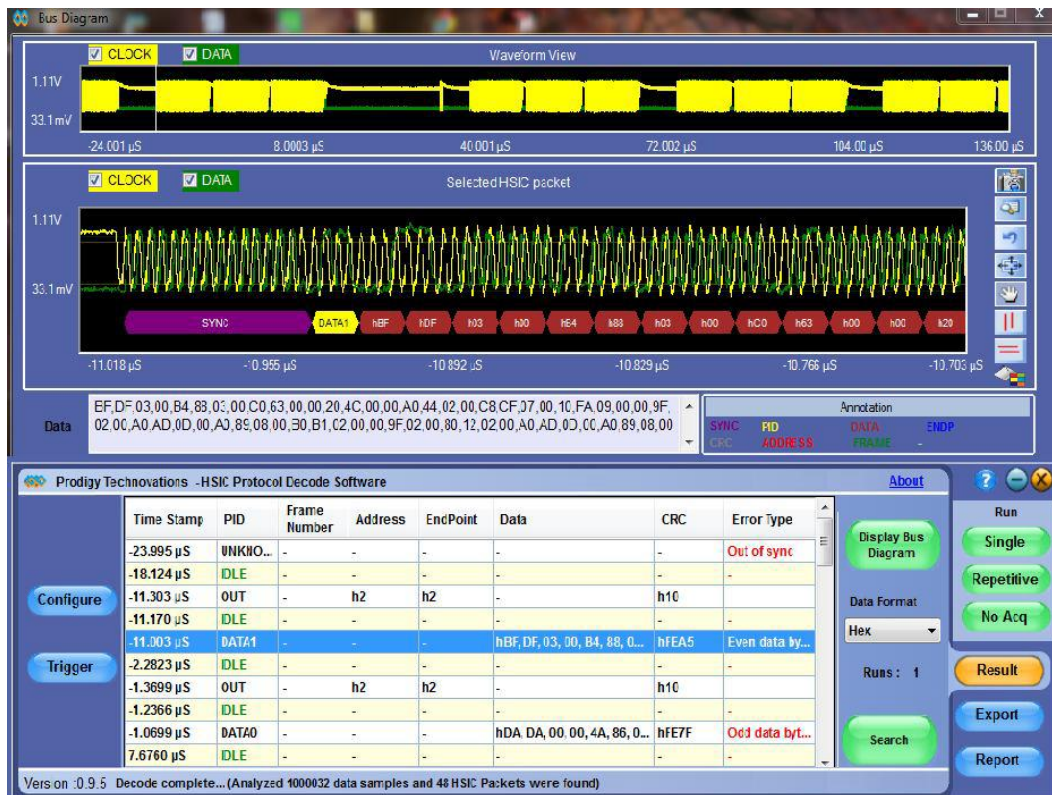


## PGY-HSIC HSIC Protocol Trigger & Decode Software



### HSIC Protocol Trigger & Decode Software

High Speed Inter Chip (HSIC) Protocol is being adopted very fast in electronic design industry. Engineers designing HSIC interface are finding extremely difficult to debug this serial bus by manually going through the serial NRZI electrical signals in oscilloscope and locate the problems. PGY-HSIC Protocol Trigger and Decode Analysis software allows HSIC Protocol aware real-time hardware-based trigger to capture HSIC signals, decode and analyse it for any errors, bus status condition, correlate protocol level information with electrical signals.

PGY-HSIC Software runs inside Tektronix Make oscilloscopes such as DPO/MSO5000, DPO7000 and DPO/DSA/MSO70000 oscilloscope series. PGY-HSIC utilizes the hardware based real-time serial pattern trigger, long acquisition record length up to 125MB to provide superior HSIC Protocol Analysis Solution.

#### Features:

- HSIC protocol decode using either data signal or both data and strobe signals
- Powerful HSIC Protocol Aware trigger capabilities
- Error checks for CRC errors, data packet byte count errors; Invalid PID, End of packet; packet length, PID byte mismatch
- Protocol decode supports decode of bus status condition such as idle, suspend, reset
- Bus diagram display of Protocol packet along with electrical waveform
- Long duration data decode support to capture more number of HSIC events
- Protocol analysis using live channel data as well as stored files
- Search capabilities to locate protocol event
- Filter view enables viewing packets of interest in hundreds of HSIC packets
- Filter capabilities to view only information of Interest
- Documentation by exporting data in CSV and TXT file format
- Report Generation

