

The Embedded I/O Company



TPIM005

PIM I/O Module

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User Manual

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TPIM005

PIM I/O Module with HD68 SCSI-3 type connector for TPMC862/TPMC863 and TPMC362/TPMC363

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Style Conventions

Hexadecimal characters are specified with prefix 0x, i.e. 0x029E (that means hexadecimal value 029E).

For signals on hardware products, an 'Active Low' is represented by the signal name with # following, i.e. IP_RESET#.

Access terms are described as:

W	Write Only
R	Read Only
R/W	Read/Write
R/C	Read/Clear
R/S	Read/Set

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Issue	Description	Date
1.0	First Issue	October 2005
1.1	New address TEWS LLC	September 2006
1.2	Applicable with new TPMC863 and TPMC363	March 2007
1.0.3	New notation of User Manual Issue	November 2009

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1 Product Description

The TPIM005 is a standard single-width PIM I/O module to be used with any PIM Carrier like TEWS' TCP020-TM-10, TVME020-TM-10 or others. It offers easy access to the PMC back I/O lines of PMC carriers with back I/O like TEWS TCP260 or TVME8400.

The TPIM005 distributes all 64 PMC back I/O lines to a HD68 SCSI-3 type connector located in the EMI front panel. The routing and I/O signal mapping of the TPIM005-10 is optimized for differential pair routing.

The TPIM005-10 recreates the PMC front I/O signal mapping in its HD68 SCSI-3 type connector when used with the TPMC862/TPMC863 or TPMC362/TPMC363. Refer to the TPMC Data Sheets to find out if the TPIM005-10 recreates the PMC front I/O signal mapping in its HD68 SCSI-3 type connector.

The operating temperature is -40°C to +85°C.

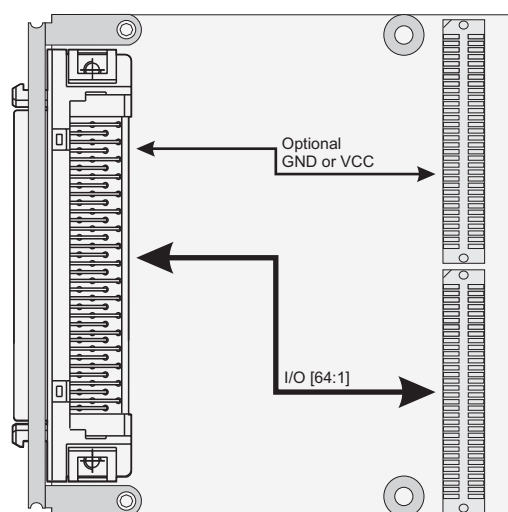


Figure 1-1 : Block Diagram

The TPIM005-10 recreates the PMC front I/O signal mapping in its HD68 SCSI-3 type connector when used with the TPMC862/TPMC863 or TPMC362/TPMC363.

Always refer to the TPMC Data Sheets to find out the pin assignment of the TPIM005-10 HD68 SCSI-3 type connector.

2 Technical Specification

Front panel	EMI front panel
Number of PMC I/O Lines supported	64
Operating Data	
Temperature Range	Operating: -40°C to +85°C Storage: -40°C to +100°C
MTBF	1435000 h
Weight	47 g
Board Size	69 mm x 74 mm
Humidity	5 – 95% non condensing

Table 2-1 : Technical Specification

3 Connector P10

P10 Pin	Signal Name	Signal Name	P10 Pin
1	-	-	2
3	-	-	4
5	-	-	6
7	-	-	8
9	-	-	10
11	-	-	12
13	GND	-	14
15	-	-	16
17	-	GND	18
19	-	-	20
21	-	-	22
23	-	-	24
25	-	-	26
27	-	-	28
29	GND	-	30
31	-	-	32
33	-	GND	34
35	-	-	36
37	-	-	38
39	-	-	40
41	-	-	42
43	-	-	44
45	GND	-	46
47	-	-	48
49	-	GND	50
51	-	-	52
53	-	-	54
55	-	-	56
57	-	-	58
59	-	-	60
61	-	-	62
63	-	-	64

