOA7_1
  CN2. 14 FPGA. N22
*SIGNAL* IOA8_1
  CN2. 17 FPGA. P17
*SIGNAL* IOA9_1
  CN2. 18 FPGA. P18
*SIGNAL* IOA10_1

  CN2. 19 FPGA. P21
*SIGNAL* IOA11_1
  CN2. 20 FPGA. P22
*SIGNAL* IOA12_1

```

CN2. 21 FPGA. R21
SIGNAL IOA13_1
CN2. 22 FPGA. R22
SIGNAL IOA14_1
CN2. 23
FPGA. T18
SIGNAL IOA15_1
CN2. 24 FPGA. R18
SIGNAL IOA16_1
CN2. 27 FPGA. U18
SIGNAL IOA17_1
CN2. 28 FPGA. T17
SIGNAL IOA18_1
CN2. 29 FPGA. T19
SIGNAL IOA19_1

CN2. 30 FPGA. T20
SIGNAL IOA20_1
CN2. 31 FPGA. B13
SIGNAL IOA21_1
CN2. 32 FPGA. A13
SIGNAL IOA22_1
CN2. 33 FPGA. D13
SIGNAL IOA23_1
CN2. 34
FPGA. C13
SIGNAL IOA24_1
CN2. 37 FPGA. B14
SIGNAL IOA25_1
CN2. 38 FPGA. A14
SIGNAL IOA26_1
CN2. 39 FPGA. E14
SIGNAL IOA27_1
CN2. 40 FPGA. D14
SIGNAL IOA28_1

CN2. 41 FPGA. E15
SIGNAL IOA29_1
CN2. 42 FPGA. D15
SIGNAL IOA30_1
CN2. 43 FPGA. D16
SIGNAL IOA31_1
CN2. 44 FPGA. C16
SIGNAL IOA32_1
CN2. 47
FPGA. B16
SIGNAL IOA33_1
CN2. 48 FPGA. A16
SIGNAL IOA34_1
CN2. 49 FPGA. E17
SIGNAL IOA35_1
CN2. 50 FPGA. D17
SIGNAL IOA36_1
CN2. 51 FPGA. C17
SIGNAL IOA37_1

CN2. 52 FPGA. B17
SIGNAL IOA38_1
CN2. 53 FPGA. D18
SIGNAL IOA39_1
CN2. 54 FPGA. C18
SIGNAL IOA40_1
CN2. 57 FPGA. D19
SIGNAL IOA41_1
CN2. 58
FPGA. D20
SIGNAL IOA42_1
CN2. 59 FPGA. E22
SIGNAL IOA43_1
CN2. 60 FPGA. E21
SIGNAL IOA44_1
CN2. 61 FPGA. E20
SIGNAL IOA45_1
CN2. 62 FPGA. E19
SIGNAL IOA46_1

CN2. 63 FPGA. F18
SIGNAL IOA47_1
CN2. 64 FPGA. E18
SIGNAL IOB0_1

CN1. 7 FPGA. M5
SIGNAL IOB1_1
CN1. 8 FPGA. M6
SIGNAL IOB2_1
CN1. 9 FPGA. M3
SIGNAL IOB3_1

CN1. 10 FPGA. M4
SIGNAL IOB4_1
CN1. 11 FPGA. N5
SIGNAL IOB5_1
CN1. 12 FPGA. N6
SIGNAL IOB6_1
CN1. 13 FPGA. N1
SIGNAL IOB7_1
CN1. 14 FPGA. N2
SIGNAL IOB8_1

CN1. 17 FPGA. P6
SIGNAL IOB9_1
CN1. 18 FPGA. R5
SIGNAL IOB10_1
CN1. 19 FPGA. P4
SIGNAL IOB11_1
CN1. 20 FPGA. P5
SIGNAL IOB12_1
CN1. 21 FPGA. P1
SIGNAL IOB13_1

CN1. 22 FPGA. P2
SIGNAL IOB14_1
CN1. 23 FPGA. R1
SIGNAL IOB15_1
CN1. 24 FPGA. R2
SIGNAL IOB16_1
CN1. 27 FPGA. T5
SIGNAL IOB17_1
CN1. 28 FPGA. T6
SIGNAL IOB18_1

CN1. 29 FPGA. T4
SIGNAL IOB19_1
CN1. 30 FPGA. T3
SIGNAL IOB20_1
CN1. 31 FPGA. A5
SIGNAL IOB21_1
CN1. 32 FPGA. B5
SIGNAL IOB22_1
CN1. 33 FPGA. C5
SIGNAL IOB23_1

CN1. 34 FPGA. D5
SIGNAL IOB24_1
CN1. 37 FPGA. D6
SIGNAL IOB25_1
CN1. 38 FPGA. E6
SIGNAL IOB26_1
CN1. 39 FPGA. B6
SIGNAL IOB27_1
CN1. 40 FPGA. C6
SIGNAL IOB28_1

CN1. 41 FPGA. A7
SIGNAL IOB29_1
CN1. 42 FPGA. B7
SIGNAL IOB30_1
CN1. 43 FPGA. D7
SIGNAL IOB31_1
CN1. 44 FPGA. E7
SIGNAL IOB32_1
CN1. 47 FPGA. D8
SIGNAL IOB33_1

CN1. 48 FPGA. E8
SIGNAL IOB34_1
CN1. 49 FPGA. A8
SIGNAL IOB35_1
CN1. 50 FPGA. B8
SIGNAL IOB36_1
CN1. 51 FPGA. A9

