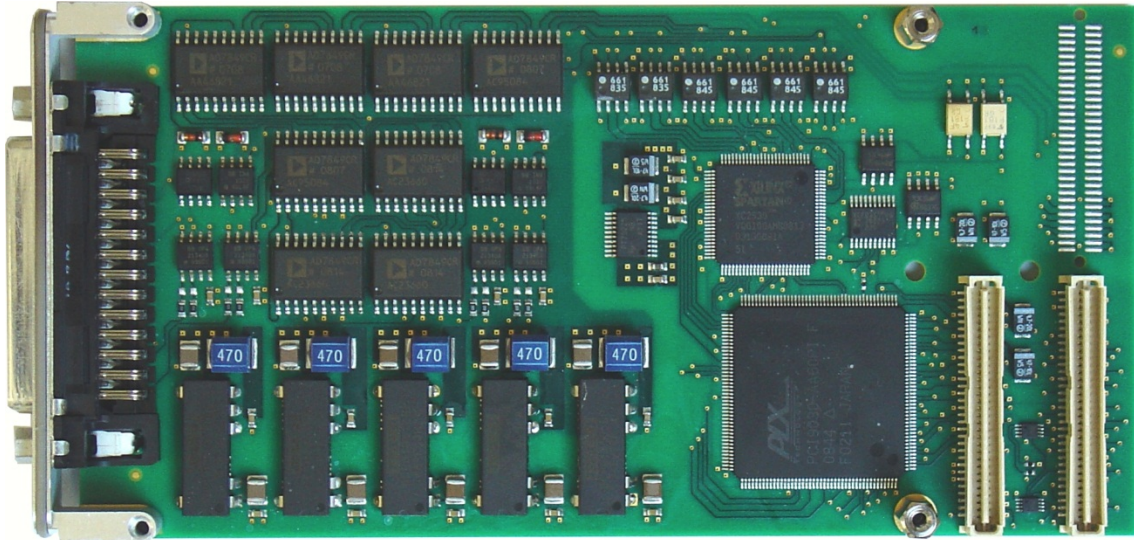# TPMC551   8/4 Channels of Isolated 16-Bit D/A

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 10µs typical. Immediate and simultaneous loading are supported.

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

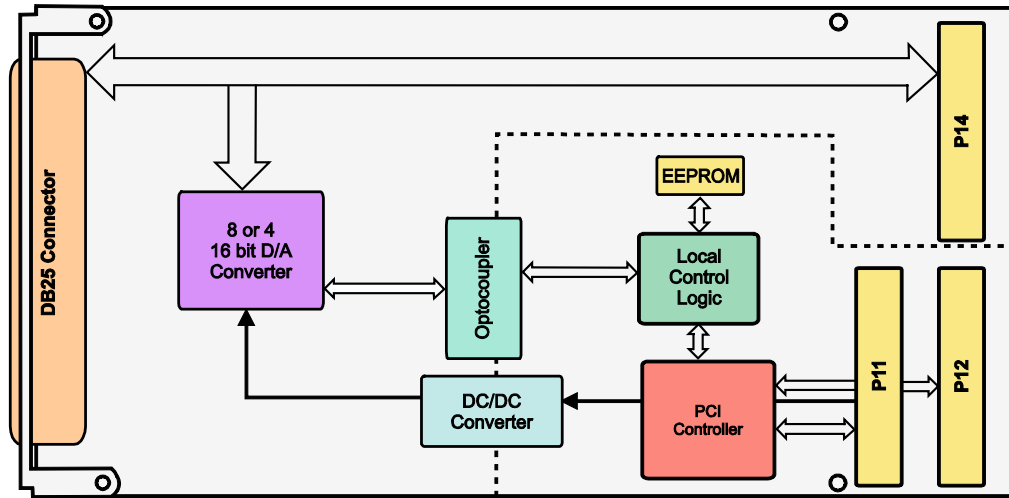The TPMC551 offers two output voltage ranges, ±10 V and 0-10V, which are selectable by solder pads. An on board DC/DC converter powers the isolated DAC and the output buffers.

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…10V or ±10V selectable output voltage range
    - 10µs maximum settling time
    - 4mA, 1000pF 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: 371000h
  TPMC551-11R: 512000h
  TPMC551-20R: 353000h
  TPMC551-21R: 479000h

Order Information

RoHS Compliant

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

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

Documentation

TPMC551-DOC User Manual

Software

TPMC551-SW-25 Integrity Software Support
TPMC551-SW-42 VxWorks Software Support (Legacy and VxBus-Enabled 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