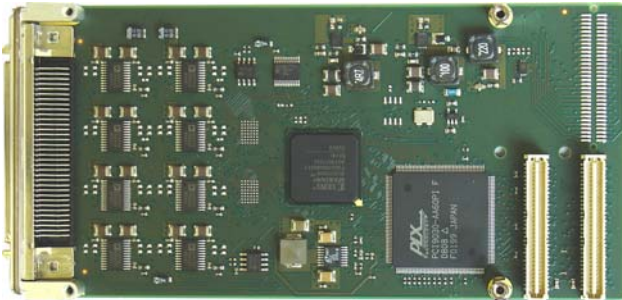


TPMC553 32 /16 Channels of 16 bit D/A

Application Information

The TPMC553 is a standard single-wide 32 bit PMC module and provides 32/16 channels of 16 bit analog outputs. All signals are accessible through a HD68 SCSI-3 type front I/O connector.



The software selectable output voltage ranges are 0-5V, 0-10V, 0-10.8V, $\pm 5V$, $\pm 10V$ or $\pm 10.8V$. The output voltage range can be individually set per channel. The conversion time is typ. 10 μs and the DAC outputs are capable to drive a load of 2k Ω , with a capacitance up to 4000pF.

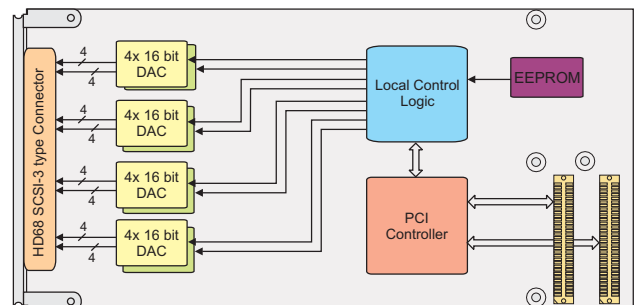
Beside of an individual channel update, the double buffered DACs allow simultaneous update of all channels. Additionally a sequencer on the TPMC553 allows to periodically update enabled channels with a sequence timer range that extends from 10 μs to 167s.

Each TPMC553 is factory calibrated. The calibration information is stored in an on board serial EEPROM unique to each PMC module.

For First-Time-Buyers the engineering documentation TPMC553-ED is recommended. The engineering documentation includes TPMC553-DOC, schematics and data sheets of the TPMC553.

Technical Information

- Form Factor: Standard single-width 32 bit PMC module conforming to IEEE P1386.1
 - Board size: 149 mm x 74 mm
 - Target Chip: PCI9030 (PLX Technology)
 - PCI 2.1 compliant interface
 - PCI I/O signaling voltage 5V or 3.3V
- 32/16 channels single-ended 16 bit analog output
 - Programmable output voltage: 0-5V, 0-10V, 0-10.8V, $\pm 5V$, $\pm 10V$, $\pm 10.8V$
 - Conversion time: typ. 10 μs
 - Up to 2k Ω resistive, 4000pF capacitive load
 - Overcurrent protection
 - Individual channel update, simultaneous update of all channels or sequencer mode
- Factory calibration data stored in EEPROM
- Operating temperature -40°C to +85°C
- MTBF (MIL-HDBK217F/FN2 G_B 20°C):
 - TPMC553-10x: 683000 h
 - TPMC553-11x: 689000 h



Order Information

RoHS Compliant

TPMC553-10R 32 Channels of 16 bit D/A

TPMC553-11R 16 Channels of 16 bit D/A

None RoHS Compliant

TPMC553-10 None RoHS compliant version of
TPMC553-10R

TPMC553-11 None RoHS compliant version of
TPMC553-11R

Documentation

TPMC553-DOC User Manual

TPMC553-ED Engineering documentation (TPMC553-
DOC, Schematics, Assembly Drawing,
Data Sheets)

Software

TPMC553-SW-25 Integrity Software Support

TPMC553-SW-42 VxWorks Software Support
(Legacy and VxBus-Enabled
Software Support)

TPMC553-SW-65 Windows XP/XPE/2000
Software Support

TPMC553-SW-72 LynxOS Software Support

TPMC553-SW-82 LINUX Software Support

TPMC553-SW-95 QNX 6 Software Support

For other operating systems please contact TEWS.

Related Products

TA304 Cable Kit for modules with HD68
connector

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