

The PGY-USB3.0 software helps in analyzing both LFPS and Superspeed patterns. The software is able to analyze both scrambled and unscrambled waveforms





Features:

1. The configuration panel enables the user to load the Tx and Rx signals.

🐼 Prodigy Tech	novations - PGY-USB3.0 Protocol Ana	lysis Software	<u>Save</u> <u>Rec</u>	<u>call</u> <u>Recall Default</u>	About 🕜 🔾 🖉
Configure	Signal Source Oscilloscope Waveform Files Signal Assignment Tx/Rx Tx v Rx v	Source CH1 ¥ CH2 ¥	Ref Type R PERCENTAGE ✓ PERCENTAGE ✓	Ref Level Hysteresis 50 % 8 % 50 % 8 %	Run Single No Ack Run/Stop <u>Run Options</u> Analyze Export
Version :0.5.0					

2. The LFPS packets are displayed in tabular manner and gives details of their timing parameters.

💸 Prodigy Techr	iovations - PGY-USB3	.0 Protocol Analys	is Software		<u>Save</u> Rec	all <u>Recall Default</u>	About	2 🔿 🛞
	TX LINK RX L	INK						Run
	LFPSType		Obtai	ned Values	Result	• LFPS	Single	
	misipe	Parameter	Min	Mean	Max	Result	Ŭ,	
Configure		TPeriod	40.131 nS	40.136 nS	40.146 nS	0	SuperSpeed	No Acq
		DutyCycle	46.76%	49.86%	50.01%	0	Protocol	Run / Stop
		TRepeat	10.353 µS	10.353 µS	10.353 µS	0	View	Run Options
Trigger	Polling_LFPS	TBurst	945.98 nS	945.98 nS	945.98 nS	Ø	Detail View	
		Amplitude	1.1820S	1.18205	1.18205	Ø		Analyze
		RiseTime	14.184 pS	14.184 pS	14.184 pS	0	- Acq Count	Export
		FallTime	14.184 pS	14.184 pS	14.184 pS		1	
Version :0.5.0								



3. Under the SuperSpeed selection, the transactions are packetized to USB3.0 packets and displayed. On expanding each packet, details with respect to that packet are displayed.

💸 Prodigy Techno	ovations - PGY-USB3.0 Protocol Analysis Software	Save Recall Recall Default	About	2 🔿 😣
	TX LINK	RX_LINK		Run
	K30_7	∧ BF_OrderedSet	^	Single
	K30_7		LFPS	Single
	K30_7	LinkCommand	SuperSpeed	No Acq
Configure	K23_7			
	D22_2	SKP_OrderedSet	Protocol View	Run / Stop
	D16_2		VIEW	Run Options
Trigger	D31_6	SKP_OrderedSet		
	D19_5		Detail View	Analyze
	EnkCommandWord1	SKP_OrderedSet		
	LGOOD_6		- Acg Count	Export
	CRC 0x2	✓ Brown SKP_OrderedSet	Y 1	
Version :0.5.0				

4. The Protocol View displays the transactions on both the Tx and Rx. This helps in easy linking of transactions between Tx and Rx. Protocol View consists of features :

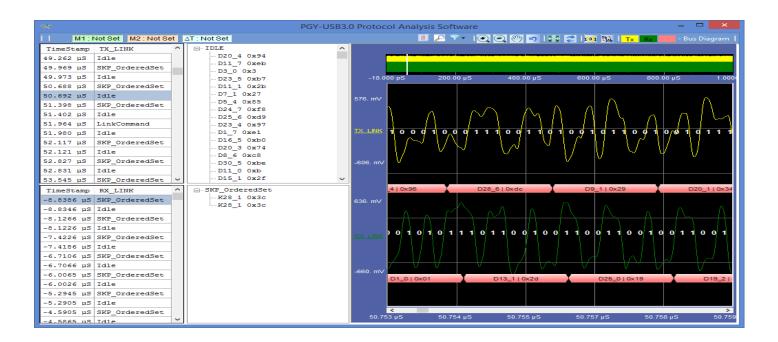
- 1. Markers : Markers can be placed to know the time between 2 transactions.
- 2. Filter: This feature can be used to view only the required packets and filter out the rest of the packets.
- 3. Search: To search for any particular packet.
- 4. The 10bit, 8bit symbol values and the inner packet structure of each packet is displayed.

				USB3.0 Protocol	Viev	N					
M1 : 75.203 µS	M2 : 74.946 µS	∆T : 256.03	nS Filter	Search							
Timestamp	Direction	Packet	SubType								^
74.946 µS	Tx 🗪 Rx	Idle	Idle	Idle							
75.003 µS	Tx 🗪 Rx	LinkCommand	LUP,LUP								
75.019 µS	Tx 🗪 Rx	Idle	Idle								
75.187 μS											
75.203 μS	Tx 🖛 Rx	Idle	Idle	Idle							
75.419 µS	Tx 🖛 Rx	SKP_OrderedS	et SKP_Ordered	lSet							
75.423 µS	Tx 🖛 Rx	Idle Idle									
75.653 µS	Tx 🗪 Rx	SKP OrderedS	et SKP Ordered	lSet							~
		Packet	Details				Symbol De	tails			
		nk Command		^	Symbol	10 Bit	8 Bit	^			
SLC	С КЗО_7						Value	Value	- 11		
EPF K23_7		23_7			К30_7	0x21E	0×FE	- 11			
LCW_1 LUP		JP			K30_7	0x21E	OxFE	- 11			
LCW 1 binary 01101011		10101111110100			K30_7	0x21E	OxFE	- 11			
CRC5_1 0x7					K23_7	0x5E	OxF7	- 1			
					D11_3	0x343	0x6B	- 1			
LCW_2 LUP					D20_7	0xB7	0xF4	- 1			
LCW_2_binary		00	000011101001100	>		D7_0	0x74	0x7	~ ~		



5. The Detail View window gives a comprehensive detail of the signals being analyzed. It gives details of the bytes in each packet and the timestamp at which the packet is received.

The waveform plot is linked with the packet being displayed on the grid. The plot contains various features like bus diagram , zoom, pan, representation of bits on the waveform and cursors.



Ordering Information

PGY-USB3.0 (shipment includes CD with PGY-USB3.0 Protocol Analysis Software) License is locked to oscilloscope

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