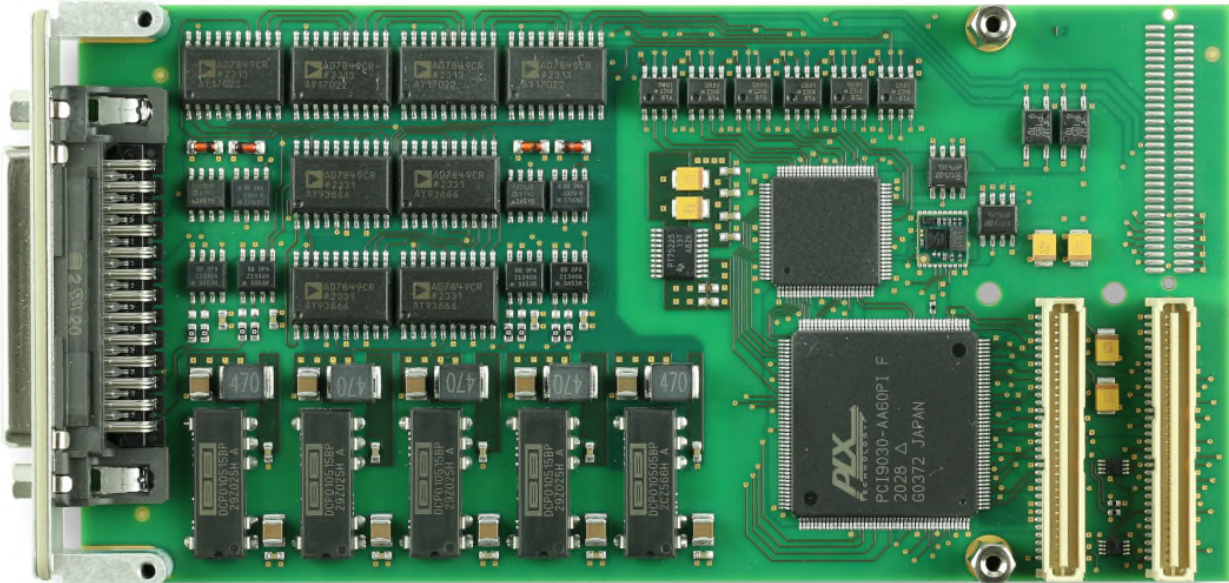# TPMC551 8/4 Channels of Isolated 16-bit D/A

TPMC551-10R

Application Information

The TPMC551 is a standard single-width 32-bit PMC module providing optically isolated 16-bit analog outputs.

The number of D/A channels and the I/O connector depends on the module version. Settling time to 0.003% is 10 μs typical. Immediate and simultaneous loading are supported.

A sequencer allows periodical updates of enabled channels and the sequence timer range extends from 100 μs to 6.5 s.

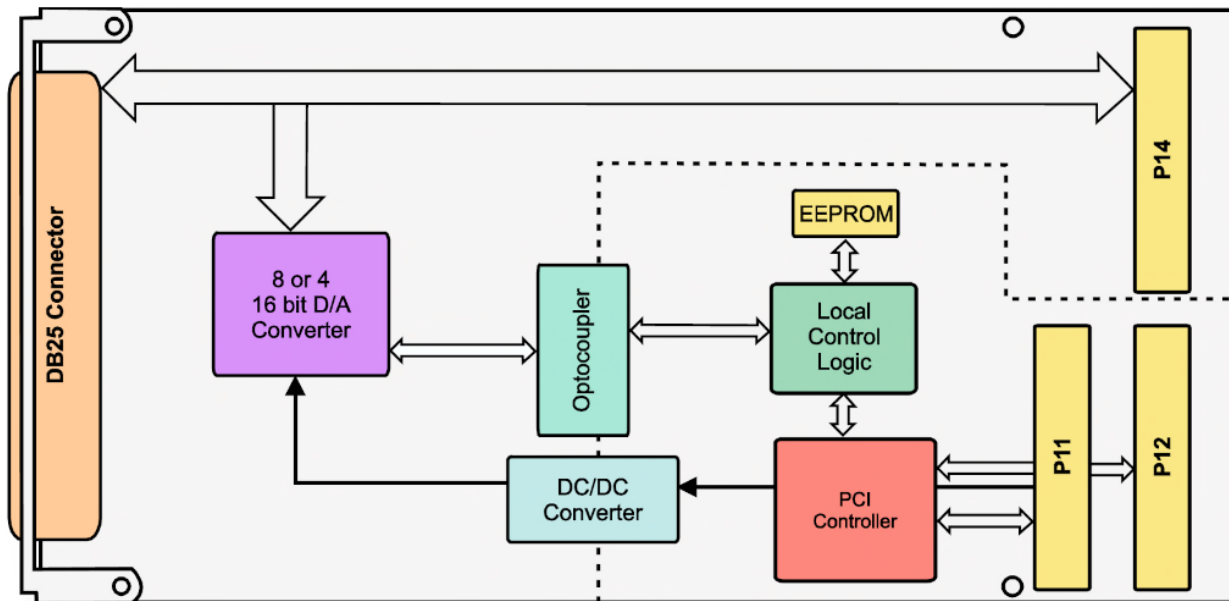The TPMC551 offers two output voltage ranges, ±10 V and 0-10 V, which are selectable by solder pads.

An board DC/DC converter powers the isolated DAC and the output buffers.

Each TPMC551 is delivered factory calibrated. The calibration information is stored in the Calibration-PROM unique to each PMC module.

Software Support (TPMC551-SW-xx) is available for different operating systems.

Technical Information

- ❏ Form Factor: Standard single-width 32-bit PMC module conforming to IEEE P1386/P1386.1
  - ❏ Board size: 147.5 mm x 74 mm
  - ❏ PCI v2.2 compliant interface
  - ❏ 3.3V and 5V PCI Signaling Voltage
- ❏ 16-bit D/A conversion
  - ❏ 0-10 V or ±10 V selectable output voltage range
  - ❏ 10 μs maximum settling time
  - ❏ 4 mA, 1000 pF maximum load

- ❏ I/O access:
  - ❏ Front panel I/O: DB25 female connector
  - ❏ Back I/O: PMC P14 I/O connector
- ❏ Operating temperature -40 °C to +85 °C
- ❏ MTBF (MIL-HDBK217F/FN2 G_B 20 °C)
  TPMC551-10R: 371000 h
  TPMC551-11R: 512000 h
  TPMC551-20R: 353000 h
  TPMC551-21R: 479000 h

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Block Diagram

Order Information

RoHS Compliant

TPMC551-10R   8 Channel Isolated 16-bit D/A, +/-10 V or 0-10 V, DB25
TPMC551-11R   4 Channel Isolated 16-bit D/A, +/-10 V or 0-10 V, DB25
TPMC551-20R   8 Channel Isolated 16-bit D/A, +/-10 V or 0-10 V, P14 I/O
TPMC551-21R   4 Channel Isolated 16-bit D/A, +/-10 V or 0-10 V, P14 I/O

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

Software

TPMC551-SW-25 Integrity Software Support
TPMC551-SW-42 VxWorks Software Support
TPMC551-SW-65 Windows Software Support
TPMC551-SW-82 Linux Software Support
TPMC551-SW-95 QNX Software Support

For other operating systems please contact TEWS.

Related Products

TA303   Cable Kit for Modules with DB25 Female Connector
TPIM002   PIM I/O Module, HD50 connector