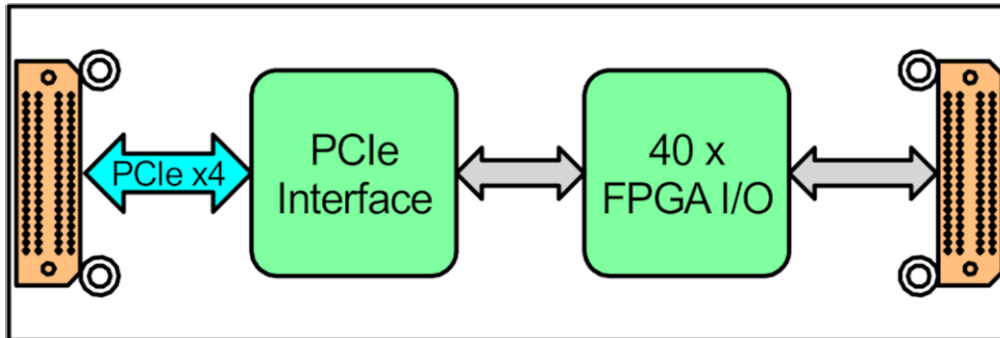


TQMC605 Reconfigurable FPGA with direct Connect to 40 I/Os



TQMC605-10R

Application Information

The TQMC605 is a VITA 93.0 compatible single-width QMC offering a user programmable AMD Artix™ 7 7A50T FPGA, supported by the AMD Vivado™ software.

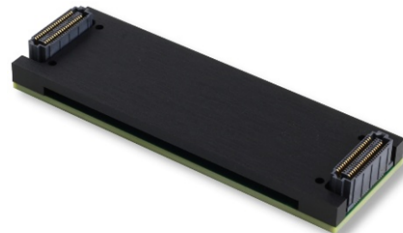
The TQMC605 offers 40 I/O lines that are directly connected to FPGA-pins, maintaining the flexibility of the SelectIO™ technology of the Artix 7 FPGA. All I/O lines provide external ESD-protection devices.

The User FPGA is configured by a SPI flash. An in-circuit debugging option is available via the QMC's JTAG interface for read back and real-time debugging of the FPGA design (using the Vivado™ ILA).

TEWS offers a well-documented basic FPGA Example Application design. It includes a constraints file with all necessary pin assignments and basic timing constraints. The example design covers the main functionalities of the TQMC605. It implements PCIe to register mapping and

basic I/O. It comes as a AMD Vivado Design Suite project with source code and as a ready-to-download bit stream.

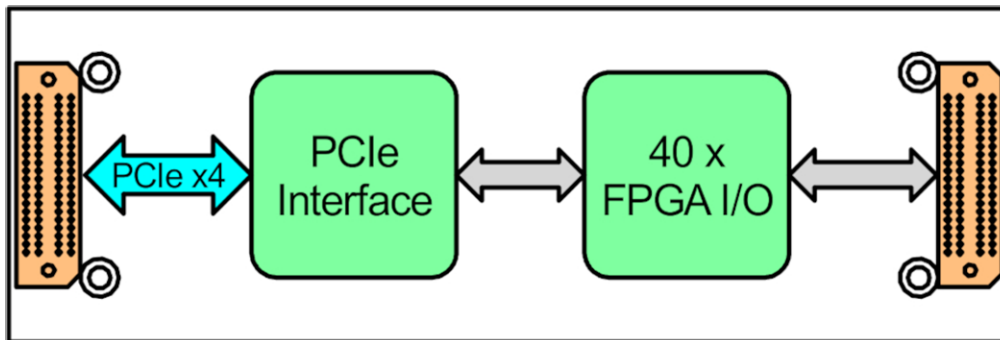
The TQMC605 is available as air cooled and conduction cooled variant.



Conduction Cooled QMC

Technical Information

- Form Factor: Standard single QMC conforming to VITA 93.0
 - Board size: 78.25 mm x 26 mm
- PCI Express 2.1 compliant interface
- Artix-7 User programmable FPGA
 - AMD XC7A50T-2
 - PCIe endpoint in FPGA
- 128 Mbit SPI-EEPROM for FPGA configuration and User Data
- Digital I/O
 - 40 direct FPGA I/O lines
 - ESD Protection
- Operating temperature -40 °C to +85 °C



Block Diagram

Order Information

RoHS Compliant

TQMC605-10R-A	Reconfigurable FPGA with direct Connect to 40 I/Os, AMD Artix™ 7 FPGA (XC7A50T), air cooled
TQMC605-10R-H	Reconfigurable FPGA with direct Connect to 40 I/Os, AMD Artix™ 7 FPGA (XC7A50T), conduction cooled

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

Software

TDRV020-SW-25	GreenHills Integrity Device Driver
TDRV020-SW-42	VxWorks Device Driver
TDRV020-SW-65	Windows Device Driver
TDRV020-SW-82	Linux Device Driver
TDRV020-SW-95	QNX Neutrino Device Driver

For other operating systems please contact TEWS.

Related Products

TPCE210	PCI Express x4, Gen 2, Dual QMC Carrier
TCPS210	CompactPCI Serial Carrier with 3 QMC Sites, PCIe Gen3 x4, Rear-I/O
TVNX210	VNX+ Carrier with 2 QMC Sites, PCIe Gen 3 x4, Rear I/O