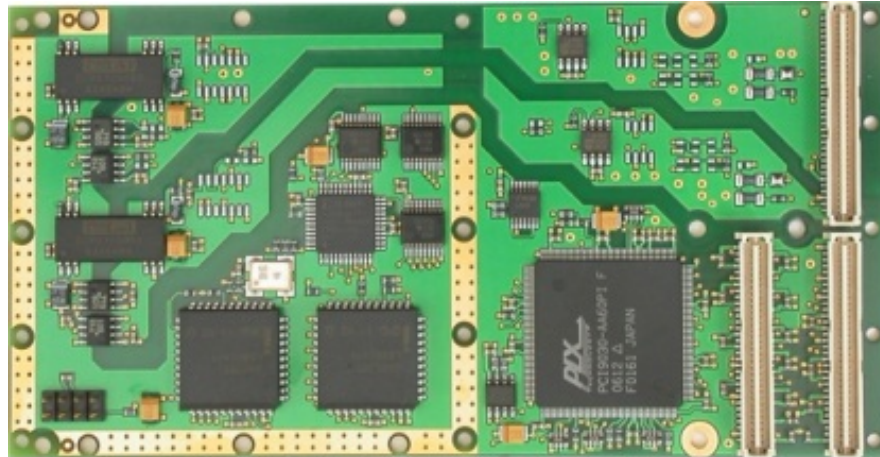## TPMC316 Conduction Cooled PMC , Isolated 2 x CAN Bus

Application Information

The TPMC316 is a conduction cooled single-width 32 bit PMC module and provides two complete CAN bus interfaces using two Bosch CC770 CAN controllers. The CC770 offers pin compatibility with Intel's 82527 CAN Controller and is a function replacement. 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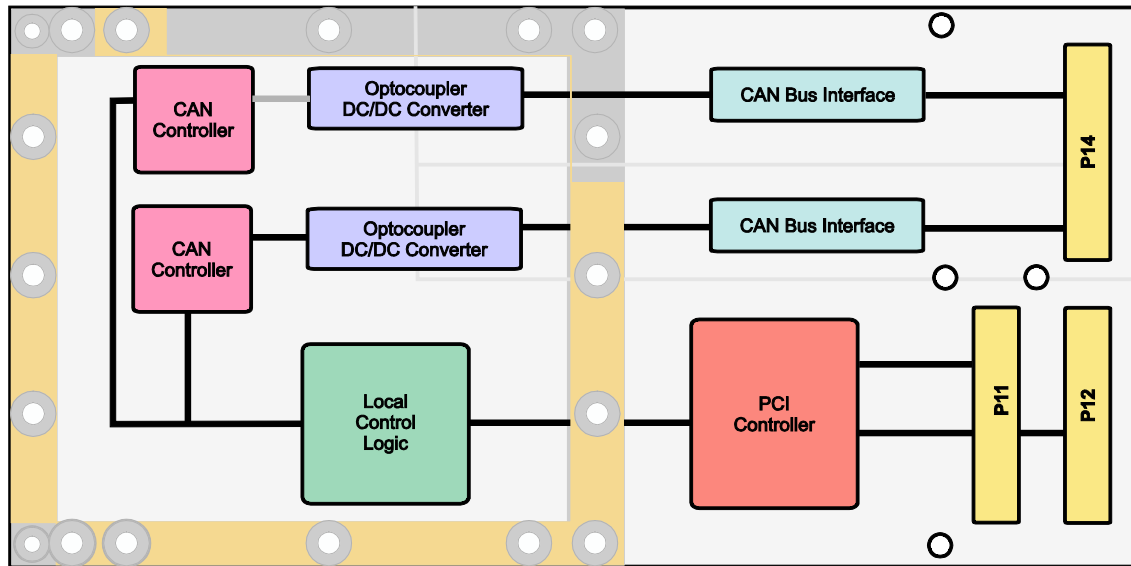 versions of physical interface are available: the TPMC316-10R supports CAN high speed for each of the two channels. The TPMC316-11R provides a modified RS485 interface for each of the two channels. The bus line termination can be enabled or disabled for each channel by solder pads (disabled per default).

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

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
- CAN bus interface based on Bosch CC770 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 TPMC316-10R or modified RS485 on TPMC316-11R 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

Order Information