DSLogic U3Pro16
USB-based Logic Analyzer

Key Features
- 16 digital channels
- USB 3.0 interface
- Up to 1GHz sample rate
- Up to 2Gbits hardware memory
- Up to 16G sample depth (stream mode)
- Adjustable Threshold (0.1V Step)
- Shielded fly wires
- Unibody aluminum case
- 3-year warranty

Connectivity
- USB Type-C interface (USB3.0 device port)
- 1.27mm dupont female connector (Host device)
- 2.54mm dupont female connector (Fly wires)

Power Source
- Power source voltage: $5V_{DC} \pm 5\%$
- Power consumption: 2.5W maximum

Input output ports
<table>
<thead>
<tr>
<th>Port</th>
<th>Direction</th>
<th>Descriptions</th>
<th>Protected Voltage Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>USB 3.0 port</td>
<td>InOut</td>
<td>Connect to host computer</td>
<td>4.75v ~ 5.25v</td>
</tr>
<tr>
<td>CH0 ~ CH15</td>
<td>Input</td>
<td>Connect to under test signals</td>
<td>-30v ~ 30v (with fly wires)</td>
</tr>
<tr>
<td>CK</td>
<td>Input</td>
<td>Clock input at state sample mode</td>
<td>0v ~ 3.3v (Max 50MHz)</td>
</tr>
<tr>
<td>TI</td>
<td>Input</td>
<td>Reserved</td>
<td>0v ~ 3.3v</td>
</tr>
<tr>
<td>TO</td>
<td>Output</td>
<td>External trigger signal output</td>
<td>--</td>
</tr>
</tbody>
</table>

Designed to make your work enjoyable
DSLogic U3Pro16 is an USB-based logic analyzer, which has a portable size (79x74x9mm), but powerful performance (up to 1GHz sample rate, USB 3.0 interface). With the easy-to-use and cross platform software, DSView, you can use your favorite computer to debug and analysis your circuits, observe the digital wave and decoder various protocols at anywhere and anytime.
Technical Specifications

Input Voltage and Thresholds
Safe voltage range: -30v ~ 30v (with fly wires)
Threshold voltage: 0v ~ 5v (0.1v step)
Work with most of logic voltage level (such as: 5v, 3.3v, 2.5v, 1.8v, 1.5v, 1.2v, 1.0v, etc.)
ESD protected

Input Impedance
250KΩ // ~13pF

Max Sample Rates

<table>
<thead>
<tr>
<th>Buffer mode</th>
<th>Stream mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 channels: 1GHz</td>
<td>3 channels: 1GHz</td>
</tr>
<tr>
<td>16 channels: 500MHz</td>
<td>6 channels: 500MHz</td>
</tr>
<tr>
<td>--</td>
<td>12 channels: 250MHz</td>
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<tr>
<td>--</td>
<td>16 channels: 125MHz</td>
</tr>
</tbody>
</table>

Max Sample Depth
Buffer mode (without RLE compression): 2G / num. of channels
Buffer mode (with RLE compression): 16G / num. of channels
Stream mode: 16G

Error/Accuracy
Minimum acquisition pulse: 2ns
Acquisition Accuracy: ± sample interval (for example: ±10ns@100M sample rate, ±1us@1M sample rate)

Noise Immunity
Each channel provides independent shielding ground.

System Requirements
Windows XP, Vista, Win7, Win8 & Win10
Mac OS X 10.12 or above
Linux: recent Ubuntu, Fedora, Arch, etc.
USB 3.0 Host port
DSLogic U3Pro16 DataSheet

Safety & Caution

- If you are using a mains powered (grounded) host computer, the ground terminals of DSLogic are also connected to the real ground, you must avoid to connect any ground terminals to HOT DUTs.
- DSLogic has the overcurrent protection, but we recommend that you should try to avoid any short circuit event. After all the ability of upstream USB port is an uncertain factor.

Revision History

The following table shows the revision history for this document.

<table>
<thead>
<tr>
<th>Date(DD/MM/YY)</th>
<th>Version</th>
<th>Revision</th>
</tr>
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<tbody>
<tr>
<td>20/06/20</td>
<td>v1.1</td>
<td>Add CK max frequency</td>
</tr>
<tr>
<td>18/02/20</td>
<td>v1.0</td>
<td>Initial release (based on DSView v1.10)</td>
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