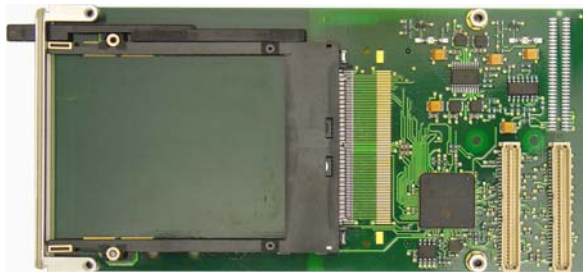


TPMC872 1/2 Socket CardBus / PC Card Interface

Application Information

The TPMC872 is a standard single-width 32 bit PMC module providing one or two sockets for 16 bit PC Card or 32 bit CardBus Cards using a dual socket PC Card / CardBus controller and a power management unit. The first CardBus / PC Card socket is mounted on the component side of the PMC. This socket supports card types I and II. The second PC Card / CardBus socket is mounted on the solder side of the PMC (TPMC872-2x only), supporting card types I, II and III.

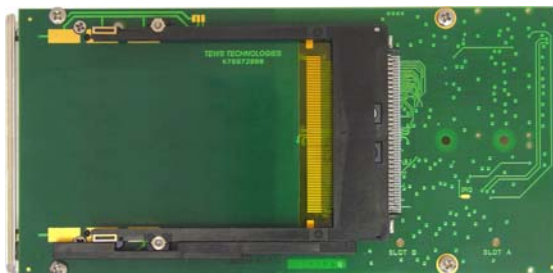
The register map of the PC Card controller is Intel 82365-DF compatible.



TPMC872-20 component side

The power management unit provides 3.3V or 5.0V PC Card / CardBus power supply and 3.3V, 5.0V or 12V PC Card / CardBus programming voltage. Due to the short circuit and thermal protection of the power management unit no external fuses are needed on the module.

The TPMC872 provides full ExCA register implementation for 16 bit PC Cards compatible with PCMCIA 2.1/JEIDA 4.2 standards. Both memory and I/O cards are supported. Up to five memory windows and up to two I/O windows are available for PC Card16 accesses. For 32 bit CardBus cards two memory windows and two I/O windows are supported by the controller. CardBus card status information can be accessed in five card bus socket registers which can be mapped in the host memory space.



TPMC872-20 solder side

Note: The PC Card assembly has a maximum component height of 5.6mm which is 0.9mm above the specified component height (4.7mm) according to IEEE1386.1. The second PC Card socket is assembled on the solder side of the PMC, requiring additional space.

The TPMC872-10, -11 and -12 have one PC Card / CardBus socket:

-10: The inserted card is accessible through the PMC front panel.

-11: The socket is relegated so that the inserted card is aligned with the PMC board border. It has no PMC front panel.

-12: The socket is relegated so that the inserted card is aligned with the PMC board border. It has a PMC front panel.

The TPMC872-20, -21 and -22 have two PC Card / CardBus sockets:

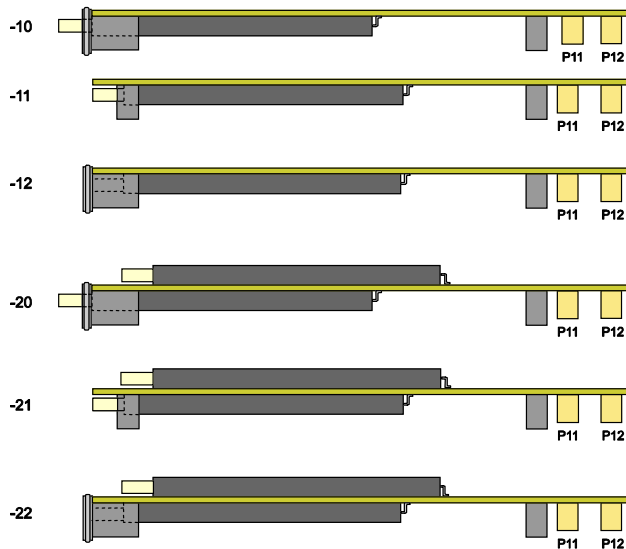
-20: The inserted card in the first socket is accessible through the front panel. The second socket on the solder side of the PMC is relegated so that the inserted card is located behind the PMC board border.

-21: The first socket is relegated so that the inserted card is aligned with the PMC board border. The second socket on the solder side of the PMC is relegated so that the inserted card is located behind the PMC board border. It has no PMC front panel.

-22: The first socket is relegated so that the inserted card is aligned with the PMC board border. The second socket on the solder side of the PMC is relegated so that the inserted card is located behind the PMC board border. It has a PMC front panel.

The Embedded I/O Company

For a detailed side view on the placement of the PC Card / CardBus sockets, see the figure below:



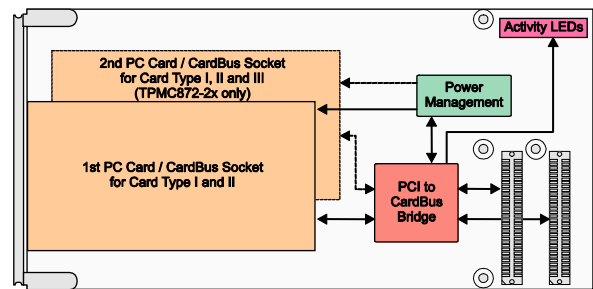
For First Time Users the Engineering Documentation TPMC872-ED is recommended. The Engineering Documentation includes TPMC872-DOC, schematics and data sheets.

Driver Support:

- Software Support (TPMC872-SW-xx) for different operating systems is available.
- The TPMC872 is directly supported from WindowsXP/2000 and Linux.

Technical Information

- Standard single-width 32 bit PMC module conforming to IEEE P1386.1
- PCI 2.2 compliant interface
- Board size: 149 mm x 74 mm
- Up to two PC Card / CardBus Sockets with hot insertion and removal, supports memory and I/O cards of type I, II and III (second socket only).
- Operating temperature: -40°C to +85°C



Order Information

None RoHS Compliant

- TPMC872-10** One Socket PC Card Interface, inserted PC Card accessible through PMC front panel
- TPMC872-11** One Socket PC Card Interface, inserted PC Card aligned with PMC board border, no front panel
- TPMC872-12** One Socket PC Card Interface, inserted PC Card aligned with PMC board border, with PMC front panel
- TPMC872-20** Two Socket PC Card Interface, inserted PC Card in first socket accessible through PMC front panel. Second socket is relegated so that the inserted card is located behind the PMC board border.
- TPMC872-21** Two Socket PC Card Interface, inserted card in first socket is aligned with the PMC board border. Second socket is relegated so that the inserted card is located behind the PMC board border, no PMC front panel.
- TPMC872-22** Two Socket PC Card Interface, inserted card in first socket is aligned with the PMC board border. Second socket is relegated so that the inserted card is located behind the PMC board border, with PMC front panel.

Documentation

- TPMC872-DOC** User Manual
- TPMC872-ED** Engineering Documentation, includes TPMC872-DOC

Software

- TPMC872-SW-42** VxWorks Software Support (Legacy and VxBus-Enabled Software Support)

For other operating systems please contact TEWS.