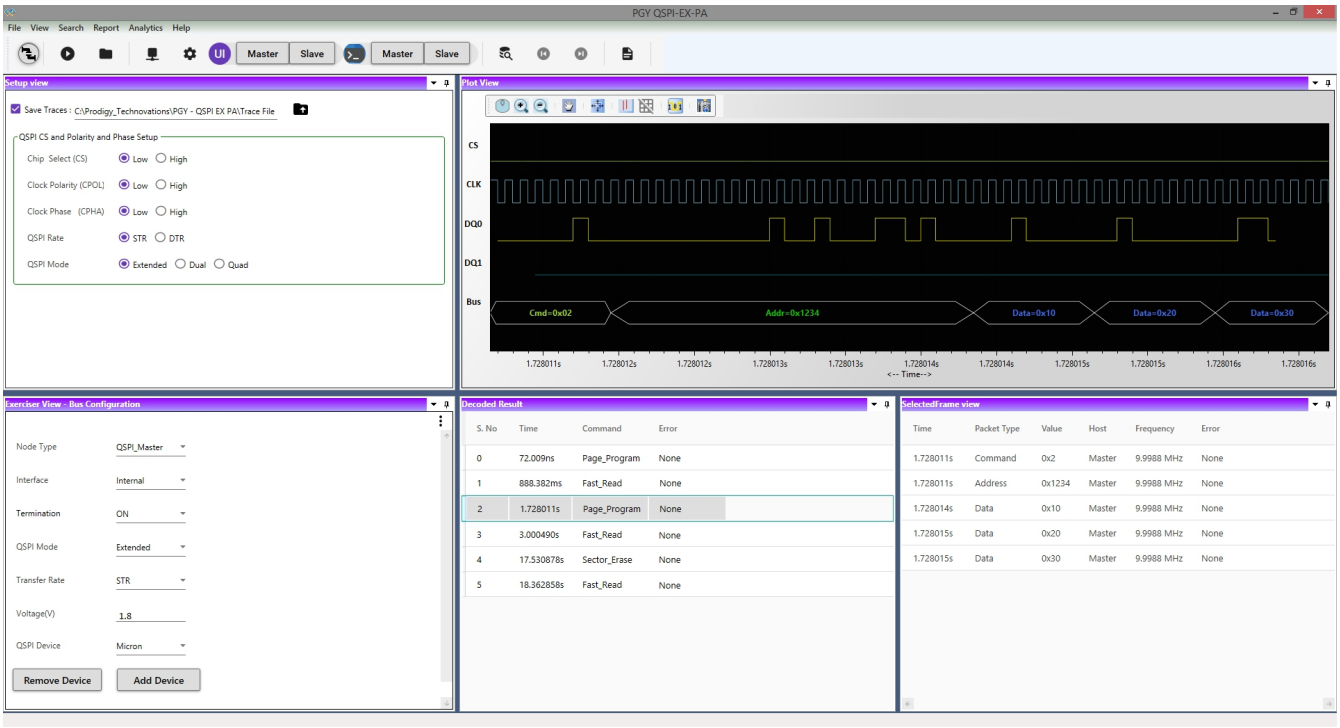
PGY-QSPI-EX-PD QSPI Protocol Exerciser and Analyzer

PGY-QSPI-EX-PD is the leading instrument that enables the design and test engineers to test the QSPI designs for its specifications by configuring PGY-QSPI-EX-PD as master/slave, generating QSPI traffic with error injection capability and decoding QSPI Protocol packets.

