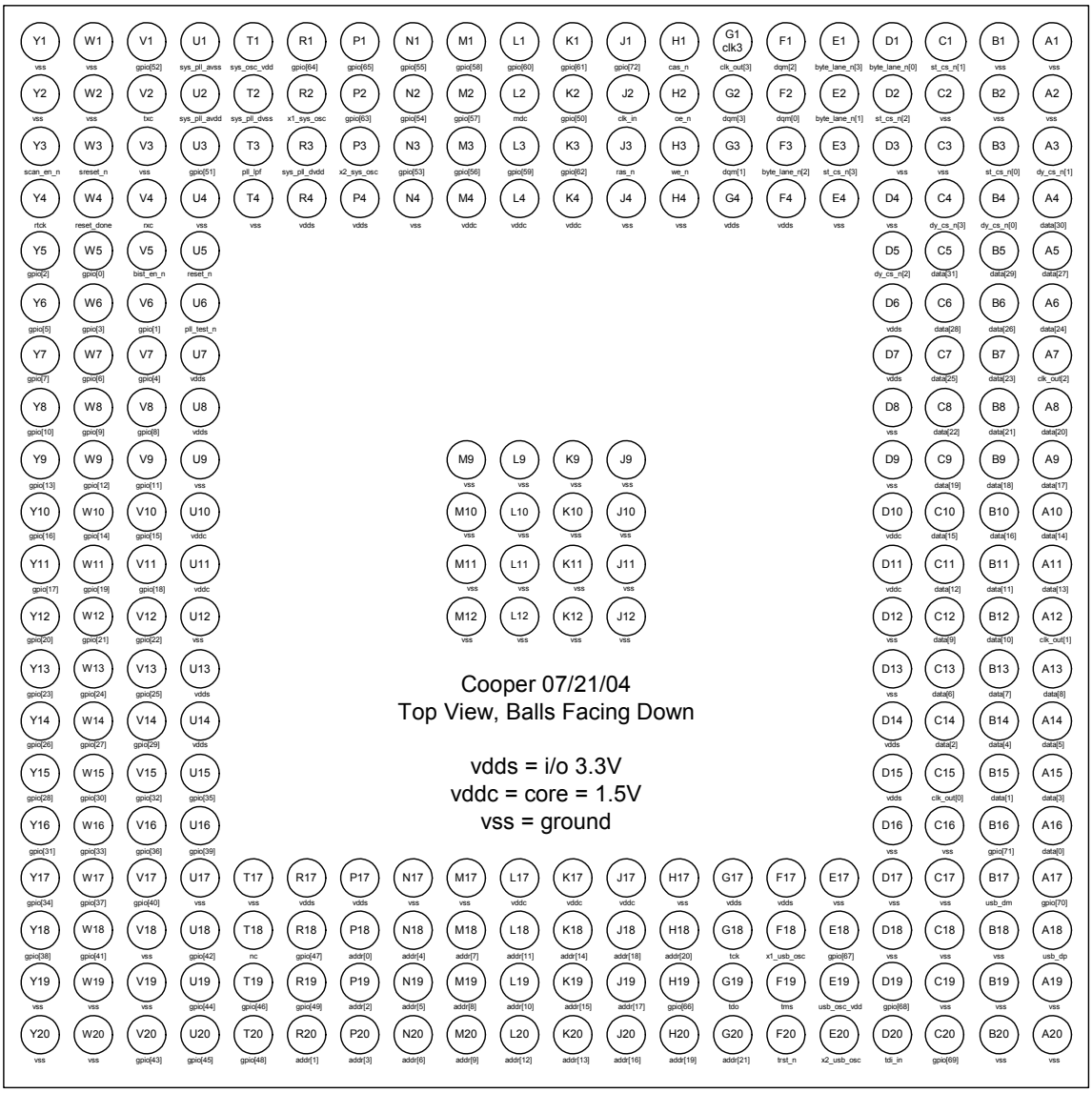
Y1 vss
W1 vss
V1 gpio[52]
U1 sys_pll_avss
T1 sys_osc_vdd
R1 gpio[64]
P1 gpio[65]
N1 gpio[55]
M1 gpio[58]
L1 gpio[60]
K1 gpio[61]
J1 gpio[72]
H1 cas_n
G1 clk3
clk_out[3]
F1 dqm[2]
E1 byte_lane_n[3]
D1 byte_lane_n[0]
C1 st_cs_n[1]
B1 vss
A1 vss
Y2 vss
W2 vss
V2 txc
U2 sys_pll_avdd
T2 sys_pll_dvss
R2 x1_sys_osc
P2 gpio[63]
N2 gpio[54]
M2 gpio[57]
L2 mdc
K2 gpio[50]
J2 clk_in
H2 oe_n
G2 dqm[3]
F2 dqm[0]
E2 byte_lane_n[1]
D2 st_cs_n[2]
C2 vss
B2 vss
A2 vss
Y3 scan_en_n
W3 sreset_n
V3 vss
U3 gpio[51]
T3 pll_lpf
R3 sys_pll_dvdd
P3 x2_sys_osc
N3 gpio[53]
M3 gpio[56]
L3 gpio[59]
K3 gpio[62]
J3 ras_n
H3 we_n
G3 dqm[1]
F3 byte_lane_n[2]
E3 st_cs_n[3]
D3 vss
C3 vss
B3 st_cs_n[0]
A3 dy_cs_n[1]
Y4 rtck
W4 reset_done
V4 rxc
U4 vss
T4 vss
R4 vdds
P4 vdds
N4 vss
M4 vddc
L4 vddc
K4 vddc
J4 vss
H4 vss
G4 vdds
F4 vdds
E4 vss
D4 vss
C4 dy_cs_n[3]
B4 dy_cs_n[0]
A4 data[30]
Y5 gpio[2]
W5 gpio[0]
V5 bist_en_n
U5 reset_n
D5 dy_cs_n[2]
C5 data[31]
B5 data[29]
A5 data[27]
Y6 gpio[5]
W6 gpio[3]
V6 gpio[1]
U6 pll_test_n
D6 vdds
C6 data[28]
B6 data[26]
A6 data[24]
Y7 gpio[7]
W7 gpio[6]
V7 gpio[4]
U7 vdds
D7 vdds
C7 data[25]
B7 data[23]
A7 clk_out[2]
Y8 gpio[10]
W8 gpio[9]
V8 gpio[8]
U8 vdds
D8 vss
C8 data[22]
B8 data[21]
A8 data[20]
M9 vss
L9 vss
K9 vss
J9 vss
Y9 gpio[13]
W9 gpio[12]
V9 gpio[11]
U9 vss
D9 vss
C9 data[19]
B9 data[18]
A9 data[17]
M10 vss
L10 vss
K10 vss
J10 vss
Y10 gpio[16]
W10 gpio[14]
V10 gpio[15]
U10 vddc
D10 vddc
C10 data[15]
B10 data[16]
A10 data[14]
M11 vss
L11 vss
K11 vss
J11 vss
Y11 gpio[17]
