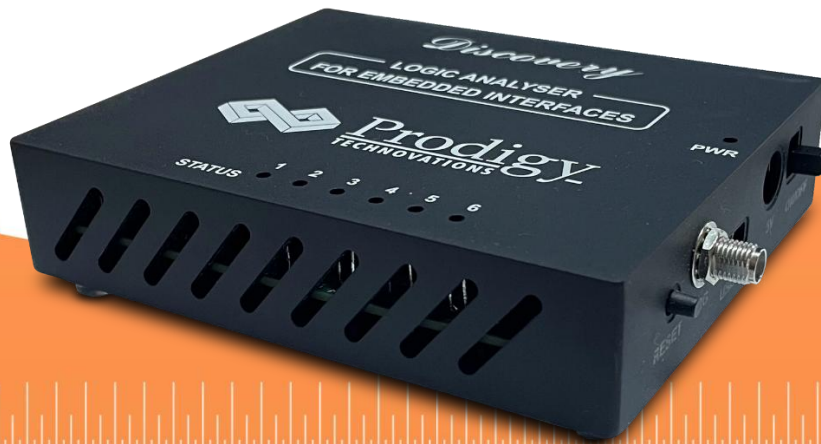


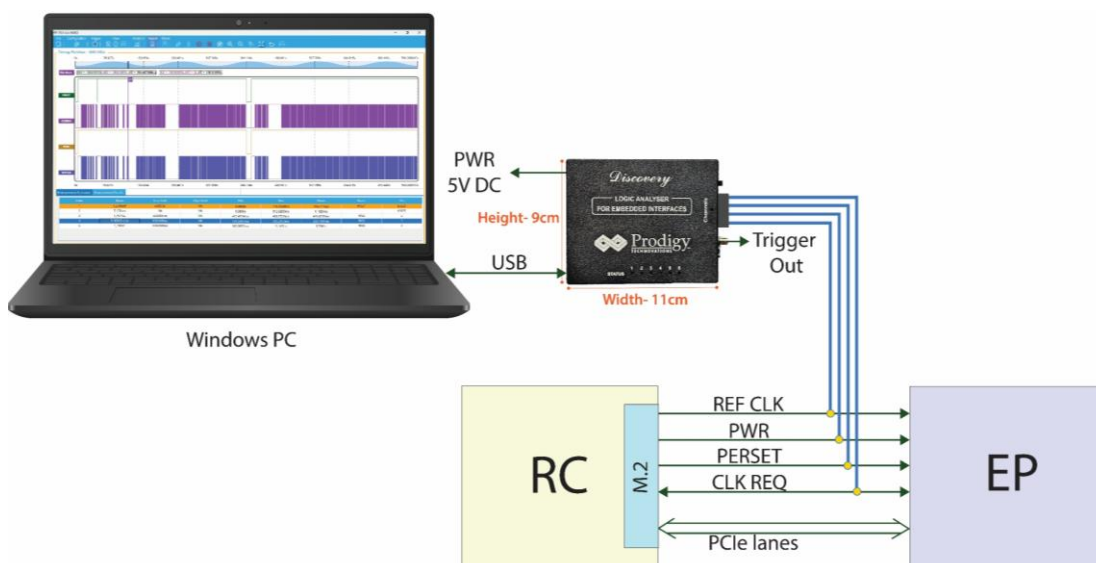
PGY-PCIeLP-SBA

PCIe Low Power Side Band Signal Analyzer



The PGY-PCIeLP-SBA PCIe Low Power Side Band Signal Analyzer that measures sideband signals timing measurements and reports failure during the low power entry and exist time over long period of time enabling test engineers test and debug the M.2 SSD devices over different operation conditions.

PGY-PCIeLP-SBA monitors CLKREQ, REFCLK, PERSET and PWR signals of the M.2 interface during the different operating conditions. It provides timing measurement of these signals as per PCIe and M.2 interface specification documents. User can also set hardware-based trigger on specific timing measurement failure and get notified during the long duration automated test environment. User interface displays timing diagram with abstract view of the 100MHz Ref Clk condition, the low power state, restart, power recycle and power on state of the during while running the test cases.



PGY-PCIeLP-SBA has M.2 extender board with access to all side band signals which can be connected to PCIe Low Power Side Band Signal Analyzer. The software runs in windows PC enables the configuration of Analyzer for measurements and trigger conditions. It continuously plots the timing waveforms and updates timing measurements summary statistical and detail information.

