DT9835 Pin Assignments

Table 1 lists the pin assignments of connector J1 on the DT9835 function module.

Table 1: Pin Assignments for Connector J1 on the DT9835 Function Module

Pin Number[a]	Signal Description	Pin Number	Signal Description
1	Bank 0, Bit 0	2	Bank 0, Bit 1
3	Bank 0, Bit 2	4	Bank 0, Bit 3
5	Bank 0, Bit 4	6	Bank 0, Bit 5
7	Bank 0, Bit 6	8	Bank 0, Bit 7
9	Bank 1, Bit 0	10	Bank 1, Bit 1
11	Bank 1, Bit 2	12	Bank 1, Bit 3
13	Bank 1, Bit 4	14	Bank 1, Bit 5
15	Bank 1, Bit 6	16	Bank 1, Bit 7
17	Bank 2, Bit 0	18	Bank 2, Bit 1
19	Bank 2, Bit 2	20	Bank 2, Bit 3
21	Bank 2, Bit 4	22	Bank 2, Bit 5
23	Bank 2, Bit 6	24	Bank 2, Bit 7
25	Bank 3, Bit 0	26	Bank 3, Bit 1
27	Bank 3, Bit 2	28	Bank 3, Bit 3
29	Bank 3, Bit 4	30	Bank 3, Bit 5
31	Bank 3, Bit 6	32	Bank 3, Bit 7
33	Bank 4, Bit 0	34	Bank 4, Bit 1
35	Bank 4, Bit 2	36	Bank 4, Bit 3
37	Bank 4, Bit 4	38	Bank 4, Bit 5
39	Bank 4, Bit 6	40	Bank 4, Bit 7
41	Bank 5, Bit 0	42	Bank 5, Bit 1
43	Bank 5, Bit 2	44	Bank 5, Bit 3
45	Bank 5, Bit 4	46	Bank 5, Bit 5
47	Bank 5, Bit 6	48	Bank 5, Bit 7
49	Isolated +5 V	50	Isolated Ground
51	Bank 6, Bit 0	52	Bank 6, Bit 1
53	Bank 6, Bit 2	54	Bank 6, Bit 3
55	Bank 6, Bit 4	56	Bank 6, Bit 5

Table 1: Pin Assignments for Connector J1 on the DT9835 Function Module (cont.)

Pin Number[a]	Signal Description	Pin Number	Signal Description
57	Bank 6, Bit 6	58	Bank 6, Bit 7
59	Bank 7, Bit 0	60	Bank 7, Bit 1
61	Bank 7, Bit 2	62	Bank 7, Bit 3
63	Bank 7, Bit 4	64	Bank 7, Bit 5
65	Bank 7, Bit 6	66	Bank 7, Bit 7
67	Bank 8, Bit 0[b]	68	Bank 8, Bit 1[b]
69	Bank 8, Bit 2[b]	70	Bank 8, Bit 3[b]
71	Bank 8, Bit 4[b]	72	Bank 8, Bit 5[b]
73	Bank 8, Bit 6[b]	74	Bank 8, Bit 7[b]
75	Bank 9, Bit 0[b]	76	Bank 9, Bit 1[b]
77	Bank 9, Bit 2[b]	78	Bank 9, Bit 3[b]
79	Bank 9, Bit 4[b]	80	Bank 9, Bit 5[b]
81	Bank 9, Bit 6[b]	82	Bank 9, Bit 7[b]
83	Bank 10, Bit 0[b]	84	Bank 10, Bit 1[b]
85	Bank 10, Bit 2[b]	86	Bank 10, Bit 3[b]
87	Bank 10, Bit 4[b]	88	Bank 10, Bit 5[b]
89	Bank 10, Bit 6[b]	90	Bank 10, Bit 7[b]
91	Bank 11, Bit 0[b]	92	Bank 11, Bit 1[b]
93	Bank 11, Bit 2[b]	94	Bank 11, Bit 3[b]
95	Bank 11, Bit 4[b]	96	Bank 11, Bit 5[b]
97	Bank 11, Bit 6[b]	98	Bank 11, Bit 7[b]
99	Isolated +5 V	100	Isolated Ground

a. The J1 connector uses a 100-pin D, Robinson Nugent part (part number P50E-100P1-SR1-TG). Because different vendors use different pinning schemes, the Robinson Nugent connector has a mirror pinout from that described in this table. The Data Translation STP100 and EP331 cable already account for the mirroring; however, if you are building your own cable or screw terminal panel, you must take this into account.

b. Dedicated digital input line. The DT9835 board can generate a PCI-bus interrupt when any of the digital input lines (bits) corresponding to banks 10 and 11 changes state.

STP100 Screw Terminal Panel Pin Assignments

Table 2 lists the pin assignments of connector J1 on the STP100 screw terminal panel.