W11 gpio[19]
V11 gpio[18]
U11 vddc
D11 vddc
C11 data[12]
B11 data[11]
A11 data[13]
M12 vss
L12 vss
K12 vss
J12 vss
Y12 gpio[20]
W12 gpio[21]
V12 gpio[22]
U12 vss
D12 vss
C12 data[9]
B12 data[10]
A12 clk_out[1]
Cooper 07/21/04
Top View, Balls Facing Down
vdds = i/o 3.3V
vddc = core = 1.5V
vss = ground
Y13 gpio[23]
W13 gpio[24]
V13 gpio[25]
U13 vdds
D13 vss
C13 data[6]
B13 data[7]
A13 data[8]
Y14 gpio[26]
W14 gpio[27]
V14 gpio[29]
U14 vdds
D14 vdds
C14 data[2]
B14 data[4]
A14 data[5]
Y15 gpio[28]
W15 gpio[30]
V15 gpio[32]
U15 gpio[35]
D15 vdds
C15 clk_out[0]
B15 data[1]
A15 data[3]
Y16 gpio[31]
W16 gpio[33]
V16 gpio[36]
U16 gpio[39]
D16 vss
C16 vss
B16 gpio[71]
A16 data[0]
Y17 gpio[34]
W17 gpio[37]
V17 gpio[40]
U17 vss
T17 vss
R17 vdds
P17 vdds
N17 vss
M17 vss
L17 vddc
K17 vddc
J17 vddc
H17 vss
G17 vdds
F17 vdds
E17 vss
D17 vss
C17 vss
B17 usb_dm
A17 gpio[70]
Y18 gpio[38]
W18 gpio[41]
V18 vss
U18 gpio[42]
T18 nc
R18 gpio[47]
P18 addr[0]
N18 addr[4]
M18 addr[7]
L18 addr[11]
K18 addr[14]
J18 addr[18]
H18 addr[20]
G18 tck
F18 x1_usb_osc
E18 gpio[67]
D18 vss
C18 vss
B18 vss
A18 usb_dp
Y19 vss
W19 vss
V19 vss
U19 gpio[44]
T19 gpio[46]
R19 gpio[49]
P19 addr[2]
N19 addr[5]
M19 addr[8]
L19 addr[10]
K19 addr[15]
J19 addr[17]
H19 gpio[66]
G19 tdo
F19 tms
E19 usb_osc_vdd
D19 gpio[68]
C19 vss
B19 vss
A19 vss
Y20 vss
W20 vss
V20 gpio[43]
U20 gpio[45]
T20 gpio[48]
R20 addr[1]
P20 addr[3]
N20 addr[6]
M20 addr[9]
L20 addr[12]
K20 addr[13]
J20 addr[16]
H20 addr[19]
G20 addr[21]
F20 trst_n
E20 x2_usb_osc
D20 tdi_in
C20 gpio[69]
B20 vss
A20 vss