TPMC681 64 Digital Inputs/Outputs (Bit I/O)

Application Information
The TPMC681 is a standard single-width 32 bit PMC module offering 64 ESD-protected TTL I/Os. Each line is individually programmable as input, output or tri-state. The receivers are always enabled, which allows determining the state of each I/O line at any time. This can be used as read back function for lines configured as outputs. Each TTL I/O line has a pull-up resistor. The pull-up voltage is selectable to be either +3.3V or +5V.

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

The TPMC681 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 TPMC681-ED is recommended. The Engineering Documentation includes TPMC681-DOC, schematics and data sheets.

Software Support (TDRV006-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
- 64 interrupt generating digital I/O lines
  - 64 TTL I/Os
  - Direction individually programmable per line
  - TTL signaling voltage (maximum current: +/-24mA)
- ESD and overvoltage protection for each I/O line
- I/O access: 64 I/O lines on HD68 front connector, parallel to up to 64 I/O lines on rear connector P14 (upper 8 lines changeable to system ground)
- Temperature range: -40°C to +85°C
Order Information

**RoHS Compliant**
TPMC681-10R 64 Digital Inputs/Outputs

**None RoHS Compliant**
TPMC681-10  None RoHS compliant version of TPMC681-10R

**Documentation**
TPMC681-DOC User Manual
TPMC681-ED  Engineering Documentation, includes TPMC681-DOC

**Software**
TDRV006-SW-25  Integrity Software Support
TDRV006-SW-42  VxWorks Software Support (Legacy and VxBus-Enabled Software Support)
TDRV006-SW-65  Windows XP/XPE/2000 Software Support
TDRV006-SW-72  LynxOS Software Support
TDRV006-SW-82  LINUX Software Support
TDRV006-SW-95  QNX 6 Software Support
For other operating systems please contact TEWS.

**Related Products**
TA304  Cable Kit for modules with HD68 SCSI-3 connector
TPIM003  PIM I/O Module with HD68 SCSI-3 type connector