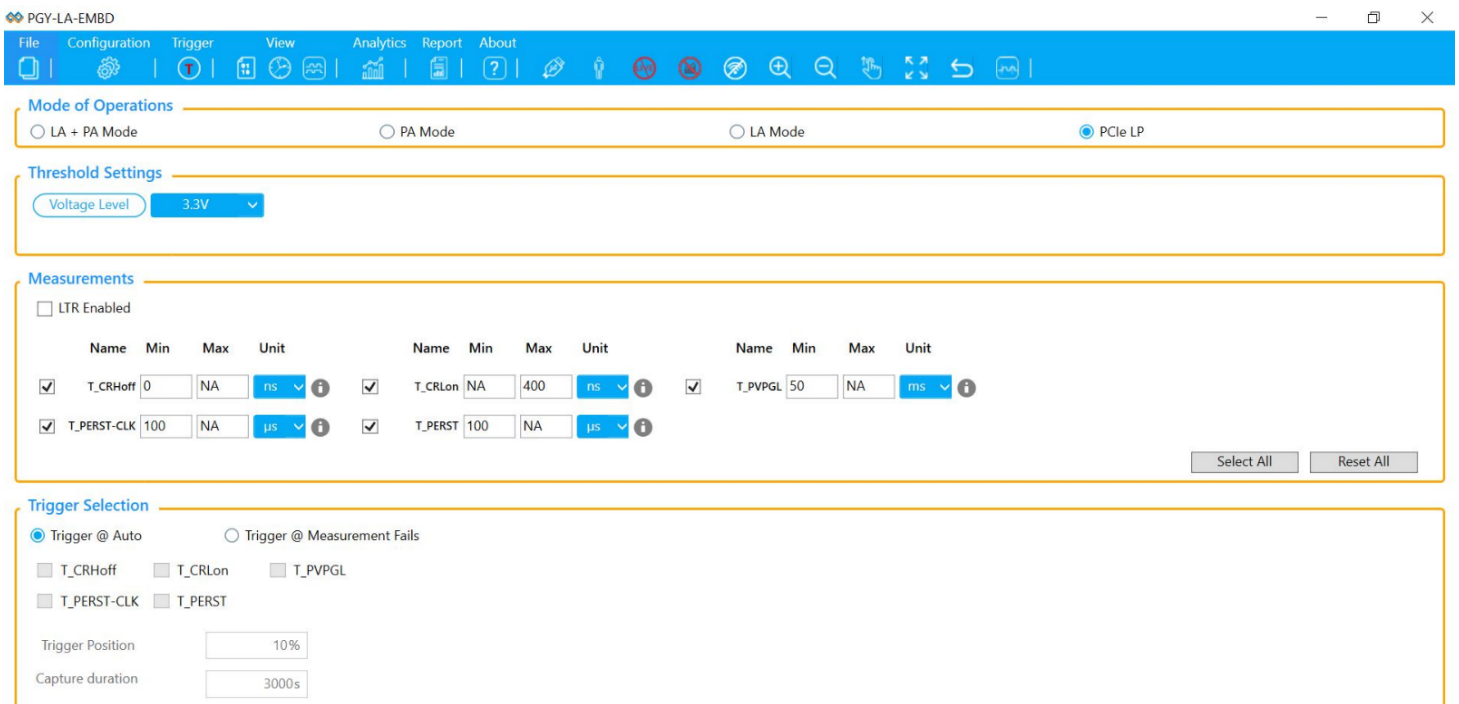
Key features

- ❖ Low-Cost Logic Analyzer with continuous streaming capability to monitor sideband signals
- ❖ Plots the timing waveforms of PWR, CLKREQ, PERSET and REFCLK
 - Power-ON State
 - Restart
 - Low power entry and exit from and to L0 State
- ❖ Measures the timing parameters

Measurement Parameter	Description
TCRH OFF	CLQREQ# de-asserted high to clock parked
TCRL ON	CLQREQ# asserted low to clock active
TPVGL	Power Valid to PERST# input active
TPERST#CLK	REFCLK stable before PERST# deassertion
TPERST	Assertion time of PERST#

- ❖ Reports timing parameter failure
- ❖ Trigger on Timing parameter failure
- ❖ Low Latency report support to overwrite T-CRON parameter
- ❖ Report Generation
- ❖ Palmtop (easily portable)

Configuration Panel



The screenshot shows the configuration panel for PGY-LA-EMBD. It includes a menu bar (File, Configuration, Trigger, View, Analytics, Report, About) and a toolbar. The main configuration area is divided into several sections:

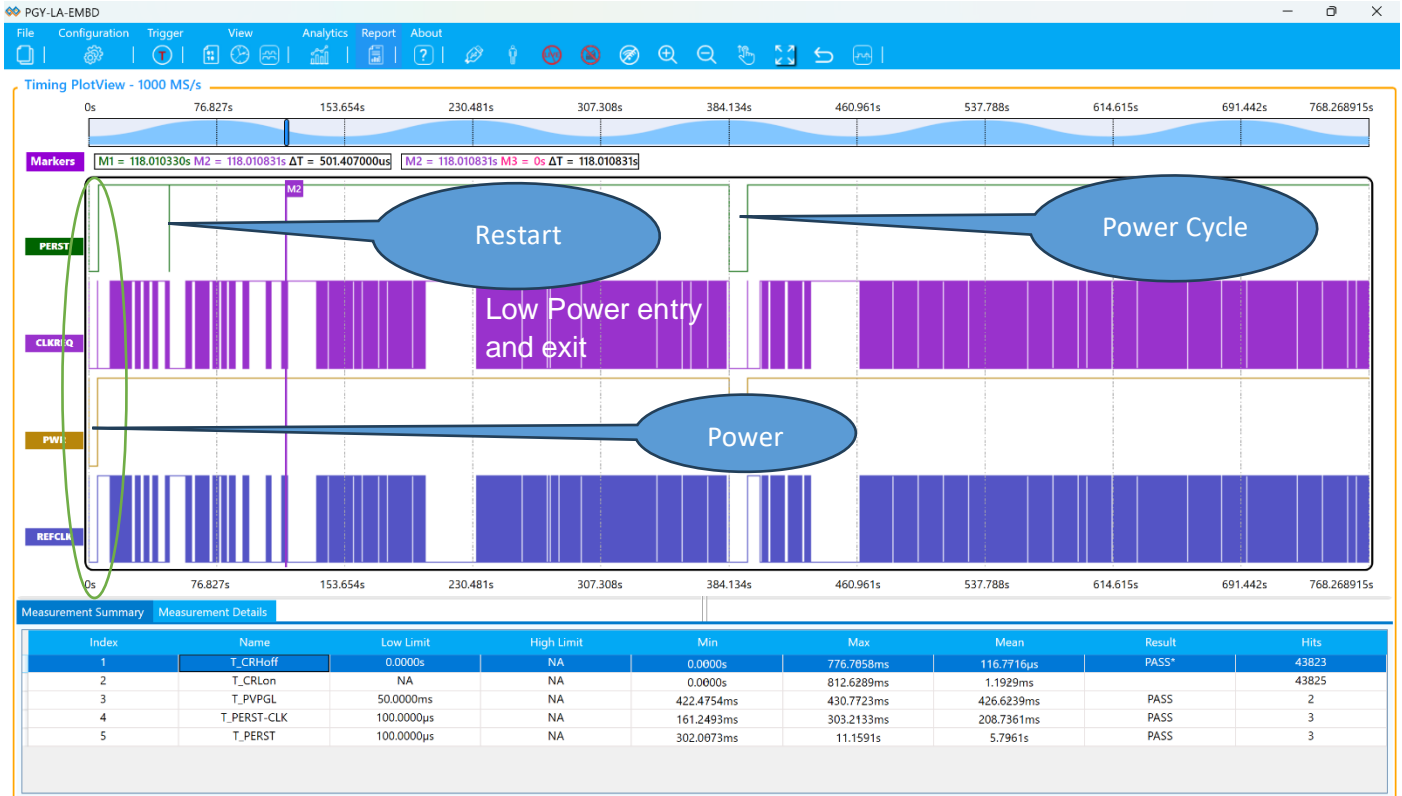
- Mode of Operations:** Radio buttons for LA + PA Mode, PA Mode, LA Mode, and PCIe LP (selected).
- Threshold Settings:** A dropdown menu for Voltage Level set to 3.3V.
- Measurements:** A table for configuring measurement parameters.

LTR Enabled			
Name	Min	Max	Unit
<input checked="" type="checkbox"/> T_CRHoff	0	NA	ns
<input checked="" type="checkbox"/> T_CRLon	NA	400	ns
<input checked="" type="checkbox"/> T_PVPGL	50	NA	ms
<input checked="" type="checkbox"/> T_PERST-CLK	100	NA	µs
<input checked="" type="checkbox"/> T_PERST	100	NA	µs
- Trigger Selection:** Radio buttons for Trigger @ Auto (selected) and Trigger @ Measurement Fails. Checkboxes for T_CRHoff, T_CRLon, T_PVPGL, T_PERST-CLK, and T_PERST. Input fields for Trigger Position (10%) and Capture duration (3000s).

Configuration allows the users to easily select the timing parameters to be measured and set the trigger on any of this timing parameter failure. User can decide the duration of the capture in time (it can be few hours) or manually can stop the analysis. Pre and post trigger selection gives the option to view the data around the trigger condition.

