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1 # This file is a general .ucf for Basys2 rev C board
2 # To use it in a project:
3 # - remove or comment the lines corresponding to unused pins
4 # - rename the used signals according to the project
5
  # clock pin for Basys2 Board
6
  NET "clk_50" LOC = "B8"; # Bank = 0, Signal name = MCLK
  #NET "uclk" LOC = "M6"; # Bank = 2, Signal name = UCLK
  #NET "mclk" CLOCK DEDICATED ROUTE = FALSE;
  #NET "uclk" CLOCK DEDICATED ROUTE = FALSE;
10
11
12 # Pin assignment for EppCtl
13 # Connected to Basys2 onBoard USB controller
14 #NET "EppAstb" LOC = "F2"; # Bank = 3
15 #NET "EppDstb" LOC = "F1"; # Bank = 3
  #NET "EppWR"
                      LOC = "C2"; # Bank = 3
16
17
  #NET "EppWait" LOC = "D2";  # Bank = 3
18
19
20
  #NET "EppDB<0>" LOC = "N2"; # Bank = 2
21
  #NET "EppDB<1>" LOC = "M2"; # Bank = 2
22
  #NET "EppDB<2>" LOC = "M1"; # Bank = 3
  #NET "EppDB<3>" LOC = "L1"; # Bank = 3
  #NET "EppDB<4>" LOC = "L2"; # Bank = 3
26 #NET "EppDB<5>" LOC = "H2"; # Bank = 3
  #NET "EppDB<6>" LOC = "H1"; # Bank = 3
27
  #NET "EppDB<7>" LOC = "H3"; # Bank = 3
29
30
31 # Pin assignment for DispCtl
32 # Connected to Basys2 onBoard 7seg display
33 NET "led<1>" LOC = "L14"; # Bank = 1, Signal name = CA
34 NET "led<2>" LOC = "H12"; # Bank = 1, Signal name = CB
35 NET "led<3>" LOC = "N14"; # Bank = 1, Signal name = CC
36 NET "led<4>" LOC = "N11"; # Bank = 2, Signal name = CD
37 NET "led<5>" LOC = "P12"; # Bank = 2, Signal name = CE
38 NET "led<6>" LOC = "L13"; # Bank = 1, Signal name = CF
  NET "led<7>" LOC = "M12"; # Bank = 1, Signal name = CG
  NET "led<8>" LOC = "N13"; # Bank = 1, Signal name = DP
41
  NET "an<3>" LOC = "K14"; # Bank = 1, Signal name = AN3
  NET "an<2>" LOC = "M13"; # Bank = 1, Signal name = AN2
  NET "an<1>" LOC = "J12"; # Bank = 1, Signal name = AN1
  NET "an<0>" LOC = "F12"; # Bank = 1, Signal name = AN0
45
46
47 # Pin assignment for LEDs
  #NET "Led<7>" LOC = "G1" ; # Bank = 3, Signal name = LD7
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49 #NET "Led<6>" LOC = "P4" ; # Bank = 2, Signal name = LD6
50 #NET "Led<5>" LOC = "N4" ; # Bank = 2, Signal name = LD5
51 #NET "Led<4>" LOC = "N5" ; # Bank = 2, Signal name = LD4
  #NET "Led<3>" LOC = "P6" ; # Bank = 2, Signal name = LD3
53 #NET "Led<2>" LOC = "P7" ; # Bank = 3, Signal name = LD2
  #NET "Led<1>" LOC = "M11" ; # Bank = 2, Signal name = LD1
  #NET "Led<0>" LOC = "M5" ; # Bank = 2, Signal name = LD0
56
57 # Pin assignment for SWs
58 NET "cola_sw" LOC = "N3";
                              # Bank = 2, Signal name = SW7
59 NET "aqua_sw" LOC = "E2";
                              # Bank = 3, Signal name = SW6
60 NET "hash sw" LOC = "F3";
                              # Bank = 3, Signal name = SW5
  #NET "agua sw" LOC = "G3";
                               # Bank = 3, Signal name = SW4
62 #NET "hash sw" LOC = "B4";
                               # Bank = 3, Signal name = SW3
  #NET "sum<2>" LOC = "K3";
                              # Bank = 3, Signal name = SW2
                              # Bank = 3, Signal name = SW1
  #NET "sum<1>" LOC = "L3";
  NET "reset" LOC = "P11";
                             # Bank = 2, Signal name = SW0
66
  NET "coin1_btn" LOC = "A7"; # Bank = 1, Signal name = BTN3
67
68 NET "coin2_btn" LOC = "M4"; # Bank = 0, Signal name = BTN2
  NET "coin5_btn" LOC = "C11"; # Bank = 2, Signal name = BTN1
  NET "buy btn" LOC = "G12"; # Bank = 0, Signal name = BTN0
71
  # Loop back/demo signals
72
73 # Pin assignment for PS2
  #NET "PS2C"
                 LOC = "B1"
                               | DRIVE = 2 | PULLUP; # Bank = 3, Signal nam
  #NET "PS2D"
                 LOC = "C3"
                               \mid DRIVE = 2
                                           | PULLUP ; # Bank = 3, Signal nam
