



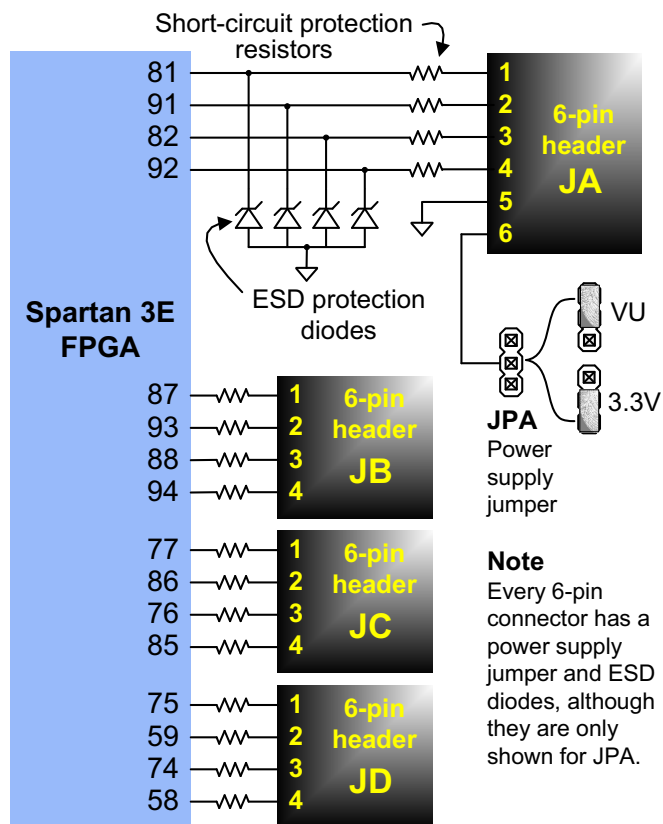
Expansion Connectors (6-pin headers)

The Basys board provides four 6-pin peripheral module connectors. Each connector provides Vdd, GND, and four unique FPGA signals. Several 6-pin module boards that can attach to this connector are available from Digilent, including A/D converters, speaker amplifiers, microphones, H-bridge amplifiers, etc. Please see www.digilentinc.com for more information.

FPGA Pin Definitions

The table below shows all pin definitions for the Spartan-3E on the Basys board. Pins in grey boxes are not available to the user

FPGA pin definition table color key		
Grey		Not available to user
Green		User I/O devices
Yellow		Data ports
Tan		Pmod connector signals
Blue		USB signals



Note
Every 6-pin connector has a power supply jumper and ESD diodes, although they are only shown for JPA.

Figure 18. Basys Pmod connector circuits

Basys Spartan-3E pin definitions											
Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	PROG	25	CA	49	VDDO-2	73	GND	97	PS2D	121	VDDO-0
2	LD7	26	AN3	50	GRN2	74	JD-3	98	NC	122	U-INT0
3	LD6	27	GND	51	GRN1	75	JD-1	99	GND	123	U-FLAGC
4	LD5	28	VDDO-3	52	GRN0	76	JC-3	100	VDDO-1	124	U-FLAGB
5	LD4	29	SW2	53	CLK2	77	JC-1	101	NC	125	U-FLAGA
6	SW7	30	VDDAUX	54	CLK1	78	NC	102	VDDAUX	126	U-IFCLK
7	LD3	31	NC	55	GND	79	VDDO-1	103	NC	127	GND
8	LD2	32	AN2	56	NC	80	VDDINT	104	U-SLWR	128	NC
9	VDDINT	33	AN1	57	MODE2	81	JA-1	105	U-SLRD	129	NC
10	SW6	34	AN0	58	JD-4	82	JA-3	106	U-SLCS	130	U-D7
11	GND	35	VS	59	JD-2	83	CG	107	NC	131	U-D6
12	SW5	36	SW1	60	MODE1	84	NC	108	TMS	132	U-D5
13	VDDO-3	37	GND	61	GND	85	JC-4	109	TDO	133	GND
14	LD1	38	SW0	62	MODE0	86	JC-2	110	TCK	134	U-D4
15	LD0	39	HS	63	DIN	87	JB-1	111	NC	135	U-D3
16	CB	40	INIT	64	VDDO-2	88	JB-3	112	U-PKTD	136	NC
17	CF	41	BTN3	65	VDDAUX	89	NC	113	U-FAD1	137	VDDAUX
18	SW4	42	VDDO-2	66	NC	90	GND	114	NC	138	VDDO-0
19	GND	43	BLUE1	67	RED2	91	JA-2	115	VDDINT	139	U-D2
20	CE	44	BLUE0	68	RED1	92	JA-4	116	U-FAD0	140	U-D1
21	CD	45	VDDINT	69	BTN0	93	JB-2	117	U-SLDE	141	NC
22	DP	46	GND	70	RED0	94	JB-4	118	GND	142	U-D0
23	CC	47	BTN2	71	CCLK	95	NC	119	NC	143	HSWAP
24	SW3	48	BTN1	72	DONE	96	PS2C	120	NC	144	TDI