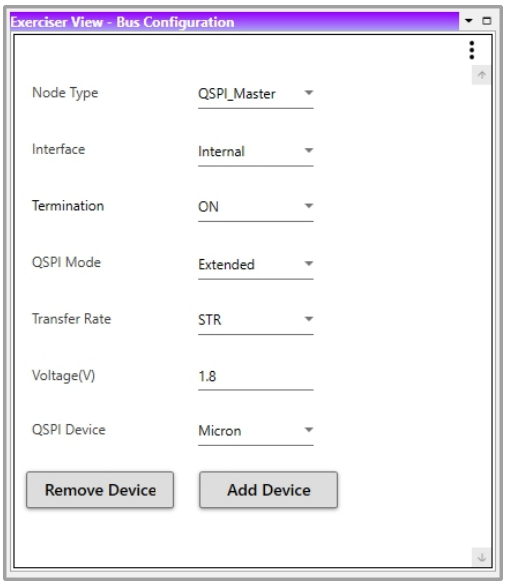
Features
● Supports QSPI speeds of up to 80MHz ● Ability to configure it as Master or Slave ● Simultaneously generate QSPI traffic and Protocol decode of the Bus ● QSPI Master and Slaves ● STR and DTR Transfer rates ● Extended, Dual and Quad QSPI Modes Supported ● Variable QSPI Data speeds and Duty cycle ● Continuous streaming of protocol data to host computer to provides large buffer ● Timing diagram of Protocol decoded bus ● Listing view of Protocol activity ● Error Analysis in Protocol Decode ● Ability to write exerciser script to combine multiple data frame generation at different data speeds ● USB 2.0/3.0 host computer interface ● API support for automation in Python or C++

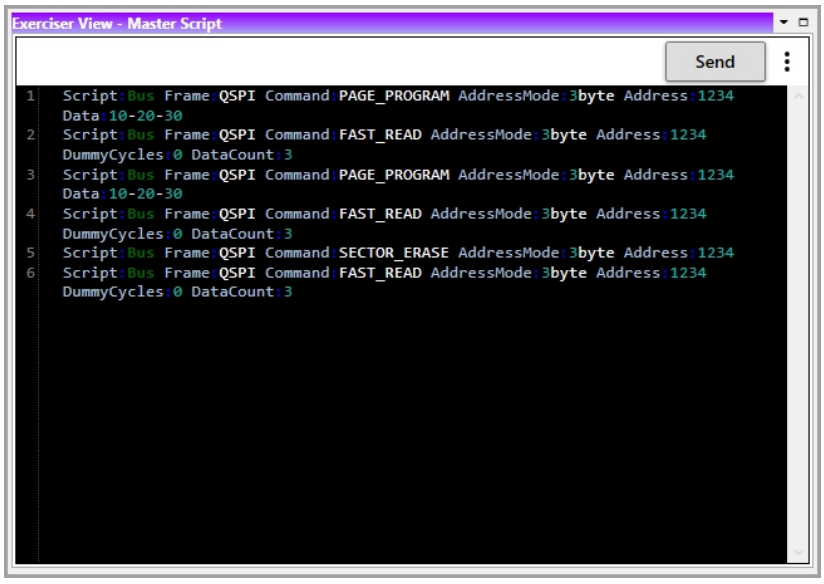
Multi Domain view



Multi domain View provides the complete view of QSPI Protocol activity in single GUI. User can easily setup the analyzer to generate QSPI traffic using a GUI or script. User can capture Protocol activity at specific event and decode the transition between Master and Slave. The decoded results can be viewed in timing diagram and Protocol listing window with auto-correlation. This comprehensive view of information makes it industry best, offering an easy to use solution to debug the QSPI protocol activity.

