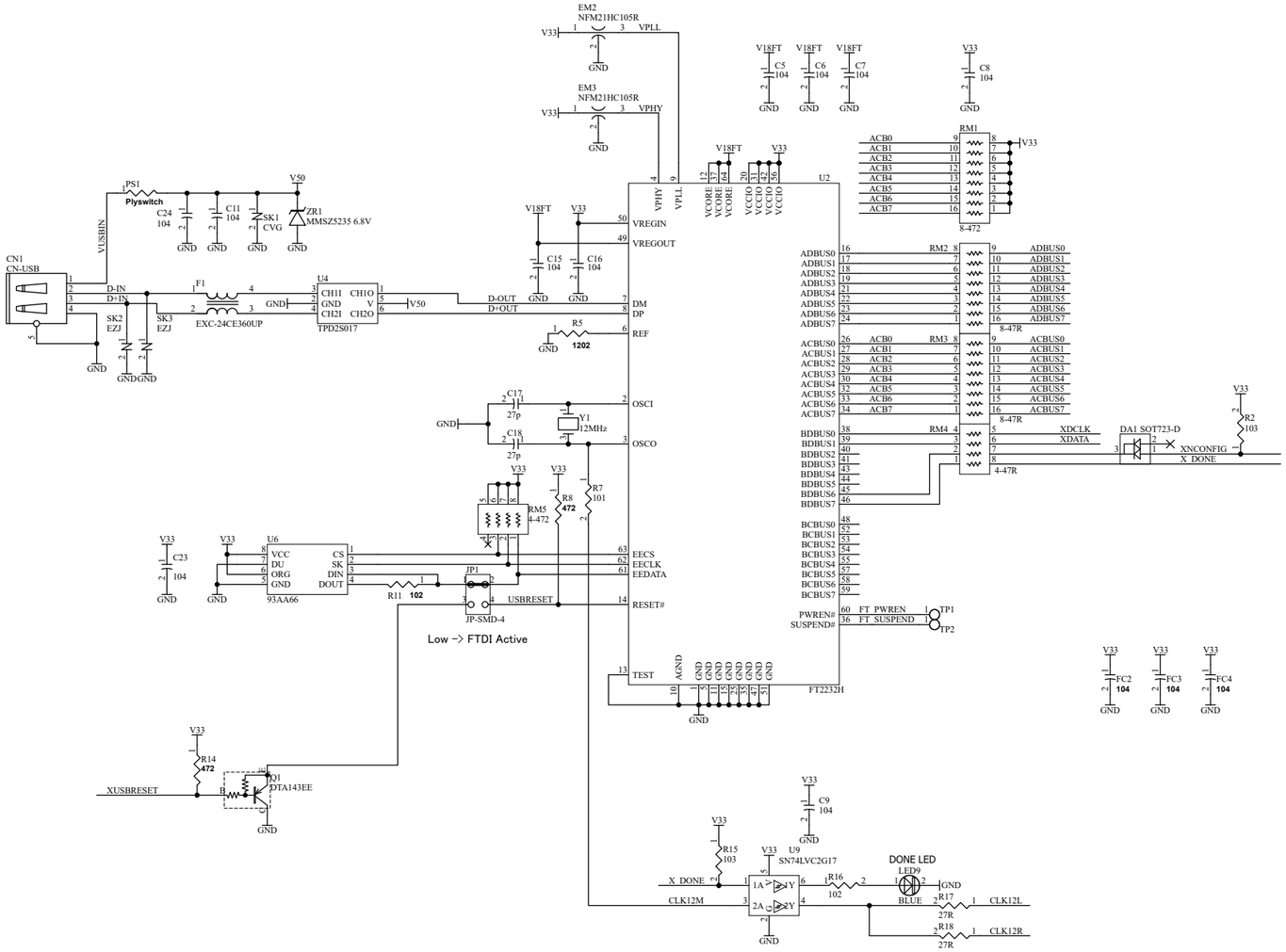

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ADBUS[0..7] ADBUS[0..7]
ACBUS[0..7] ACBUS[0..7]
CLK12L CLK12L
CLK12R CLK12R

