

## TPMC680 8 x 8 Bit Digital Inputs/Outputs (5V TTL)



### Application Information

The TPMC680 is a standard single-width 32 bit PMC module offering 64 bit of TTL I/O arranged in 8 x 8 bit ports. Direction of the I/O lines is software programmable for each of the 8 bit ports. Each 8 bit port is built up using a TTL bus transceiver. Each line is protected against ESD and overvoltage.

Each input can generate an interrupt. Signal edge handling is programmable to interrupt on rising and/or falling edge of the input signal. Interrupts can be enabled and disabled for each bit. For interrupt source detection the status of each bit can be read from the interrupt status register.

The TPMC680 supports three basic modes of operation: standard byte I/O with interrupts, 2 x 16 bit port with handshake and 1 x 32 bit port with handshake. The two handshake modes offer double buffered inputs or outputs and interlocked or pulsed handshake output protocol.

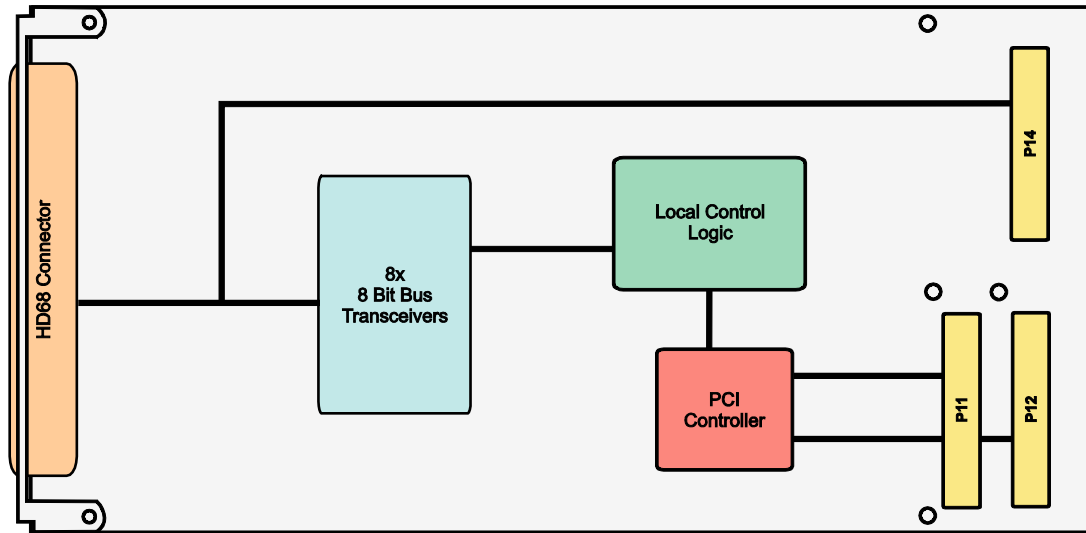
In byte I/O mode it is possible to read or write synchronously all 64 lines.

The TPMC680 provides front panel I/O via a HD68 SCSI-3 type connector and rear panel I/O via P14.

Software Support (TPMC680-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
- Interrupt generating digital I/O lines
  - TTL I/O's arranged in 8 x 8 bit ports
  - Direction programmable per 8 bit port
  - TTL signaling voltage (maximum current: ±16mA)
- 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 [55:0] and system ground on rear connector P14; changeable to up to 64 I/O lines without ground
- Basic operating modes: Byte I/O and two handshake modes
- Temperature range: -40°C to +85°C



### Order Information

#### RoHS Compliant

**TPMC680-10R** 64-bit TTL I/O, 8 x 8-bit Port, interrupts, handshake modes, HD68, 7 ports available at P14 I/O

For the availability of non-RoHS compliant (lead solder) products please contact TEWS.

#### Documentation

**TPMC680-DOC** User Manual

#### Software

**TPMC680-SW-25** Integrity Software Support

**TPMC680-SW-42** VxWorks Software Support (Legacy and VxBus-Enabled Software Support)

**TPMC680-SW-65** Windows Software Support

**TPMC680-SW-82** Linux Software Support

**TPMC680-SW-95** QNX Software Support

For other operating systems please contact TEWS.

#### Related Products

**TA304** Cable Kit for Modules with HD68 Connector

**TPIM002** PIM I/O Module, HD68 connector