Table 2: Pin Assignments for Connector J1 on the STP100 Screw Terminal Panel

Pin Number[a]	Signal Description	Pin Number	Signal Description
1	Bank 0, Bit 0	2	Bank 0, Bit 1
3	Bank 0, Bit 2	4	Bank 0, Bit 3
5	Bank 0, Bit 4	6	Bank 0, Bit 5
7	Bank 0, Bit 6	8	Bank 0, Bit 7
9	Bank 1, Bit 0	10	Bank 1, Bit 1
11	Bank 1, Bit 2	12	Bank 1, Bit 3
13	Bank 1, Bit 4	14	Bank 1, Bit 5
15	Bank 1, Bit 6	16	Bank 1, Bit 7
17	Bank 2, Bit 0	18	Bank 2, Bit 1
19	Bank 2, Bit 2	20	Bank 2, Bit 3
21	Bank 2, Bit 4	22	Bank 2, Bit 5
23	Bank 2, Bit 6	24	Bank 2, Bit 7
25	Bank 3, Bit 0	26	Bank 3, Bit 1
27	Bank 3, Bit 2	28	Bank 3, Bit 3
29	Bank 3, Bit 4	30	Bank 3, Bit 5
31	Bank 3, Bit 6	32	Bank 3, Bit 7
33	Bank 4, Bit 0	34	Bank 4, Bit 1
35	Bank 4, Bit 2	36	Bank 4, Bit 3
37	Bank 4, Bit 4	38	Bank 4, Bit 5
39	Bank 4, Bit 6	40	Bank 4, Bit 7
41	Bank 5, Bit 0	42	Bank 5, Bit 1
43	Bank 5, Bit 2	44	Bank 5, Bit 3
45	Bank 5, Bit 4	46	Bank 5, Bit 5
47	Bank 5, Bit 6	48	Bank 5, Bit 7
49	Isolated +5 V	50	Isolated Ground
51	Bank 6, Bit 0	52	Bank 6, Bit 1
53	Bank 6, Bit 2	54	Bank 6, Bit 3

Table 2: Pin Assignments for Connector J1 on the STP100 Screw Terminal Panel (cont.)

Pin Number[a]	Signal Description	Pin Number	Signal Description
55	Bank 6, Bit 4	56	Bank 6, Bit 5
57	Bank 6, Bit 6	58	Bank 6, Bit 7
59	Bank 7, Bit 0	60	Bank 7, Bit 1
61	Bank 7, Bit 2	62	Bank 7, Bit 3
63	Bank 7, Bit 4	64	Bank 7, Bit 5
65	Bank 7, Bit 6	66	Bank 7, Bit 7
67	Bank 8, Bit 0[b]	68	Bank 8, Bit 1[b]
69	Bank 8, Bit 2[b]	70	Bank 8, Bit 3[b]
71	Bank 8, Bit 4[b]	72	Bank 8, Bit 5[b]
73	Bank 8, Bit 6[b]	74	Bank 8, Bit 7[b]
75	Bank 9, Bit 0[b]	76	Bank 9, Bit 1[b]
77	Bank 9, Bit 2[b]	78	Bank 9, Bit 3[b]
79	Bank 9, Bit 4[b]	80	Bank 9, Bit 5[b]
81	Bank 9, Bit 6[b]	82	Bank 9, Bit 7[b]
83	Bank 10, Bit 0[b]	84	Bank 10, Bit 1[b]
85	Bank 10, Bit 2[b]	86	Bank 10, Bit 3[b]
87	Bank 10, Bit 4[b]	88	Bank 10, Bit 5[b]
89	Bank 10, Bit 6[b]	90	Bank 10, Bit 7[b]
91	Bank 11, Bit 0[b]	92	Bank 11, Bit 1[b]
93	Bank 11, Bit 2[b]	94	Bank 11, Bit 3[b]
95	Bank 11, Bit 4[b]	96	Bank 11, Bit 5[b]
97	Bank 11, Bit 6[b]	98	Bank 11, Bit 7[b]
99	Isolated +5 V	100	Isolated Ground

a. The J1 connector on the DT9835 uses a 100-pin D, Robinson Nugent part (part number P50E-100P1-SR1-TG). Because different vendors use different pinning schemes, the Robinson Nugent connector has a mirror pinout from that described in Table 1. The Data Translation STP100 and EP331 cable already account for the mirroring; however, if you are building your own cable or screw terminal panel, you must take this into account.

b. Dedicated digital input line. The DT9835 board can generate a PCI-bus interrupt when any of the digital input lines (bits) corresponding to banks 10 and 11 changes state.

Table 3 lists the screw terminal assignments of the STP100 screw terminal panel.

