

# Basys 3 Board FPGA Pin Assignments for On-Board I/O

function	FPGA pin
LEDs	
LD0	U16
<b>LD1</b>	<b>E19</b>
LD2	U19
<b>LD3</b>	<b>V19</b>
LD4	W18
<b>LD5</b>	<b>U15</b>
LD6	U14
<b>LD7</b>	<b>V14</b>
LD8	V13
<b>LD9</b>	<b>V3</b>
LD10	W3
<b>LD11</b>	<b>U3</b>
LD12	P3
<b>LD13</b>	<b>N3</b>
LD14	P1
<b>LD15</b>	<b>L1</b>

DISPLAY (4 digit 7-segment display)	
CA	W7
<b>CB</b>	<b>W6</b>
CC	U8
<b>CD</b>	<b>V8</b>
CE	U5
<b>CF</b>	<b>V5</b>
CG	U7
<b>CDP</b>	<b>V7</b>
AN0	U2
<b>AN1</b>	<b>U4</b>
AN2	V4
<b>AN3</b>	<b>W4</b>

function	FPGA pin
BUTTONS	
BTNL	W19
<b>BTNR</b>	<b>T17</b>
BTNU	T18
<b>BTND</b>	<b>U17</b>
BTNC	U18

SWITCHES	
SW0	V17
<b>SW1</b>	<b>V16</b>
SW2	W16
<b>SW3</b>	<b>W17</b>
SW4	W15
<b>SW5</b>	<b>V15</b>
SW6	W14
<b>SW7</b>	<b>W13</b>
SW8	V2
<b>SW9</b>	<b>T3</b>
SW10	T2
<b>SW11</b>	<b>R3</b>
SW12	W2
<b>SW13</b>	<b>U1</b>
SW14	T1
<b>SW15</b>	<b>R2</b>

CLOCKS	
system (100 MHz)	W5

reverse look-up	
FPGA pin	function
E19	LD1
<b>L1</b>	<b>LD15</b>
N3	LD13
<b>P1</b>	<b>LD14</b>
P3	LD12
<b>R2</b>	<b>SW15</b>
R3	SW11
<b>T1</b>	<b>SW14</b>
T2	SW10
<b>T3</b>	<b>SW9</b>
T17	BTNR
<b>T18</b>	<b>BTNU</b>
U1	SW13
<b>U2</b>	<b>AN0</b>
U3	LD11
<b>U4</b>	<b>AN1</b>
U5	CE
<b>U7</b>	<b>CG</b>
U8	CC
<b>U14</b>	<b>LD6</b>
U15	LD5
<b>U16</b>	<b>LD0</b>
U17	BTND
<b>U18</b>	<b>BTNC</b>
U19	LD2

reverse look-up	
FPGA pin	function
<b>V13</b>	<b>LD8</b>
V14	LD7
<b>V15</b>	<b>SW5</b>
V16	SW1
<b>V17</b>	<b>SW0</b>
V19	LD3
<b>V2</b>	<b>SW8</b>
V3	LD9
<b>V4</b>	<b>AN2</b>
V5	CF
<b>V7</b>	<b>CDP</b>
V8	CD
<b>W2</b>	<b>SW12</b>
W3	LD10
<b>W4</b>	<b>AN3</b>
W5	Sys Clock
<b>W6</b>	<b>CB</b>
W7	CA
<b>W13</b>	<b>SW7</b>
W14	SW6
<b>W15</b>	<b>SW4</b>
W16	SW2
<b>W17</b>	<b>SW3</b>
W18	LD4
<b>W19</b>	<b>BTNL</b>