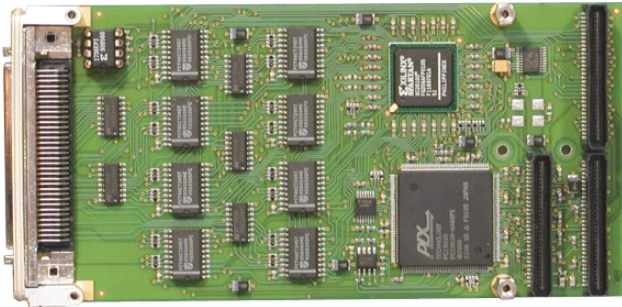# TPMC682   3 x 16 bit I/O Ports with 512 Word FIFO and Handshake

Application Information

The TPMC682 is a standard single-width 32 bit PMC with three 16 bit TTL digital input/output lines controlled by handshake signals. These handshake signals run over an additional 8 bit input and an 8 bit output port. Interlocked or pulsed handshake protocol is provided. Each I/O port has a 512 words deep FIFO. All I/O lines are protected by bus transceivers and ESD protection devices.

The PLX PCI9030 PCI target chip is used for the PCI interface.

An interrupt can be generated on INTA, when the filling level of a FIFO exceeds the value of the individually programmable threshold. Each port has a programmable timeout counter for input direction of data.
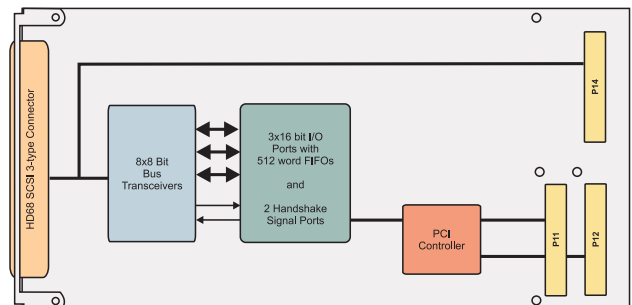
The TPMC682 provides front panel I/O via a HD68 SCSI-3 type connector and rear panel I/O via P14.

For First Time Users the Engineering Documentation TPMC682-ED is recommended. The Engineering Documentation includes TPMC682-DOC, schematics and data sheets.

Software Support (TDRV008-SW-xx) for different operating systems is available.

Technical Information

- Standard single-width 32 bit PMC module conforming to IEEE P1386.1
- PCI 2.1 compliant interface
- 3.3V and 5V PCI Signaling Voltage
- Board size: 149 mm x 74 mm
- Digital Input/Output Ports
  - TTL I/O's arranged in 3 x 16 bit ports and 2 x 8 bit ports for handshake signals and for general purpose
  - 512 word FIFO for each I/O port
  - individually programmable FIFO thresholds
  - programmable timeout for reading
  - Direction programmable per 16 bit port
  - TTL signaling voltage (maximum current: +/-8mA)
- ESD and overvoltage protection for each I/O line
- I/O access:
  - 64 I/O lines on HD68 front connector, parallel to
  - 56 I/O lines (Port 0/1 [15:0], Port 2 [7:0]) and system ground on rear connector P14; changeable to 64 I/O lines (Port 0/1/2 [15:0]) without ground
- Temperature range: -40°C to +85°C

TEWS TECHNOLOGIES GmbH keeps the right to change technical specification without further notice.   09/2009
All trademarks mentioned are property of their respective owners.

TEWS TECHNOLOGIES GmbH
Am Bahnhof 7   25469 Halstenbek, Germany
Phone: +49 (0) 4101 4058 0   Fax: +49 (0) 4101 4058 19
e-mail: info@tews.com   www.tews.com

Order Information

RoHS Compliant
TPMC682-10R   Three 16 bit Digital Input/Output Ports

None RoHS Compliant
TPMC682-10   None RoHS compliant version of TPMC682-10R

Documentation
TPMC682-DOC   User Manual
TPMC682-ED   Engineering Documentation, includes TPMC682-DOC

Software
TDRV008-SW-25   Integrity Software Support
TDRV008-SW-42   VxWorks Software Support (Legacy and VxBus-Enabled Software Support)
TDRV008-SW-65   Windows XP/XPE/2000 Software Support
TDRV008-SW-72   LynxOS Software Support
TDRV008-SW-82   LiNUX Software Support
TDRV008-SW-95   QNX 6 Software Support

For other operating systems please contact TEWS.

Related Products
TA304   Cable Kit for modules with HD68 connector
TPIM002   PIM I/O Module with HD68 SCSI-3 type connector