PX2816B
Protocol Exerciser

Data Transmission
- **Interface:** USB Type-C
- **Throughput:** Up to 5Gbps

Solid-State Drive (SSD) Storage Support
- Users need to purchase and install a compatible M.2 2280 PCIe Gen3 to Gen5 SSD.
- The SSD is used only in LA/PA logger mode, and its file system adopts Microsoft exFAT technology for storing large amounts of data.

8-Channel Exerciser POD Options: MIPI I3C, I²C, UART
- Capable of simulating protocol signals on up to 8 channels, and can be configured as either a Controller or Target device.
- Can edit topology of internal devices, where each device has separate settings.
- Can edit bus output voltage and operating modes (Pull up/down, etc.).
- Controller Mode Simulation
  - Provides Quick settings (Template) for rapid script generation and editing.
  - Provides Design wizard for editing transmission protocol data.
- Target Mode Simulation
  - Supports different Target types in various different communication protocols.
- SDK Mode
  - Supports Python Automation control API and examples.
- Logic Analysis/Protocol Analysis Functions
  - Maximum sampling rate 2GHz
  - When using with exerciser, can simultaneously observe signal waveforms and analysis results
  - Can be used independently as logic analyzer or protocol analyzer
  - Includes communication protocol decode and protocol analyzer functions
  - Supports real-time Live Mode decoding.
  - Can view decoding and packet statistics reports while transmitting protocol data.

16-Channel Logic Analyzer / Protocol Analyzer (Optional)
- Supports Acute 16-channel LA/PA POD.
- Supports various Protocol Trigger/Decode functions.

Power Supply and Power Consumption Measurement
- Provides one set of Power Supply (DC) output, configurable 0.1V - 5V DC output.
- When using power supply, can simultaneously measure power consumption.

General Purpose Input/Output (GPIO)
Provides two sets of GPIO outputs, configurable as Reset signal or general I/O control.

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Protocol	Speed	Vdd	Pull-Up Resistance	Internal Devices
I²C	50KHz~1000KHz	1.8~5V	100~100KΩ	4 (Controller + Target)
MIPI I3C	0.1MHz~13MHz	1.2~5V		
UART	110~921600 bps	1.8~5V	N/A	1

MIPI I3C Specifications

- Supports I3C v1.2 Specification.
- Can dynamically configure simulated devices (types: I3C Primary Controller / I3C Secondary Controller / I3C Target / I²C Target).
- Can set device PID / BCR / DCR.
- Custom device address allocation table creation.
- Supports generating packet data in different modes.
- Supported Modes
  - I3C SDR Mode
  - I²C Legacy
- Supports I3C Target mode sending IBI / Hot Join and other Interrupts.
- Can dynamically adjust Clock Speed and detailed Timing settings.
- Can send command formats containing Errors (Parity, CRC, etc.).

I²C Specifications

- External I²C devices auto scanning.
- Timing and Frequency adjustment.
- Support different register types of internal I²C node.
- Capable of simulating both Controllers and Targets.

UART Specifications

- Support different baud rates and format for UART Packet.
- Capable to send packets with ASCII or HEX format.

Packing List:

• Device

PX2816B unit


USB 3.0 cable


PD to DC Adapter Cable


Power Adapter (PD, 15V/3A)


Stack cable

• Exerciser POD (Option)

PX-POD


18.5cm Lead Cable


Grippers