Exerciser

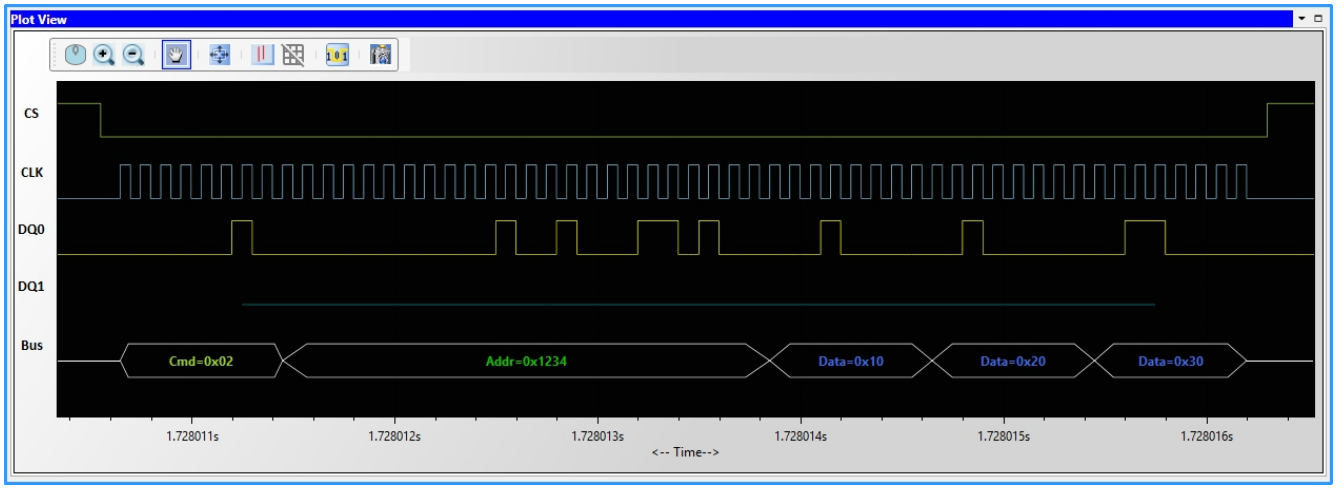




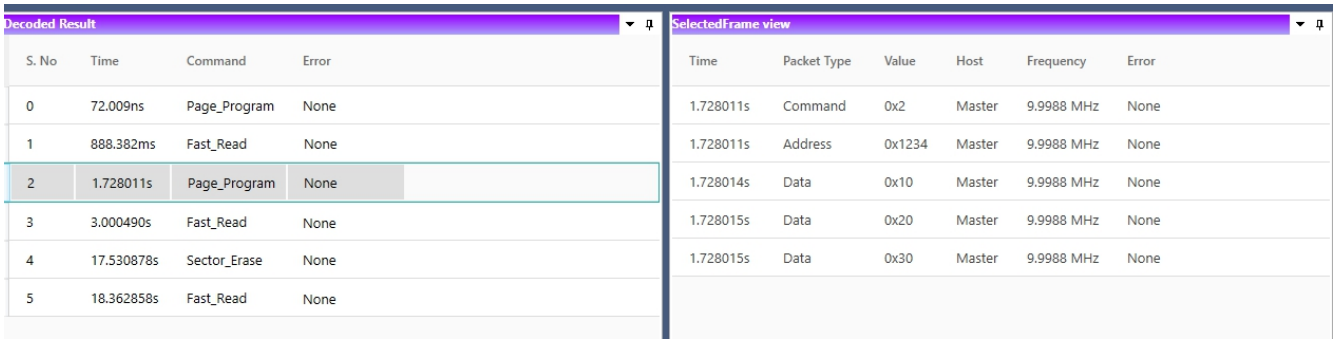
PGY-QSPI-EX-PD supports QSPI traffic generation using GUI and Script. User can generate simple traffic generation using the GUI to test the DUT. Script based GUI provides flexibility to emulate the complete expected traffic in real world including error injections. In this sample script user can generate QSPI traffic as below:

Script Line #1: PAGE_PROGRAM
Script Line #2: FAST_READ
Script Line #3: PAGE_PROGRAM
Script Line #4: FAST_READ
Script Line #5: SECTOR_ERASE
Script Line #6: FAST_READ