```

*SIGNAL* IOB37_1
CN1.52 FPGA.B9
*SIGNAL* IOB38_1

CN1.53 FPGA.E9
*SIGNAL* IOB39_1
CN1.54 FPGA.F9
*SIGNAL* IOB40_1
CN1.57 FPGA.E10
*SIGNAL* IOB41_1
CN1.58 FPGA.F10
*SIGNAL* IOB42_1
CN1.59
FPGA.B10
*SIGNAL* IOB43_1
CN1.60 FPGA.C10
*SIGNAL* IOB44_1
CN1.61 FPGA.E11
*SIGNAL* IOB45_1
CN1.62 FPGA.F11
*SIGNAL* IOB46_1
CN1.63 FPGA.D4
*SIGNAL* IOB47_1

CN1.64 FPGA.E4
*SIGNAL* LED0_2
FPGA.U17 R5.2
*SIGNAL* LED1_2
FPGA.V17 R6.2
*SIGNAL* NSDCAS_2
FPGA.AA17 U7.17
*SIGNAL* NSDCLKE_2
FPGA.Y17 U7.37
*SIGNAL* NSDCS_2

FPGA.V18 U7.19
*SIGNAL* NSDRAS_2
FPGA.W17 U7.18
*SIGNAL* NSDWE_2
FPGA.Y18 U7.16
*SIGNAL* NetCN6_1
CN6.1 R27.2
*SIGNAL* NetCN6_5
CN6.5 R28.2
*SIGNAL* NetCN6_9
CN6.9
R29.2
*SIGNAL* NetFPGA_A4
FPGA.A4 R40.2
*SIGNAL* NetFPGA_AA5
FPGA.AA5 R32.2
*SIGNAL* NetFPGA_AA20
FPGA.AA20 R38.2
*SIGNAL* NetFPGA_AB5
FPGA.AB5 R33.2
*SIGNAL* NetFPGA_AB20

FPGA.AB20 R39.2
*SIGNAL* NetFPGA_B4
FPGA.B4 R41.2
*SIGNAL* NetFPGA_B20
FPGA.B20 R47.2
*SIGNAL* NetFPGA_C3
FPGA.C3 R43.2
*SIGNAL* NetFPGA_C4
FPGA.C4 R42.2
*SIGNAL* NetFPGA_C19

FPGA.C19 R46.2
*SIGNAL* NetFPGA_C20
FPGA.C20 R37.2
*SIGNAL* NetFPGA_C21
FPGA.C21 R36.2
*SIGNAL* NetFPGA_Y2
FPGA.Y2 R45.2
*SIGNAL* NetFPGA_Y3
FPGA.Y3 R44.2
*SIGNAL* NetFPGA_Y19

