# TEWS
# TECHNOLOGIES

## The Embedded I/O Company

## TPMC362  Conduction Cooled PMC
## 4 Channel High Speed Synch/Asynch Serial Interface

### Application Information

The TPMC362 is a conduction cooled single-width 32 bit PMC with four high speed serial data communication channels.

An Infineon PEF 20534 DMA Supported Serial Communication Controller (DSCC4) with integrated bus master PCI interface is used.

Several interrupt sources can generate interrupts on INTA for each channel. Interrupts can be enabled and disabled separately.
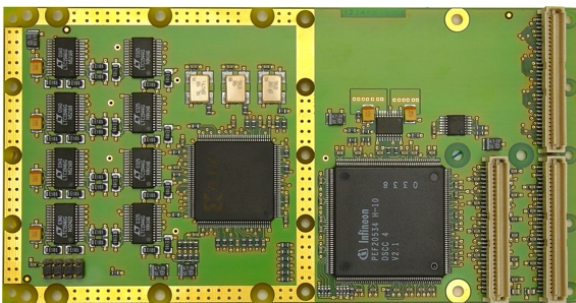
A 14.7456 MHz oscillator provides standard asynchronous baud rates. An additional 24 MHz oscillator is provided for other baud rates. A 10 MHz oscillator is used for the maximum synchronous baud rate of 10Mbit/s.

Each channel can support many serial communication protocols such as HDLC, SDLC, PPP, asynchronous, monosynchronous, bisynchronous.

Multiprotocol transceivers are used for the line interface. The physical interface can be selected by software individually for each channel as EIA-232, EIA-422, EIA-449, EIA-530, EIA-530A, V.35, V.36 or X.21.

The TPMC362 supports Receive Data (RxD +/-), Transmit Data (TxD +/-), Receive Clock (RxC +/-), Transmit Clock (TxC +/-), Ready-To-Send (RTS +/-), Clear-To-Send (CTS +/-), Carrier-Detect (CD +/-) and GND for each channel.

The DSCC4 contains a central receive and transmit FIFO of 128 long words (32 bit) each. Additionally each channel has a receive FIFO (17 long words deep) and a transmit FIFO (8 long words deep).
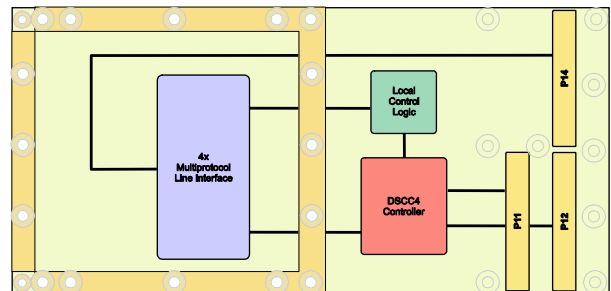


The TPMC362 provides rear panel I/O via P14.

For First Time Users the Engineering Documentation TPMC362-ED is recommended. The Engineering Documentation includes TPMC362-DOC, schematics and data sheets.

Software support (TDRV001-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 master/slave interface
- ❍ Board size: 143.75 mm x 74 mm
- ❍ Four high speed synchronous/asynchronous serial interfaces based on Infineon PEF20534
- ❍ Support of RxD, TxD, RxC, TxC, RTS, CTS, CD and GND on rear connector P14
- ❍ Physical interface (individually programmable per channel):
  EIA-232, EIA-422, EIA-449, EIA-530, EIA-530A, V.35, V.36 and X.21
- ❍ Maximum data rate: 10 Mbit/s (synchronous), 2 Mbit/s (asynchronous), internal or external provided clock
  EIA-232: up to 115.2 kbit/s
- ❍ Temperature range: -40°C to +85°C

## Order Information

### None RoHS Compliant

**TPMC362-20**  Conduction Cooled PMC
4 Channel High Speed Synch/Asynch
Serial Interface (None RoHS
compliant)

### Documentation

**TPMC362-DOC**  User Manual
**TPMC362-ED**  Engineering Documentation, includes
TPMC362-DOC

### Software

**TDRV001-SW-42**  VxWorks Software Support
**TDRV001-SW-65**  Windows XP/XPE/2000 Software
Support
**TDRV001-SW-72**  LynxOS Software Support
**TDRV001-SW-82**  LiNUX Software Support
**TDRV001-SW-95**  QNX 6 Software Support

For other operating systems please contact TEWS.

### Related Products

**TPIM002**  PIM I/O Module with HD68 SCSI-3
type connector
**TPIM005**  PIM I/O Module with HD68 SCSI-3
type connector