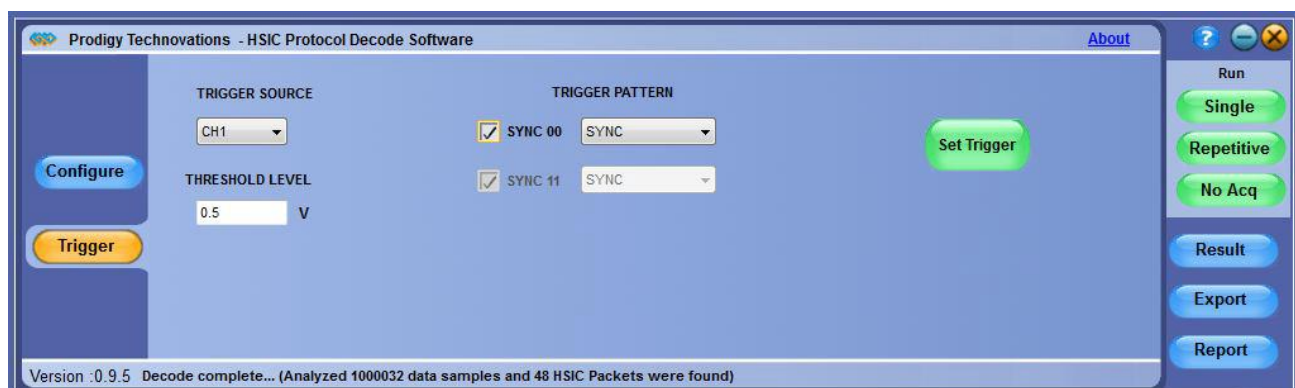
### Easy HSIC Test Setup and Debug:

PGY-HSIC Software installed in Tektronix oscilloscopes can be launched by clicking on PGY-HSIC icon in oscilloscope desktop folder. Now user has simultaneous view and control to oscilloscope waveform display as well as PGY-HSIC Software. PGY-HSIC Software is set make all HSIC Protocol analysis. User can analyze HSIC single acquisition mode, Repetitive mode and as well as No Acq mode. In No Acq Mode, HSIC software analyses already captured HSIC signal that is present in the acquisition memory of the oscilloscope.



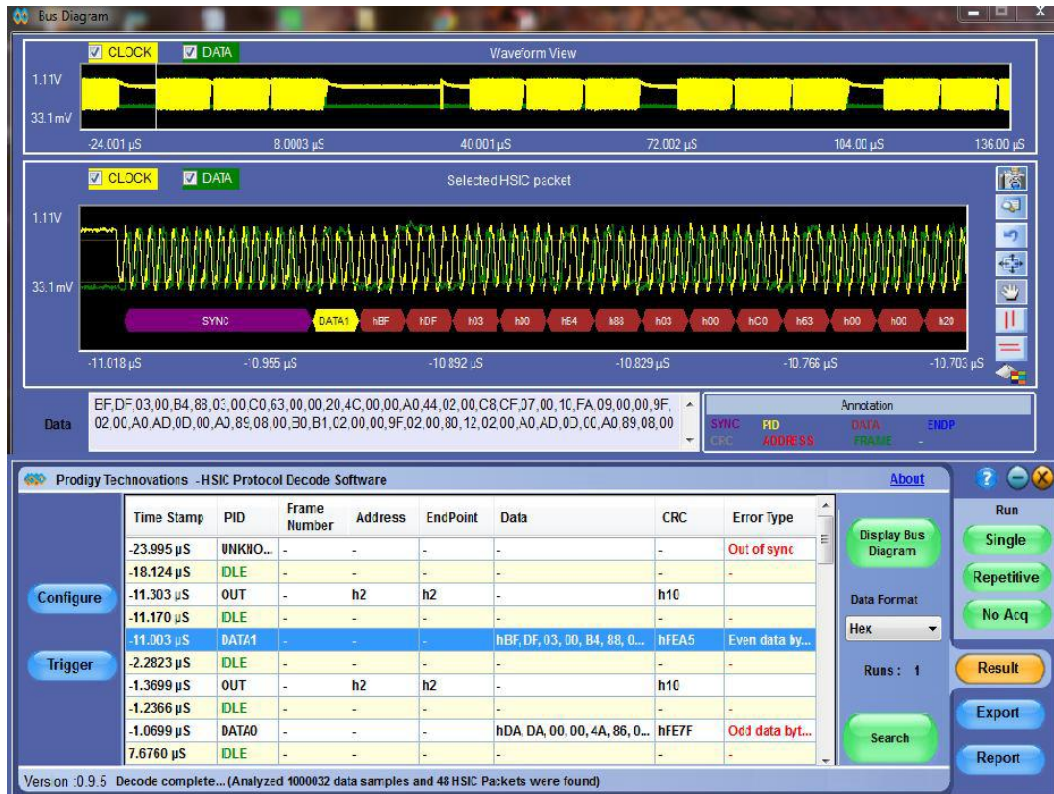
### Powerful HSIC Protocol Aware Hardware Based Real-Time Trigger:

Simple easy to use HSIC protocol aware trigger features allows engineers to capture HSIC signals at specific event in HSIC bus.



