



AT A GLANCE

Subnanosecond time to digital converter for quantum research applications

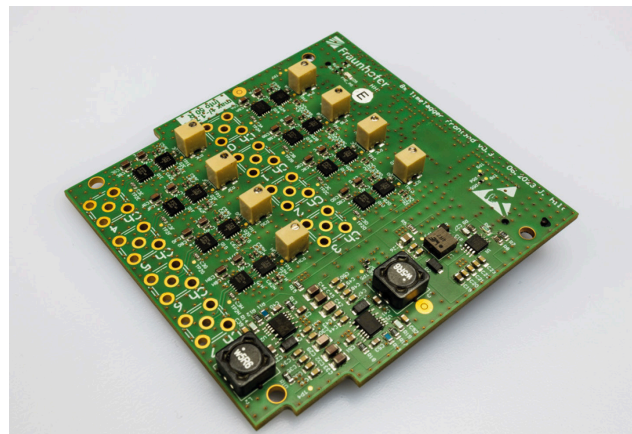
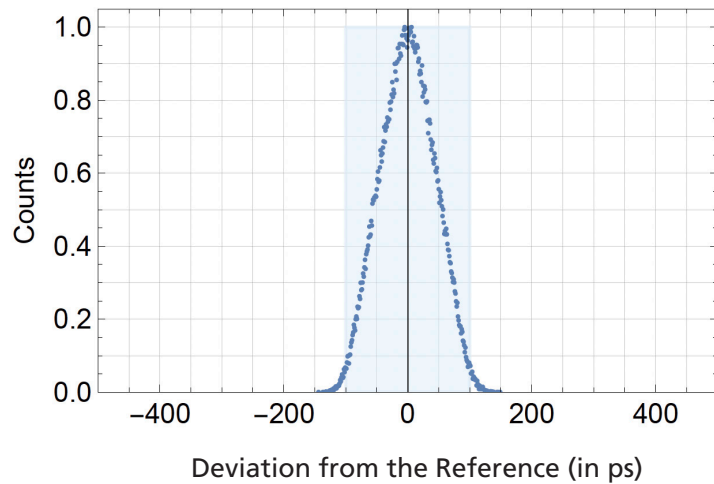
Benefits

- Low cost
- Easy integration
- No calibration necessary
- Stand alone OEM version available
- FMC card for high-end FPGA systems available

Background

HHI's Timetagger is a versatile measurement device with multiple input channels allowing digitizing the time of events with a resolution of 100 ps.

Switching threshold and hysteresis could be set for any input channel. The digitized events could be read by an Ethernet interface or via high speed FMC interface for FPGA based applications.



Eight Channel Timetagger FMC Card

Features

- 100 ps bin size (FMC card) / 160 ps bin size (stand alone device)
- 8 input channels (FMC card)
4 input channels (stand alone device)
- Adjustable threshold and hysteresis
- Ethernet Interface
- Available as a stand alone device or FMC card for full custom FPGA applications.

Applications

- Single Photon Counting
- Quantum Communications
- LIDAR
- Test and Measurements



Jonas Hilt
 Photonic Networks and Systems

Phone +49 30 31002-543 | -414
 info-pn@hhi.fraunhofer.de

Fraunhofer Heinrich Hertz Institute
 Einsteinufer 37, 10587 Berlin
 Germany

www.hhi.fraunhofer.de/en/time-tagger