X_DONE X_DONE
XDCLK XDCLK
XNCONFIG XNCONFIG
XDATA XDATA

XUSBRESET XUSBRESET

RM8 RM7

XSG_E0 XSG_G0 XSG_F0 XSG_DP0 XSG_B0 XSG_C0 XSG_A0 XSG_D0
SG_E0 SG_G0 SG_F0 SG_DP0 SG_B0 SG_C0 SG_A0 SG_D0
XSG_E1 XSG_G1 XSG_F1 XSG_DP1 XSG_B1 XSG_C1 XSG_A1 XSG_D1
SG_E1 SG_G1 SG_F1 SG_DP1 SG_B1 SG_C1 SG_A1 SG_D1
8-472

SEG0 SEG1
SG_E0 SG_D0 SG_C0 SG_DP0 SG_G0 SG_F0 SG_A0 SG_B0
SG_E1 SG_D1 SG_C1 SG_DP1 SG_G1 SG_F1 SG_A1 SG_B1
V33
KCSA02-105

7 Segment LED

RM9 PSW0 PSW1 PSW2 PSW3 4-103
PSW0 PSW1 PSW2 PSW3 SKHHANA010
GND

Push Switch

LED0 LED1 LED2 LED3 LED4 LED5 LED6 LED7 RED
RM10 V33 8-472

LED

R19 2 1 103 XDCLK

FPGAA
DSW4 DSW3 DSW2 GND VCCINT XASDO XNCSO PSW4 PSW3 XDATA XNCONFIG XTDI XTCK XTMS XTDO GND XTDO CLK12L ACBUS5 BUZZER PSW0 PSW1 PSW2 V25 GNDA1
IO/B1 IO/B1 IO/B1 GND VCCINT IO_DATA1,ASDO_DIFFIO_L1n/B1 IO_VREFB1N0/B1 nSTATUS/B1 IO_DPCLK0_DIFFIO_L4p/B1 IO_DIFFIO_L4n/B1 IO_DCLK/B1 IO_DATA0/B1 nCONFIG/B1 TDI/B1 TCK/B1 VCCIO1 TMS/B1 GND TDO/B1 nCE/B1 CLK0_DIFFCLK_0p/B1 CLK1_DIFFCLK_0n/B1 CLK2_DIFFCLK_1p/B2 CLK3_DIFFCLK_1n/B2 VCCIO2 GND IO_DIFFIO_L6n/B2 VCCINT GND IO_VREFB2N0/B2 IO_RUP1/B2 IO_RDN1/B2 IO/B2 VCCA1 GNDA1
CY10LP_E144_006/010_V2

LED

RM11 4-472
DSW4 DSW3 DSW2 DSW1 DSW1 SW DIP-4S
GND

DIP SW

BZ1 BUZZER R20 102

BUZZER

RM12 CNTDI CNTMS J_TCK V33 GND 4-472
RM13 V33 XTDI XTMS XTDO 4-472

CN5 GND TCK TDO TMS NC TDI
J_TCK R23 J_TDO R24 J_TMS R25 J_TDI R26 47R 000 47R 47R
DIL 10pin

U10 U12 SN74LVC2G17
XTDO XTCK XTMS CNTMS CNTDI
RM14 4-47R

JTAG

U11 MT25QL128
XDCLK XNCSO DCLK nCS VCC GND DATA3 DATA2 DATA1 DATA0
R21 103 R22 47R XDATA XASDO
FC5 104

Configuration ROM

FPGAD
CY10LP_E144_006/010_V2
IO_DIFFIO_T1p/B8 IO_DIFFIO_T1n/B8 IO_DPCLK7_DIFFIO_T2p/B8 IO_DIFFIO_T2n/B8 GND VCCIO8 IO_DATA5/B8 IO_VREFB8N0/B8 IO_DIFFIO_T8n/B8 VCCINT IO_DATA3_DIFFIO_T10p/B8 IO_DATA2_DIFFIO_T10n/B8 GND VCCIO8 IO_DIFFIO_T11p/B8 IO_DIFFIO_T11n/B8 IO_DIFFIO_T12p/B7 IO_DIFFIO_T12n/B7 IO/B7 IO_DIFFIO_T13p/B7 GND VCCIO7 IO_DIFFIO_T16p/B7 IO_DIFFIO_T16n/B7 IO_VREFB7N0/B7 GND VCCINT IO_RDN4/B7 IO_RUP4/B7 IO_PLL2_CLKOUTp/B7 IO_PLL2_CLKOUTn/B7 IO_DIFFIO_T19p/B7 GND VCCD_PLL2
ADBUS0 ADBUS1 ADBUS2 ADBUS3 ADBUS4 ADBUS5 ADBUS6 ADBUS7 ACBUS0 ACBUS1 ACBUS2 ACBUS3 ACBUS4 ACBUS5 ACBUS6 ACBUS7 EIO0 EIO1 EIO2 EIO3 EIO4 EIO5 EIO6 EIO7 EIO8
V33 V12 GND