Table 3: Screw Terminal Assignments of the STP100 Screw Terminal Panel

Screw Terminal Block	Terminal Number	Signal Description
TB1	1	Bank 0, Bit 0
	2	Bank 0, Bit 1
	3	Bank 0, Bit 2
	4	Bank 0, Bit 3
	5	Bank 0, Bit 4
	6	Bank 0, Bit 5
	7	Bank 0, Bit 6
	8	Bank 0, Bit 7
	9	Bank 1, Bit 0
	10	Bank 1, Bit 1
TB2	51	Bank 6, Bit 0
	52	Bank 6, Bit 1
	53	Bank 6, Bit 2
	54	Bank 6, Bit 3
	55	Bank 6, Bit 4
	56	Bank 6, Bit 5
	57	Bank 6, Bit 6
	58	Bank 6, Bit 7
	59	Bank 7, Bit 0
	60	Bank 7, Bit 1

Table 3: Screw Terminal Assignments of the STP100 Screw Terminal Panel (cont.)

Screw Terminal Block	Terminal Number	Signal Description
TB3	11	Bank 1, Bit 2
	12	Bank 1, Bit 3
	13	Bank 1, Bit 4
	14	Bank 1, Bit 5
	15	Bank 1, Bit 6
	16	Bank 1, Bit 7
	17	Bank 2, Bit 0
	18	Bank 2, Bit 1
	19	Bank 2, Bit 2
	20	Bank 2, Bit 3
TB4	61	Bank 7, Bit 2
	62	Bank 7, Bit 3
	63	Bank 7, Bit 4
	64	Bank 7, Bit 5
	65	Bank 7, Bit 6
	66	Bank 7, Bit 7
	67	Bank 8, Bit 0[a]
	68	Bank 8, Bit 1[a]
	69	Bank 8, Bit 2[a]
	70	Bank 8, Bit 3[a]

Table 3: Screw Terminal Assignments of the STP100 Screw Terminal Panel (cont.)

Screw Terminal Block	Terminal Number	Signal Description
TB5	21	Bank 2, Bit 4
	22	Bank 2, Bit 5
	23	Bank 2, Bit 6
	24	Bank 2, Bit 7
	25	Bank 3, Bit 0
	26	Bank 3, Bit 1
	27	Bank 3, Bit 2
	28	Bank 3, Bit 3
	29	Bank 3, Bit 4
	30	Bank 3, Bit 5
TB6	71	Bank 8, Bit 4[a]
	72	Bank 8, Bit 5[a]
	73	Bank 8, Bit 6[a]
	74	Bank 8, Bit 7[a]
	75	Bank 9, Bit 0[a]
	76	Bank 9, Bit 1[a]
	77	Bank 9, Bit 2[a]
	78	Bank 9, Bit 3[a]
	79	Bank 9, Bit 4[a]
	80	Bank 9, Bit 5[a]

Table 3: Screw Terminal Assignments of the STP100 Screw Terminal Panel (cont.)

Screw Terminal Block	Terminal Number	Signal Description
TB7	31	Bank 3, Bit 6
	32	Bank 3, Bit 7
	33	Bank 4, Bit 0
	34	Bank 4, Bit 1
	35	Bank 4, Bit 2
	36	Bank 4, Bit 3
	37	Bank 4, Bit 4
	38	Bank 4, Bit 5
	39	Bank 4, Bit 6
	40	Bank 4, Bit 7
TB8	81	Bank 9, Bit 6[a]
	82	Bank 9, Bit 7[a]
	83	Bank 10, Bit 0[a]
	84	Bank 10, Bit 1[a]
	85	Bank 10, Bit 2[a]
	86	Bank 10, Bit 3[a]
	87	Bank 10, Bit 4[a]
	88	Bank 10, Bit 5[a]
	89	Bank 10, Bit 6[a]
	90	Bank 10, Bit 7[a]

Table 3: Screw Terminal Assignments of the STP100 Screw Terminal Panel (cont.)

Screw Terminal Block	Terminal Number	Signal Description
TB9	41	Bank 5, Bit 0
	42	Bank 5, Bit 1
	43	Bank 5, Bit 2
	44	Bank 5, Bit 3
	45	Bank 5, Bit 4
	46	Bank 5, Bit 5
	47	Bank 5, Bit 6
	48	Bank 5, Bit 7
	49	Isolated +5 V
	50	Isolated Ground
TB10	91	Bank 11, Bit 0[a]
	92	Bank 11, Bit 1[a]
	93	Bank 11, Bit 2[a]
	94	Bank 11, Bit 3[a]
	95	Bank 11, Bit 4[a]
	96	Bank 11, Bit 5[a]
	97	Bank 11, Bit 6[a]
	98	Bank 11, Bit 7[a]
	99	Isolated +5 V
	100	Isolated Ground

a. Dedicated digital input line.