Select any of live channels Ch1 to CH4 as trigger source and set trigger pattern. The trigger pattern could be either Sync pattern to any PID packet. PGY-HSIC Software has the flexibility chose sync pattern that end '00' pattern or '11' pattern at the end of 32 bit sync pattern. Threshold level allows user indetify the right threshold to distinguish logic 1 and logic 0. Protocol Aware trigger supporting trigger on sync and all PIDs.

## Debugging of HSIC Signals:

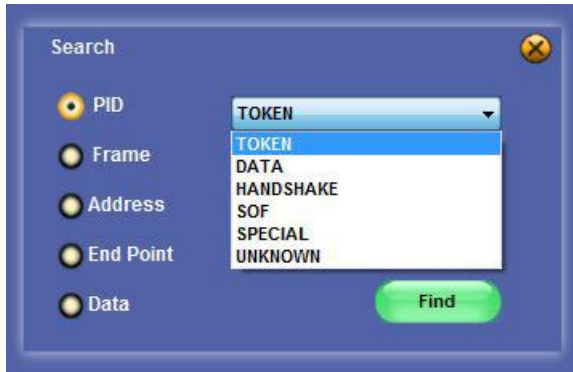


Debugging capabilities such as CRC error checks, number of data byte counts in data packet and correlating protocol information with electrical signals quickly locates problems in HSIC protocol. PGY-HSIC lists all decoded data in decode table in HSIC Protocol format. The Protocol analysis capability computes the CRC values and checks with decoded CRC value for any CRC errors.

- CRC5 error
- CRC16 error
- Bit Stuffing error
- PID Mismatch error
- Invalid PID
- EOP Length error
- Frame Length error

By selecting any HSIC protocol packet data in decode table highlights corresponding electrical waveform in detail view. The Bus diagram below the waveform indicates the protocol data for waveform. This waveform can be further analyzed by zooming out, placing cursors, fit to screen. There is flexibility to snap and store the waveform image for report with flexibility to adding comments for image.

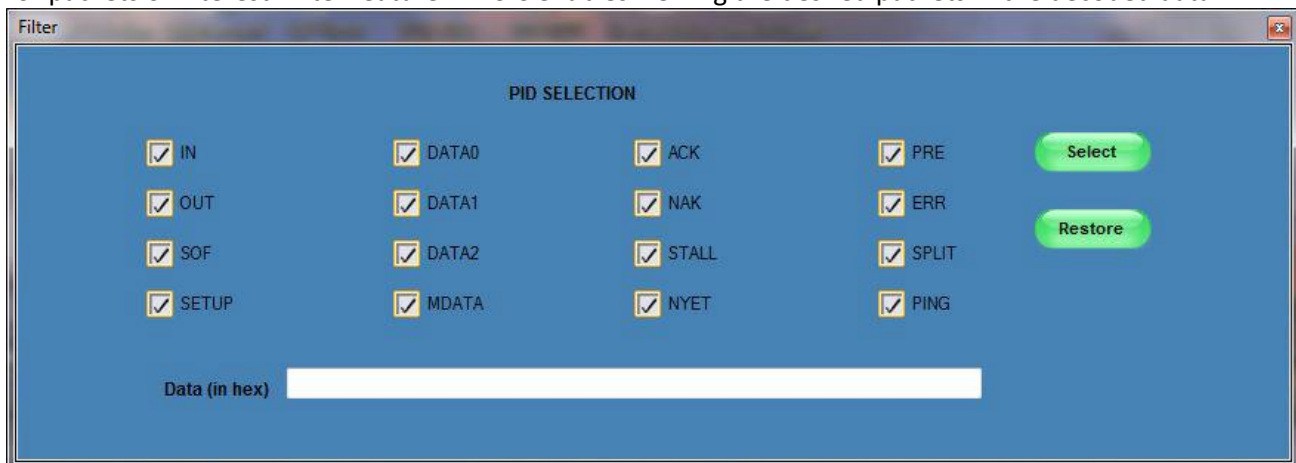
### Search:



Searching for Specific PID, address, end point and data allows us to focus on area of interest in long record length up to 125MB of data.

### Filter:

While testing and debugging HSIC protocol using 100MB of oscilloscope record length, hundreds HSIC packets are expected to present. In order to focus on the right packet of interest in the decoded, it is important look for packets of interest. Filter feature in HSIC enables viewing the desired packets in the decoded data.



### Documentation of Protocol Analysis:

PGY-HSIC Protocol Trigger and decode Analysis software provides flexibility of exporting the decode data in txt and csv file format. Report Generation capability allows user to have different waveforms images including the oscilloscope screenshot in pdf format report. Report header, comments and Test attributes can be added to report.

### Tektronix Oscilloscopes Supported

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



**Ordering Information:**

**PGY-HSIC** (shipment includes CD with PGY-HSIC Protocol Trigger and Decode Analysis Software)  
License is locked to oscilloscope

**Contact Information**

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**About Prodigy Technovations Pvt Ltd**

Technovations Pvt Ltd ([www.prodigytechno.com](http://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.