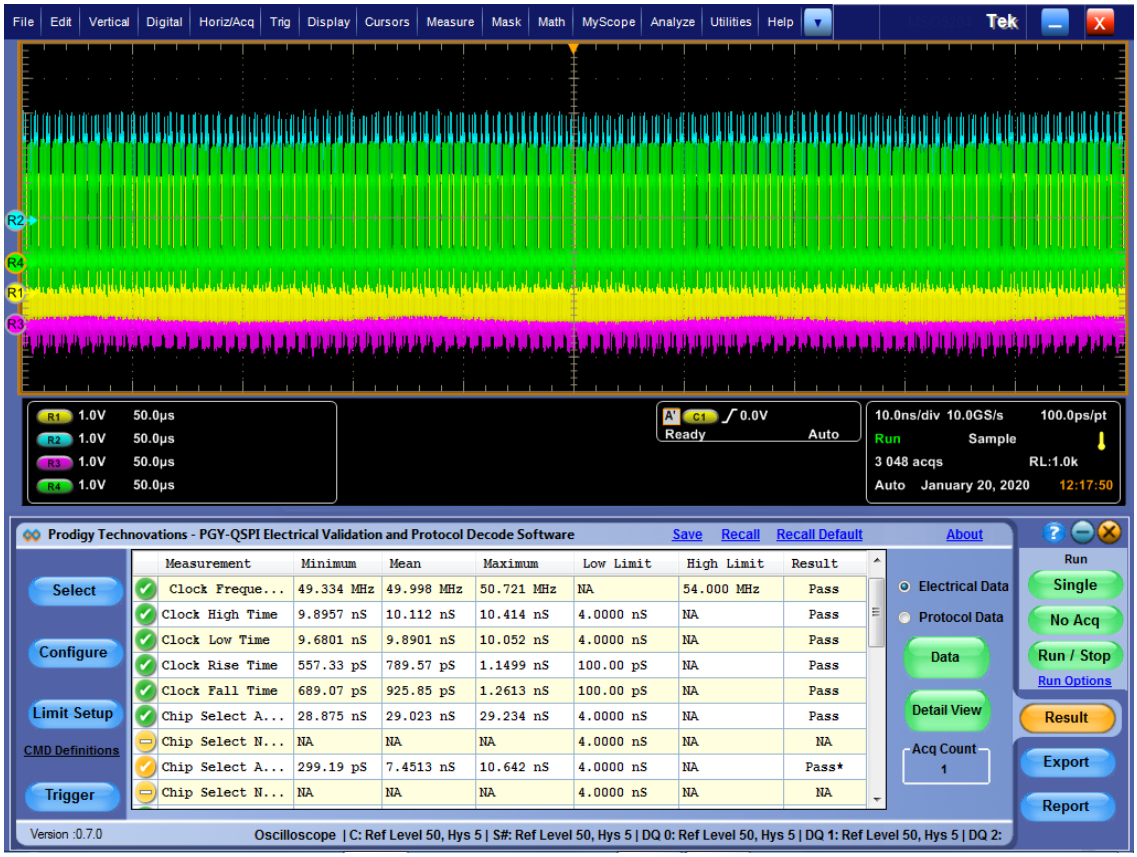
PGY-QSPI-EV QSPI Electrical Validation & Protocol Decode Software



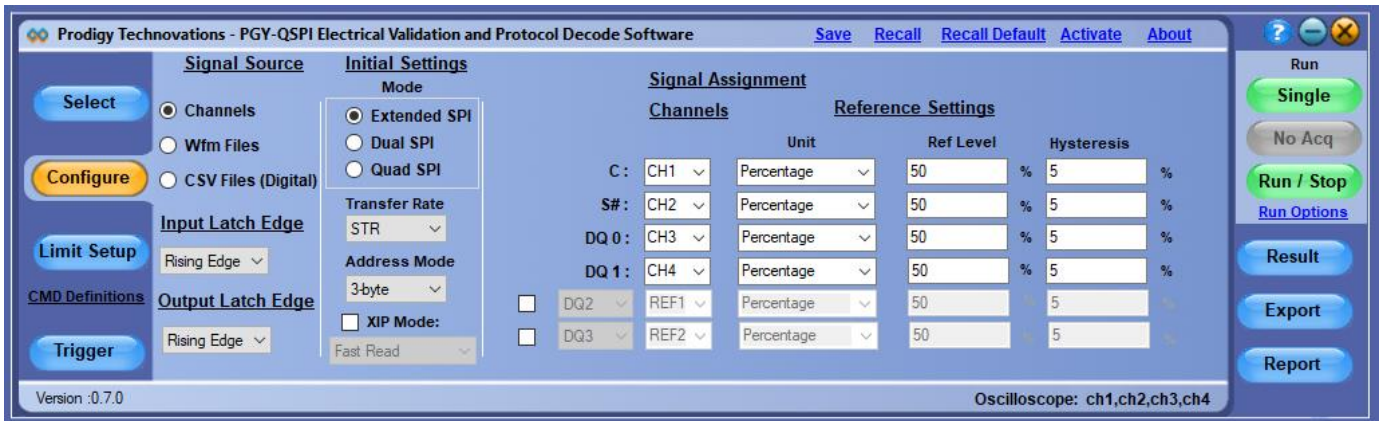
QSPI Electrical Validation & Protocol Decode Software