Timing Diagram and Protocol Listing View

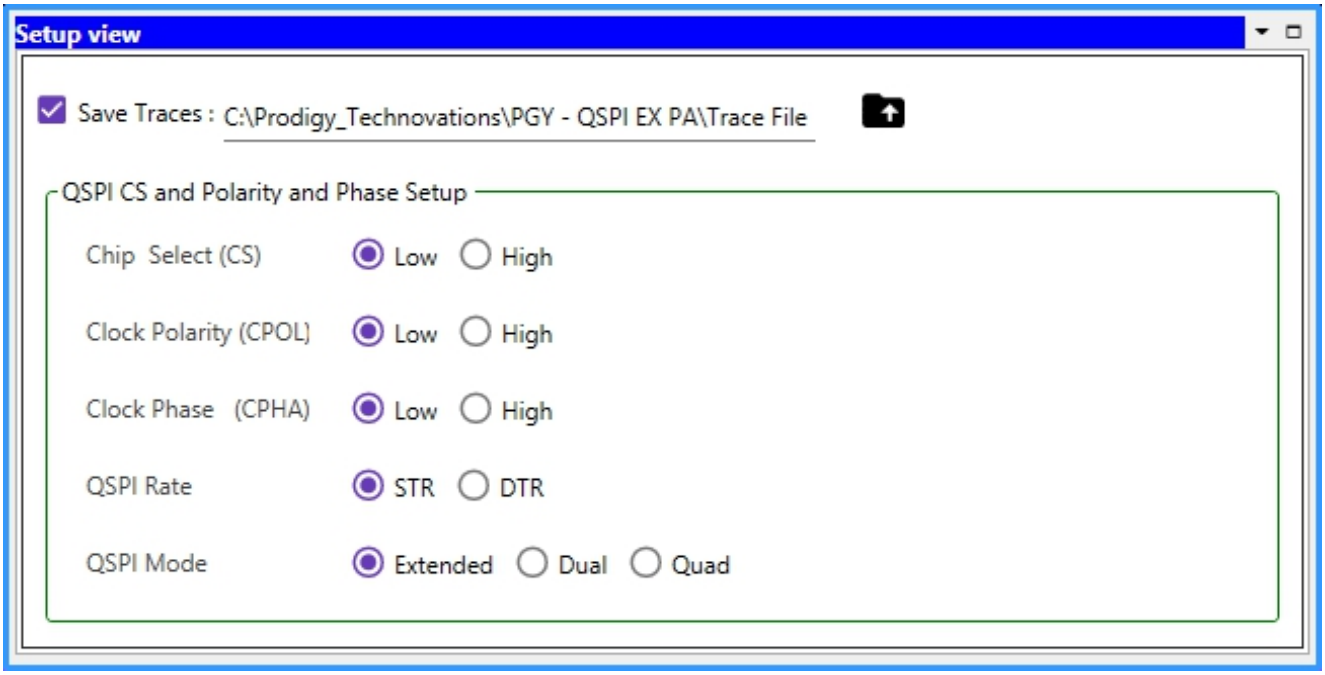


Timing view provides the plot of CS, CLK, DQO and DQ1 signals with bus diagram. Overlaying of Protocol bits on the digital timing waveform will help easy debugging of Protocol decoded data. Cursor and Zoom features will make it convenient to analyze Protocol in timing diagram for any timing errors.



Protocol window provides the decoded packet information in each state and all packet details with error info in packet. Selected frame in Protocol listing window will be auto correlated in timing view to view the timing information of the packet.

Setup View



Setup View of PGY-QSPI-EX-PD allows the user to configure the QSPI Chip select (CS), Clock Polarity (CPOL), Clock Phase (CHPA), QSPI rate of STR or DTR and the different modes of QSPI such as Extended, Dual or Quad.

QSPI Specifications

PGY-QSPI Specification	Features	PGY-QSPI-EX-PD
Exerciser:		
Configurable	1 Master + 1 slave	✔
QSPI Traffic Generation	Custom QSPI traffic generation Simulate real world network traffic	✔
CLK Frequency	100KHz to 80MHz	✔
Voltage Drive Level	1.8V	✔
CLK Duty Cycle variation	25%,50% and 75%	✔
Clock In Data Out	User Defined	✔
Delay between two messages	User Defined	✔
QSPI Modes Supported	Extended, Dual and Quad	✔
Transfer Rate	STR and DTR	✔
API Support	Support for Automation of operation using Python or C++	✔
Protocol Analysis:		
Supports	QSPI protocol decode	✔
Protocol Views	Timing Diagram View Protocol Listing View Bus-Diagram to display Protocol packets with timing diagram plot	✔
Protocol Error Report	Non-standard frame format	✔
Capture Duration	Continuous streaming Protocol Data to host HDD/SSD	✔
Host Connectivity	USB 3.0 / 2.0 interface	✔

Ordering Information

PGY-QSPI-EX-PD QSPI Exerciser and Protocol Analyzer

Deliverables for PGY-SMI-EX-PD

PGY- QSPI -EX-PD Unit
USB 3.0 cable
PGY- QSPI -EX-PD Software in CD
12V DC adapter
Flying lead probe cable with female connector to connect to DUT

Warranty Information

Hardware Warranty - 2 years
Software and Firmware Warranty - 1 year
Probes (covered under warranty for any manufacturing defect) - 6 months

Contact Information

About Prodigy Technovations Pvt Ltd

Prodigy 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.