FPGA.Y19 R34.2

```

```

*SIGNAL* NetFPGA_Y20
FPGA. Y20 R35. 2
*SIGNAL* NetLED1_2
LED1. 2 R1. 1
*SIGNAL* NetLED2_2
LED2. 2 R3. 1
*SIGNAL* NetLED3_2
LED3. 2 R5. 1
*SIGNAL* NetLED4_2
LED4. 2
R6. 1
*SIGNAL* NetR49_2
CN5. 1 R49. 2
*SIGNAL* NetRA1_3
R7. 2 RA1. 3 U5. 17 U6. 4
*SIGNAL* NetU2_4
R24. 2 U2. 4
*SIGNAL* NetU3_1
R27. 1 RA1. 1 U3. 1
*SIGNAL* NetU3_3
R28. 1
RA1. 2 U3. 3
*SIGNAL* NetU4_3
R29. 1 RA1. 9 U4. 3
*SIGNAL* NetU4_6
CN6. 3 U4. 6
*SIGNAL* NetU6_10
U5. 13 U6. 10
*SIGNAL* RESET_1
FPGA. W22 R25. 2
*SIGNAL* SDADD0_2
FPGA. V8
U7. 23
*SIGNAL* SDADD1_2
FPGA. W8 U7. 24
*SIGNAL* SDADD2_2
FPGA. AA8 U7. 25
*SIGNAL* SDADD3_2
FPGA. AB8 U7. 26
*SIGNAL* SDADD4_2
FPGA. U9 U7. 29
*SIGNAL* SDADD5_2
FPGA. V9
U7. 30
*SIGNAL* SDADD6_2
FPGA. AA9 U7. 31
*SIGNAL* SDADD7_2
FPGA. AB9 U7. 32
*SIGNAL* SDADD8_2
FPGA. U10 U7. 33
*SIGNAL* SDADD9_2
FPGA. V10 U7. 34
*SIGNAL* SDADD10_2
FPGA. Y10
U7. 22
*SIGNAL* SDADD11_2
FPGA. AA10 U7. 35
*SIGNAL* SDADD12_2
FPGA. AB10 U7. 36
*SIGNAL* SDBS0_2
FPGA. U11 U7. 20
*SIGNAL* SDBS1_2
FPGA. V11 U7. 21
*SIGNAL* SDD0_2
FPGA. U12 U7. 2
*SIGNAL* SDD1_2
FPGA. AA3 U7. 4
*SIGNAL* SDD2_2
FPGA. Y4 U7. 5
*SIGNAL* SDD3_2
FPGA. AA4 U7. 7
*SIGNAL* SDD4_2
FPGA. AB4 U7. 8
*SIGNAL* SDD5_2
FPGA. W5 U7. 10
*SIGNAL* SDD6_2
FPGA. Y5 U7. 11
*SIGNAL* SDD7_2

```

FPGA. V6 U7. 13
 SIGNAL SDD8_2
 FPGA. W6 U7. 42
 SIGNAL SDD9_2
 FPGA. Y6 U7. 44
 SIGNAL SDD10_2

FPGA. AA6 U7. 45
 SIGNAL SDD11_2
 FPGA. U7 U7. 47
 SIGNAL SDD12_2
 FPGA. V7 U7. 48
 SIGNAL SDD13_2
 FPGA. Y7 U7. 50
 SIGNAL SDD14_2
 FPGA. AA7 U7. 51
 SIGNAL SDD15_2

FPGA. AB7 U7. 53
 SIGNAL SDDCLK_2
 FPGA. W11 FPGA. Y11 U7. 38
 SIGNAL SDLDQM_2
 FPGA. AB18 U7. 15
 SIGNAL SDUDQM_2
 FPGA. AA18 U7. 39
 SIGNAL USBDMA_2

C8. 1 FPGA. U21 R31. 1
 SIGNAL USBDPA_2
 C9. 1 FPGA. V19 R30. 1
 SIGNAL USBD_M_2
 CN5. 2 R31. 2 R50. 2
 SIGNAL USBD_P_2
 CN5. 3 R30. 2

R48. 2
 SIGNAL USBUMPA_2
 FPGA. V20 R50. 1
 SIGNAL USBUPPA_2
 FPGA. V21 R48. 1
 SIGNAL USB_OPTN_2
 FPGA. T22 TP4. 1
 SIGNAL USB_PDET_2
 FPGA. U19 R49. 1
 SIGNAL V12

C4. 1
 C7. 1 D3. 1 FPC3. 1 FPC5. 1 FPC7. 1 FPC9. 1 FPC11. 1 FPC13. 1 FPGA. G7 FPGA. G8
 FPGA. G15 FPGA. G16 FPGA. H7 FPGA. H16 FPGA. R7 FPGA. R16 FPGA. T7 FPGA. T8
 FPGA. T15 FPGA. T16 U2. 3
 SIGNAL V25
