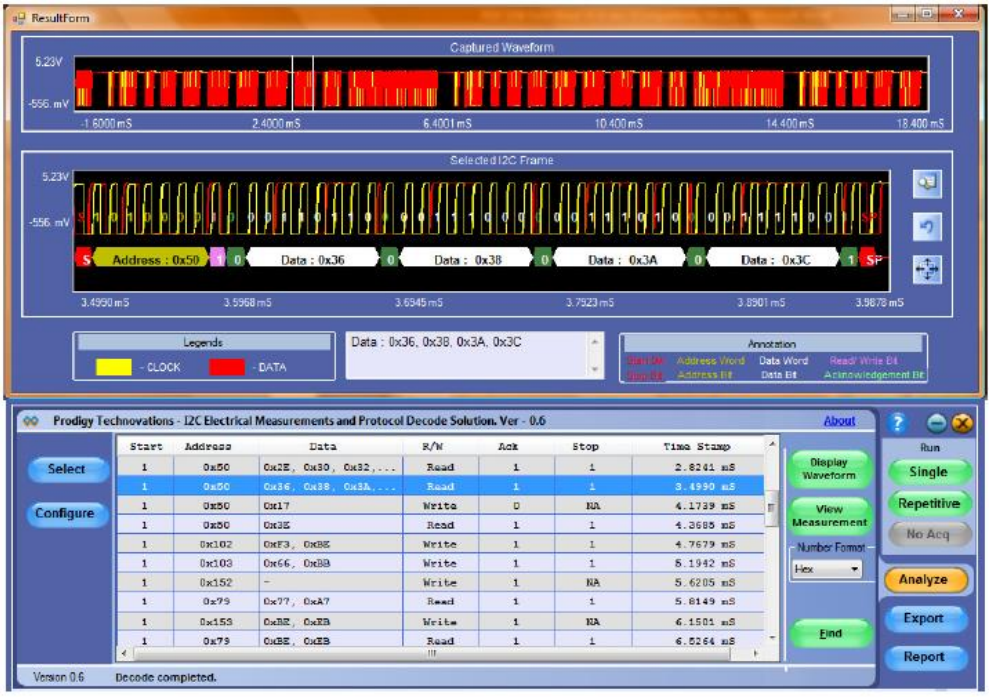
PGY-I2C I2C Electrical Validation & Protocol Decode Software



I2C Electrical Validation & Protocol Decode Software

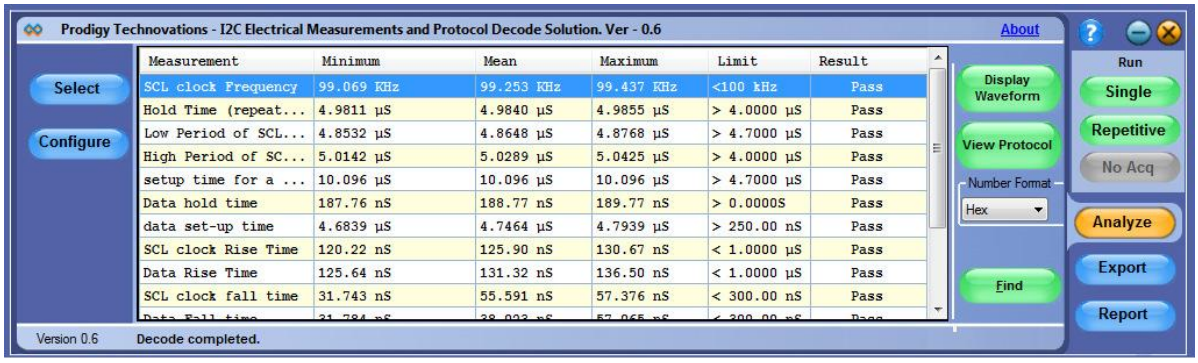
Engineers, designing and testing I2C hardware and firmware, need to measure electrical parameters and monitor protocol of I2C interface to ensure inter-operability. Engineers test and debug their designs with easy-to-use instruments such as oscilloscopes to capture the electrical signals but use time-consuming and error prone tools to make electrical measurements and protocol analysis. Often, they need a single tool or instrument to cross-examine the protocol layer and the PHY layer to debug the designs to reduce development and testing cycles.

The PGY-I2C Electrical Validation and Protocol Decode Software offers electrical measurements andprotocol decoding as specified in Rev 03, June 2007 I2C Bus specification. Now design and test engineers can automatically make accurate and reliable electrical measurements and decode protocols in PGY-I2C software using data acquired by Tektronix DPO5000, TDS7000, DPO/DSA/MSO7000 oscilloscope series to reduce the development and test cycle.

Features:

- Automated electrical measurements as specified in Rev 3 June 2007 I2C Bus specification documentation.
- Supports electrical measurement for standard, fast, fast plus and high-speed with limit comparison
- Decodes standard, fast, fast plus and high-speed I2C signals for easy understanding of protocol between master and salve components
- Links the protocol content to the electrical signal in the oscilloscope for easy understanding of the electrical
- characteristics of the protocol
- Overlays the protocol data on analog waveform in a bus diagram window
- Zooms the selected I2C packet content in the decode table in the bus diagram display for easy analysis of
- electrical characteristics of the I2C frame
- Color codes protocol content for easy analysis
- Search capabilities to locate unique events in thousands of protocol data
- Ability to view protocol decode data in hexadecimal, decimal, binary, octal, and ASCII formats
- Ability to store the I2C protocol data in CSV and txt format
- Utility features like zoom, undo, and fit screen for easy debugging while correlating the protocol data to the
- waveform
- Report generation in html format
- Supports wfm and isf file formats for offline analysis

Seamless Integration with Oscilloscope



PGY-I2C runs inside the Tektronix oscilloscopes and makes the electrical measurements, decodes protocols and displays the decoded data in a bus diagram, a table, and links the decoded data to electrical signal in the bus diagram. I2C Protocol-based trigger can be setup using the built-in I2C trigger capabilities in Tektronix oscilloscopes.

Characteristics

Electrical Measurements	SCL Clock Frequency	Data Valid Acknowledge time
	High Period-SCL	Rise Time
	Low Period-SCL	Fall Time
	Hold Time at Sr Condition	Data Setup time
	Setup Time Sr Condition	Bus free time between stop and start Condition
	Data Valid Time	
	Data Hold time	Setup time for Atop
Bus Speed	Standard, Fast, Fast plus, and High speed	
Protocol Decode	Hexadecimal, Octal, Binary, Decimal, ASCII	
Find/search	Data and Address	
Waveform window	Overlay of protocol decode data on waveform	
Report Generation	Customizable report in html format	
Export of data	CSV and Txt format	

Oscilloscopes Supported

- DPO5000 Series
- DPO7000 Series
- DPO/MSO/DSA 70000 Series

Ordering Information

PGY-I2C Electrical Validation and Protocol Decode Software (shipment includes CD with PGY-I2C software and license key)

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.