Quad serial peripheral interface (QSPI) is a SPI module that allows single, dual and quad read access to external SPI devices. PGY-QSPI Electrical Validation and Protocol Decode Software offers electrical measurements compliance testing and protocol decoding as specified in QSPI specification. This software runs inside Tektronix windows oscilloscope and provides quickly all electrical parameter value and decoding of QSPI signals.

Features:

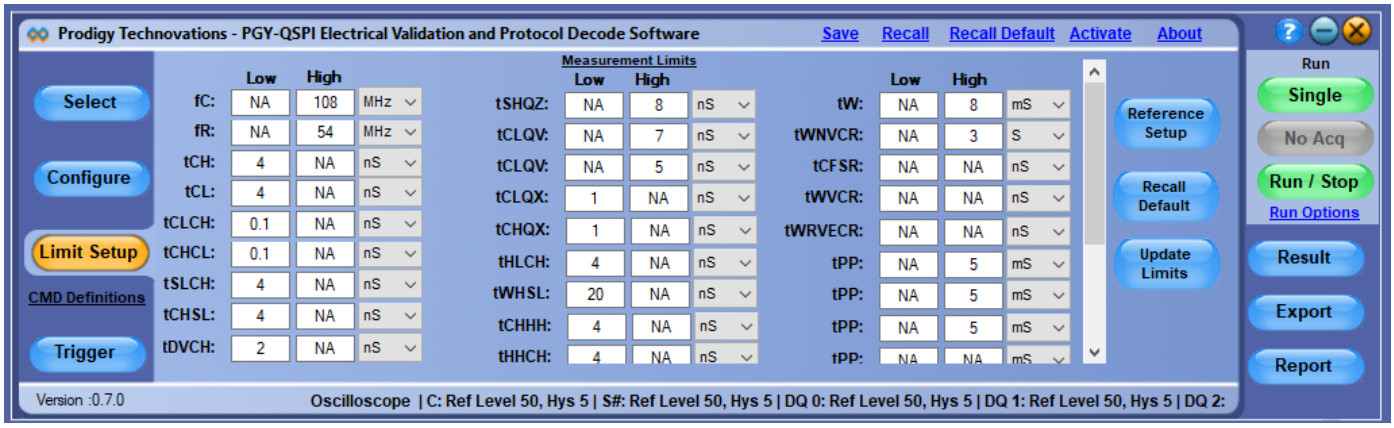
- Single and Dual Transfer rate (STR/DTR).
- Supports electrical measurements and compliance testing for Ext SPI, Dual SPI and Quad SPI.
- Supports Triggering on command index and on S# falling edge.
- Supports Analog and Digital Channels of Tektronix MSO
- Automated electrical measurements with customizable reference level of QSPI electrical signal.
- Customizable measurement limit setup for pass/fail validation of electrical signal to enable measurements.
- Ability to store the QSPI protocol data and electrical data in CSV and txt format.
- Report Generation
- Supports offline analysis

Limit Setup Panel



Limit Setup tab helps to set up the limits and reference levels of each selected measurements. In order to characterize and validate QSPI signals PGY-QSPI software provides graphical measurement reference level setup to set measurement reference level of QSPI signals.

Configuration



Configure panel helps in selecting the *Signal Source*, Such as *Channels, Wfm Files and CSV Files (Digital).* Live Analog or Digital Channels of the oscilloscope can be used for analysing the signal. The software decodes the data and displays both the protocol data and electrical measurements as shown below. Offline analysis is made using the stored .wfm files (Analog channels data) or from csv file (Digital Channel data)