75
76
77
  # Pin assignment for VGA
  #NET "HSYNC"
                LOC = "J14"
                               | DRIVE = 2
                                            | PULLUP ; # Bank = 1, Signal nam
78
  #NET "VSYNC"
                 LOC = "K13"
                               | DRIVE = 2 | PULLUP ; # Bank = 1, Signal nam
79
80
  #NET "OutRed<2>"
                     LOC = "F13"
                                    DRIVE = 2
                                               | PULLUP ; # Bank = 1, Signal
81
82 #NET "OutRed<1>"
                                    DRIVE = 2 | PULLUP; # Bank = 1, Signal
                     LOC = "D13"
  #NET "OutRed<0>"
                     LOC = "C14"
                                  | DRIVE = 2 | PULLUP; # Bank = 1, Signal
83
                                    | DRIVE = 2 | PULLUP; # Bank = 1, Signa
  #NET "OutGreen<2>"
                      LOC = "G14"
84
  #NET "OutGreen<1>"
                      LOC = "G13"
                                    | DRIVE = 2 | PULLUP ; # Bank = 1, Signa
  #NET "OutGreen<0>" LOC = "F14"
                                    | DRIVE = 2 | PULLUP; # Bank = 1, Signa
86
                                   | DRIVE = 2 | PULLUP; # Bank = 1, Signal
  #NET "OutBlue<2>" LOC = "J13"
87
  #NET "OutBlue<1>" LOC = "H13"
                                   \mid DRIVE = 2
                                                | PULLUP ; # Bank = 1, Signal
88
89
  # Loop Back only tested signals
90
  #NET "PIO<72>" LOC = "B2"
                              | DRIVE = 2
                                           | PULLUP ; # Bank = 1, Signal name
91
  #NET "PIO<73>" LOC = "A3"
                              | DRIVE = 2
                                           | PULLUP ; # Bank = 1, Signal name
  #NET "PIO<74>" LOC = "J3"
                              | DRIVE = 2
                                           | PULLUP ; # Bank = 1, Signal name
93
  #NET "PIO<75>" LOC = "B5"
                              \mid DRIVE = 2
                                           | PULLUP ; # Bank = 1, Signal name
94
95
96 #NET "PIO<76>" LOC = "C6"
                              | DRIVE = 2 | PULLUP ; # Bank = 1, Signal name
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97 #NET "PIO<77>" LOC = "B6"
                                | DRIVE = 2
                                             | PULLUP ; # Bank = 1, Signal name
                               | DRIVE = 2
98 #NET "PIO<78>" LOC = "C5"
                                             | PULLUP ; # Bank = 1, Signal name
99 #NET "PIO<79>" LOC = "B7"
                               \mid DRIVE = 2
                                             | PULLUP ; # Bank = 1, Signal name
100
101 #NET "PIO<80>" LOC = "A9"
                                             | PULLUP ; # Bank = 1, Signal name
                                \mid DRIVE = 2
102 #NET "PIO<81>" LOC = "B9"
                                | DRIVE = 2
                                             | PULLUP ; # Bank = 1, Signal name
   #NET "PIO<82>" LOC = "A10" | DRIVE = 2
                                             | PULLUP ; # Bank = 1, Signal name
103
                                             | PULLUP ; # Bank = 1, Signal name
   #NET "PIO<83>" LOC = "C9"
                               \mid DRIVE = 2
104
105
   #NET "PIO<84>" LOC = "C12"
                                  DRIVE = 2
                                             | PULLUP ; # Bank = 1, Signal nam
106
   #NET "PIO<85>" LOC = "A13"
                                 | DRIVE = 2 | PULLUP ; # Bank = 2, Signal nam
107
108 #NET "PIO<86>" LOC = "C13"
                                  DRIVE = 2 | PULLUP; # Bank = 1, Signal nam
                                | DRIVE = 2 | PULLUP ; # Bank = 2, Signal nam
   #NET "PIO<87>" LOC = "D12"
109
110
```

111