Table 3-1 : Connector P10

4 Connector P14

P14 Pin	Signal Name	Signal Name	P14 Pin
1	PMC I/O 1	PMC I/O 2	2
3	PMC I/O 3	PMC I/O 4	4
5	PMC I/O 5	PMC I/O 6	6
7	PMC I/O 7	PMC I/O 8	8
9	PMC I/O 9	PMC I/O 10	10
11	PMC I/O 11	PMC I/O 12	12
13	PMC I/O 13	PMC I/O 14	14
15	PMC I/O 15	PMC I/O 16	16
17	PMC I/O 17	PMC I/O 18	18
19	PMC I/O 19	PMC I/O 20	20
21	PMC I/O 21	PMC I/O 22	22
23	PMC I/O 23	PMC I/O 24	24
25	PMC I/O 25	PMC I/O 26	26
27	PMC I/O 27	PMC I/O 28	28
29	PMC I/O 29	PMC I/O 30	30
31	PMC I/O 31	PMC I/O 32	32
33	PMC I/O 33	PMC I/O 34	34
35	PMC I/O 35	PMC I/O 36	36
37	PMC I/O 37	PMC I/O 38	38
39	PMC I/O 39	PMC I/O 40	40
41	PMC I/O 41	PMC I/O 42	42
43	PMC I/O 43	PMC I/O 44	44
45	PMC I/O 45	PMC I/O 46	46
47	PMC I/O 47	PMC I/O 48	48
49	PMC I/O 49	PMC I/O 50	50
51	PMC I/O 51	PMC I/O 52	52
53	PMC I/O 53	PMC I/O 54	54
55	PMC I/O 55	PMC I/O 56	56
57	PMC I/O 57	PMC I/O 58	58
59	PMC I/O 59	PMC I/O 60	60
61	PMC I/O 61	PMC I/O 62	62
63	PMC I/O 63	PMC I/O 64	64

Table 4-1 : Connector P14

5 Connector X1

X1 Pin	Signal Name	Signal Name	X1 Pin
1	PMC I/O 1	PMC I/O 2	2
3	PMC I/O 3	PMC I/O 4	4
5	PMC I/O 5	PMC I/O 6	6
7	PMC I/O 7	PMC I/O 8	8
9	GND	PMC I/O10	10
11	PMC I/O 11	PMC I/O 12	12
13	PMC I/O 13	GND	14
15	PMC I/O 15	PMC I/O 16	16
17	PMC I/O 33	PMC I/O 34	18
19	PMC I/O 35	PMC I/O 36	20
21	PMC I/O 37	PMC I/O 38	22
23	PMC I/O 39	PMC I/O 40	24
25	GND	PMC I/O 42	26
27	PMC I/O 43	PMC I/O 44	28
29	PMC I/O 45	GND	30
31	PMC I/O 47	PMC I/O 48	32
33)*)*	34
35	PMC I/O 17	PMC I/O 18	36
37	PMC I/O 19	PMC I/O 20	38
39	PMC I/O 21	PMC I/O 22	40
41	PMC I/O 23	PMC I/O 24	42
43	GND	PMC I/O 26	44
45	PMC I/O 27	PMC I/O 28	46
47	PMC I/O 29	GND	48
49	PMC I/O 31	PMC I/O 32	50
51	PMC I/O 49	PMC I/O 50	52
53	PMC I/O 51	PMC I/O 52	54
55	PMC I/O 53	PMC I/O 54	56
57	PMC I/O 55	PMC I/O 56	58
59	GND	PMC I/O 58	60
61	PMC I/O 59	PMC I/O 60	62
63	PMC I/O 61	GND	64
65	PMC I/O 63	PMC I/O 64	66
67)*)*	68

Table 5-1 : Connector X1

*) Each of these pins can separately be connected to GND or VCC by a 0 Ohm resistor or solder jumper to realize additional logic level at these I/O lines. The defaults of the TPIM005-10 are floating pins.

6 Pin Assignment

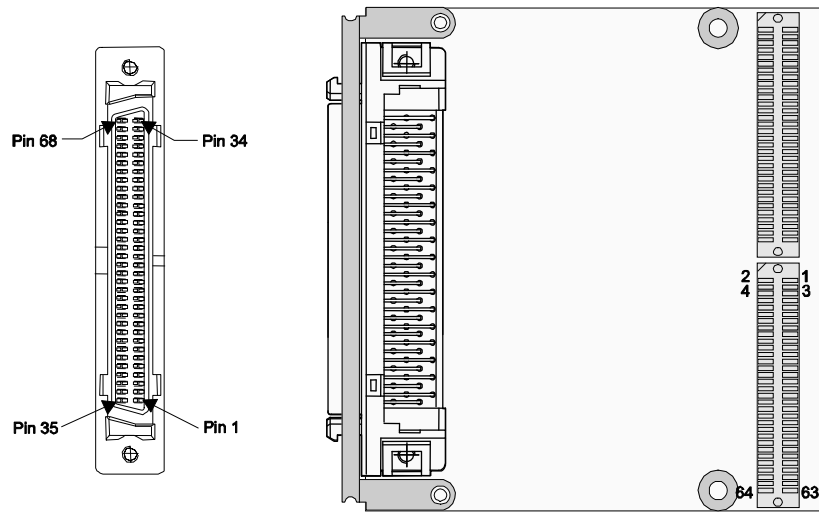


Figure 6-1 : Pin Assignment