C25 476 2012 C26 475 2012 C27 475 2012 C28 104

FPGAC
GNDA2 VCCA2 IO_DIFFIO_R1n/B6 IO_VREFB6N0/B6 GND IO_CLKUSR_DIFFIO_R3p/B6 VCCINT IO_nCEO_DIFFIO_R3n/B6 IO/B6 IO_CRC_ERROR_DIFFIO_R4p/B6 IO_INIT_DONE_DIFFIO_R4n/B6 MSEL2/B6 MSEL1/B6 GND MSEL0/B6 VCCIO6 CONF_DONE/B6 CLK4_DIFFCLK_2p/B6 CLK5_DIFFCLK_2n/B6 CLK6_DIFFCLK_3p/B5 CLK7_DIFFCLK_3n/B5 IO_DEV_CLRn_DIFFIO_R7p/B5 IO_DEV_OE_DIFFIO_R7n/B5 IO_DPCLK4_DIFFIO_R8p/B5 IO_DIFFIO_R8n/B5 IO/B5 GND VCCIO5 IO_VREFB5N0/B5 GND VCCINT IO_RDN3/B5 IO_RUP3/B5 IO/B5 IO/B5 IO/B5
EIO9 EIO10 EIO11 EIO12 EIO13 EIO14 EIO15 V25 GND GND MSEL V33 X_DONE CLK12R EIO16 EIO20 EIO21 EIO17 EIO18 EIO19 EIO22 GND V12 EIO19 EIO23 XUSBRESET JP5-IO DSW1
CY10LP_E144_006/010_V2

R3 472 R4 472
MSEL HIGH:AS(ROM) LOW:PS(BBC or JTAG)
JP5 JP-SMD-4

C29 C30 C31 476 2012 C32 476 2012 C33 C34 C35 C36 C37 C38 104

FPGAB
CY10LP_E144_006/010_V2
VCCD_PLL1 IO_DIFFIO_B1p/B3 IO_DIFFIO_B1n/B3 VCCIO3 GND IO_PLL1_CLKOUTp/B3 IO_PLL1_CLKOUTn/B3 VCCINT VCCIO3 GND IO_DIFFIO_B9p/B3 IO_DIFFIO_B9n/B3 IO_DIFFIO_B10p/B3 IO_DIFFIO_B10n/B3 IO_DIFFIO_B11p/B3 IO_DIFFIO_B11n/B3 IO_DIFFIO_B12p/B4 IO_DIFFIO_B12n/B4 VCCIO4 GND IO_DIFFIO_B15p/B4 IO_DIFFIO_B15n/B4 IO_DIFFIO_B16p/B4 IO_DIFFIO_B16n/B4 VCCINT GND IO_VREFB4N0/B4 IO_RUP2/B4 IO_RDN2/B4 IO_PLL3_CLKOUTp/B4 IO_DIFFIO_B21p/B4 IO_DIFFIO_B21n/B4 IO_DIFFIO_B22p/B4 IO_DIFFIO_B22n/B4
LED7 LED6 LED5 LED4 LED3 LED2 LED1 LED0 XSG_E1 XSG_G1 XSG_F1 XSG_DP1 XSG_B1 XSG_C1 XSG_A1 XSG_D1 XSG_E0 XSG_G0 XSG_F0 XSG_DP0 XSG_B0 XSG_C0 XSG_A0 XSG_D0

C39 475 2012 C40 104 C41 476 2012 C42 475 2012

FC1 FC7 FC8 FC9 FC10 FC11 FC12 FC13 104

ZKB-156

Unmounted
CN2 CN3 CN4
EIO0 EIO1 EIO2 EIO3 EIO4 EIO5 EIO6 EIO7 EIO8 EIO9 EIO10 EIO11 EIO12 EIO13 EIO14 EIO15 EIO16 EIO17 EIO18 EIO19 EIO20 EIO21 EIO22 EIO23
GND VCC PAD12
JP2 JP3 JP4 V33 V50 JP1x3

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