Electrical measurements

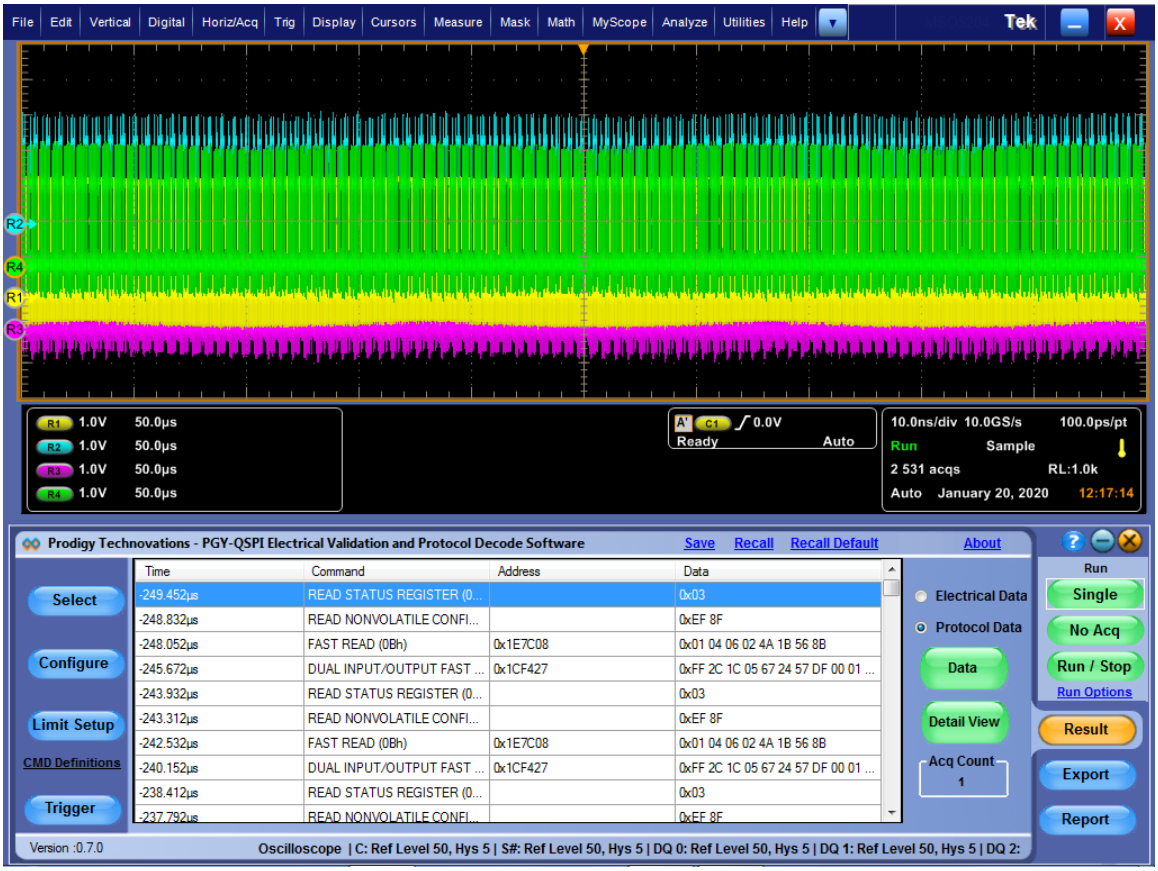
PGY-QSPI software provides extensive list of electrical measurements (DTR not supported):

- ✓ Clock frequency for all commands other
- ✓ than READ
- ✓ Clock frequency for READ commands
- ✓ Clock High Time
- ✓ Clock Low Time
- ✓ Clock rise Time
- ✓ Clock fall Time
- ✓ S# active setup time (relative to clock)
- ✓ S# not active hold time (relative to clock)
- ✓ Data in setup time
- ✓ Data in hold time
- ✓ S# active hold time (relative to clock)
- ✓ S# not active setup time (relative to
- ✓ clock)
- ✓ S# deselect time after a READ command
- ✓ S# deselect time after a non READ
- ✓ command

- ✓ Output disable time
- ✓ Clock LOW to output valid under 30pF
- ✓ Clock LOW to output valid under 10pF
- ✓ Output hold time (clock LOW)
- ✓ Output hold time (clock HIGH)
- ✓ HOLD command setup time (relative to
- ✓ clock)
- ✓ HOLD command hold time (relative to
- ✓ clock)
- ✓ HOLD command setup time (relative to clock)
- ✓ HOLD command hold time (relative to
- ✓ clock)
- ✓ HOLD command to output Low-Z
- ✓ HOLD command to output High-Z
- ✓ Write protect setup time
- ✓ Write protect hold time
- ✓ Enhanced VPPH HIGH to S# LOW for extended and dual I/O page program

Protocol Decode

PGY-QSPI simultaneously decodes the QSPI signals along with electrical measurements. Software provides flexibility to view decoded command, address and associated data.



In detail view links the selected command to electrical waveform for easy debugging of protocol related problems

Tektronix Oscilloscopes Supported

- DPO/MSO5000 series
- DPO7000 series
- DPO/MSO/DSA 70000 series
- MSO5/6 series

with bandwidth 500MHz and above and standard RL.

Probes: Standard probes

Ordering Information:

PGY-QSPI (shipment includes CD with PGY-QSPI Electrical Validation and Protocol Decode Software)

License is locked to oscilloscope

Contact Information

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About Prodigy Technovations Pvt Ltd

Technovations Pvt Ltd (www.prodigytechno.com) is a leading global technology provider of Protocol Decode, and Physical layer testing solutions on test and measurement equipment. The company's ongoing efforts include successful implementation of innovative and comprehensive protocol decode and physical Layer testing solutions that span the serial data, telecommunications, automotive, and defense electronics sectors worldwide.