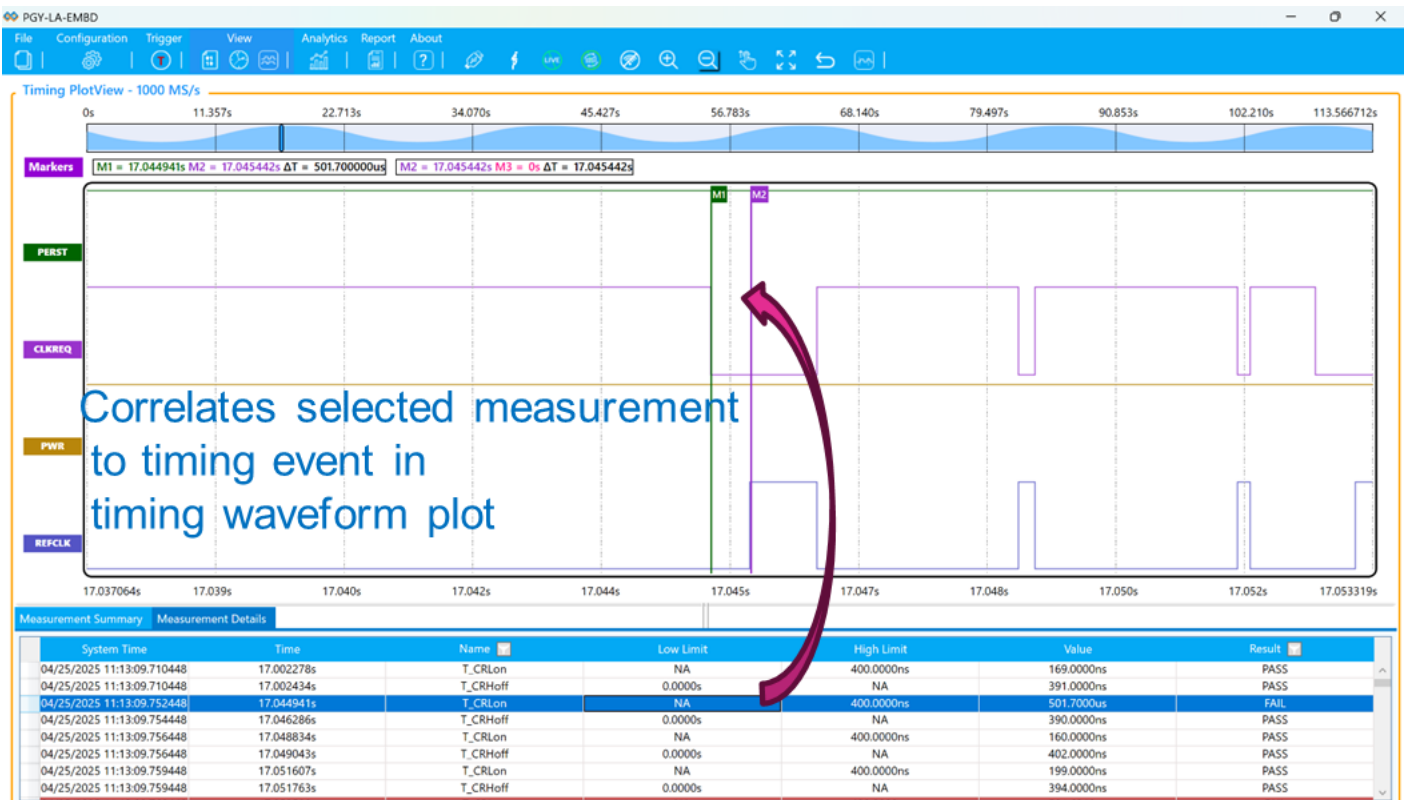


Result Panel



The applicable timing measurements for each event is measured and displayed in the software along with timing waveforms. The timing plot display PWR, CLKREQ, PERSET and REFCLK. The REFCLK is plotted at abstract layer, whenever it changes the state to 100MHz as displayed as high state and off state is displayed in low state. The acquisition duration is limited by the user need. The acquired data is continuously streamed to host computer

Debug Panel





PGY-PCIeLP-SBA provides powerful debugging capabilities to user to see failure in the acquired data by following capabilities:

- ❖ Links the specific measurement to timing waveform using Markers
- ❖ Sorting the specific measurement to view all hits
- ❖ Sort the failed or pass measurements
- ❖ Latency Tolerance Report support

Ordering Information:

PGY-PCIeLP-SBA: PCIe Low Power Side Band Signal Analyzer

Note: M.2 extender board supports 32Gbps data rate

(Shipment includes Hardware, software CD, One M.2 Extender card, Probes, USB 3.0 Cable and Power adapter)

Warranty:

12 Months of Hardware Warranty & Software upgrade Support

(Accessories, Interposer, Probes are covered for a 90 Days warranty only against any manufacturing defects)

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About Prodigy Technovations Pvt Ltd

Prodigy Technovations is the leading provider of innovative protocol analysis solutions for mainstream and emerging technologies. We provide Protocol Decode, and PHY layer testing solutions on Test & Measurements equipment's. The company's ongoing efforts include successful implementation of innovative and comprehensive protocol Analysis solutions using latest hardware technologies.