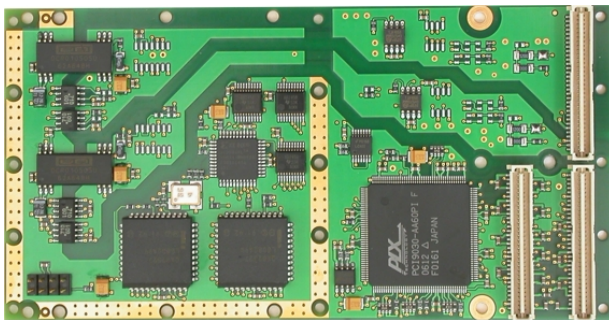# TPMC316   Conduction Cooled PMC, Isolated 2 x CAN Bus

Application Information

The TPMC316 is a conduction cooled single-width 32 bit PMC module and provides two complete CAN bus interfaces using two Intel 82527 CAN controllers. Both channels are completely independent and support CAN specification 2.0 part A and B (standard 11 bit identifier and extended 29 bit identifier).
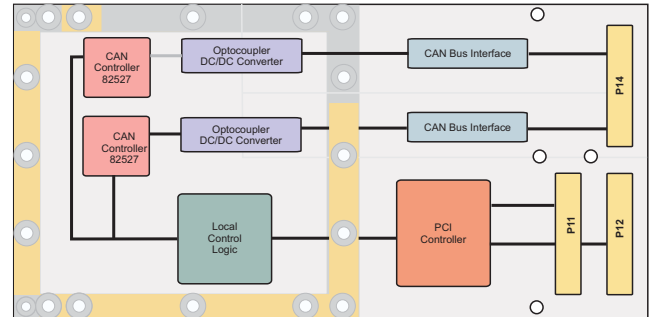
Each physical interface is optically isolated from the CAN controller and powered by an on board DC/DC converter and a voltage regulator. Two versions of physical interface are available: the TPMC316-10 supports CAN high speed for each of the two channels. The TPMC316-11 provides a modified RS485 interface for each of the two channels. The bus line termination can be enabled or disabled for each channel by solder pads (disabled per default).

The TPMC316 has no front panel. It uses P14 I/O connector with the same pin assignment as the TPMC816.

For First Time Users the Engineering Documentation TPMC316-ED is recommended. The Engineering Documentation includes TPMC316-DOC, schematics and data sheets.

Software Support (TDRV011-SW-xx) for different operating systems is available.

Technical Information

- ○ Conduction Cooled single-width 32 bit PMC module conforming to   IEEE P1386.1, no front panel
- ○ PCI 2.1 compliant interface
- ○ 3.3V and 5V PCI Signaling Voltage
- ○ Board size: 144 mm x 74 mm
- ○ Two CAN bus interface based on Intel 82527 chip
- ○ Support CAN specification 2.0 part A and B (standard and extended data frames)
- ○ Programmable global mask
- ○ 15 message objects of 8 byte data length
- ○ Powerful error handling
- ○ Programmable transfer rates
- ○ Physical interface CAN High Speed (according to ISO 11 898) on TPMC316-10 or modified RS485 on TPMC316-11 per channel
- ○ Physical interface optically isolated from CAN controller by on board DC/DC converter and optocoupler per channel
- ○ Transfer rate 1 Mbit/s maximum (bus length up to 40 m)
- ○ Operating temperature range –40°C to +85°C

09/2009

Order Information

RoHS Compliant
TPMC316-10R   Conduction Cooled PMC, Isolated 2 x CAN Bus (CAN High Speed)
TPMC316-11R   Conduction Cooled, Isolated 2 x CAN Bus (modified RS485)

None RoHS Compliant
TPMC316-10   None RoHS compliant version of TPMC316-10R
TPMC316-11   None RoHS compliant version of TPMC316-11R

Documentation
TPMC316-DOC   User Manual
TPMC316-ED   Engineering Documentation, includes TPMC316-DOC

Software
TDRV011-SW-25   Integrity Software Support
TDRV011-SW-42   VxWorks Software Support (Legacy and VxBus-Enabled Software Support)
TDRV011-SW-65   Windows XP/XPE/2000 Software Support
TDRV011-SW-72   LynxOS Software Support
TDRV011-SW-82   LiNUX Software Support
TDRV011-SW-95   QNX 6 Software Support

For other operating systems please contact TEWS.

Related Products
TPIM001   PIM I/O Module with 50 pin SCSI-2 type connector