 C3. 1 C5. 1 D2. 1 D3. 2 FPC1. 1 FPC2. 1 FPC4. 1 FPC6. 1
 FPC8. 1 FPC10. 1 FPC12. 1 FPC14. 1 FPC16. 1 FPC20. 1 FPC21. 1 FPGA. A6 FPGA. A17
 FPGA. AB6 FPGA. AB17 FPGA. F1 FPGA. F22 FPGA. U1 FPGA. U22 R4. 1 RA1. 5 RA1. 10
 RA2. 5 RA2. 10 U1. 4 U2. 1 U3. 5 U4. 5 U5. 19 U5. 20 U6. 19 U6. 20

SIGNAL V33_A
 C1. 1 C2. 1 C6. 1
 CN2. 1 CN3. 1 CN6. 4 D1. 2 D2. 2 FPC18. 1 FPC19. 1 FPC22. 1 FPC23. 1 FPC24. 1
 FPC25. 1 FPC26. 1 FPC27. 1 FPC41. 1 FPC42. 1 FPC43. 1 FPC44. 1 FPC46. 1 FPC47. 1
 FPC48. 1 FPGA. M16 FPGA. N16 FPGA. P16 FPGA. R17 FPGA. R20 FPGA. T9 FPGA. T10
 FPGA. T11 FPGA. T12 FPGA. T13 FPGA. T14 FPGA. U8 FPGA. U15 FPGA. Y8 FPGA. Y15
 LED1. 1 LED3. 1 LED4. 1 R2. 1 R8. 1 R9. 1 R10. 1 R24. 1 R32. 1 R34. 1 R39. 1 U1. 1
 U1. 2 U2. 2 U5. 18 U6. 18 U7. 1 U7. 3 U7. 9 U7. 14 U7. 27 U7. 43 U7. 49 U8. 4 U9. 4
 SIGNAL V33_B

CN1. 1 FPC49. 1 FPC50. 1 FPC51. 1 FPGA. M7 FPGA. N7 FPGA. P7 FPGA. R3 FPGA. R6 R9. 2
 R45. 1
 SIGNAL V33_C
 CN2. 2 FPC52. 1 FPC53. 1 FPC54. 1 FPC55. 1 FPGA. C15 FPGA. F15 FPGA. G12
 FPGA. G13 FPGA. G14 FPGA. H17 FPGA. H20 FPGA. J16 FPGA. K16 FPGA. L16 R8. 2 R36. 1
 R47. 1

SIGNAL V33_D
 CN1. 2 FPC34. 1 FPC35. 1 FPC36. 1 FPC37. 1 FPGA. C8 FPGA. F8 FPGA. G9
 FPGA. G10 FPGA. G11 FPGA. H3 FPGA. H6 FPGA. J7 FPGA. K7 FPGA. L7 R10. 2 R40. 1
 R42. 1
 SIGNAL VRFA
 CN4. 1 FPC28. 1 FPC29. 1 FPGA. AB11 FPGA. M22 FPGA. N19 FPGA. U20 FPGA. W19
 SIGNAL VRFB

CN4. 2 FPC30. 1 FPC31. 1 FPGA. M1 FPGA. N4 FPGA. U3 FPGA. W1
 SIGNAL VRFC
 CN4. 3 FPC32. 1

FPC33.1 FPGA. A18 FPGA. A19 FPGA. D12 FPGA. D22 FPGA. E13 FPGA. F14 FPGA. F19
FPGA. K19 FPGA. L22
SIGNAL VRFD
CN4. 4 FPC39. 1 FPC40. 1 FPGA. A3 FPGA. C1 FPGA. C7 FPGA. C11
FPGA. D3 FPGA. E5 FPGA. F7 FPGA. G2 FPGA. L1
SIGNAL X_CCLK_1
FPGA. AA22 U5. 3 U6. 3
SIGNAL X_DIN_1
FPGA. AA14 U5. 1
U6. 1
SIGNAL X_DONE_1
FPGA. AB21 LED2. 1 R2. 2 RA1. 4 U5. 10
SIGNAL X_FPGATDI_1
FPGA. B1 R7. 1 RA1. 6 U6. 17
SIGNAL X_INIT_1
FPGA. W12
RA1. 8 U5. 8 U6. 8
SIGNAL X_MO_1
FPGA. AB2 JP1. 2 RA2. 1
SIGNAL X_M1_1
FPGA. AA1 JP1. 4 RA2. 9
SIGNAL X_M2_1
FPGA. AB3 JP1. 6
RA2. 2
SIGNAL X_PROG_1
FPGA. A2 R4. 2 R25. 1 U1. 5 U5. 7 U6. 7
SIGNAL X_TCK_1
FPGA. A21 U3. 6 U5. 6 U6. 6
SIGNAL X_TDI_1
U4. 4 U5. 4
SIGNAL X_TDO_1

FPGA. B22 RA1. 7 U4. 1
SIGNAL X_TMS_1
FPGA. A20 U3. 4 U5. 5 U6. 5
END