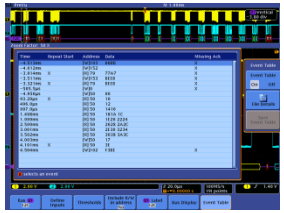
# MSO/DPO4000B Series vs. LeCroy WaveRunner Xi-A Series

## Competitive Fact Sheet

## Serial Triggering and Decode

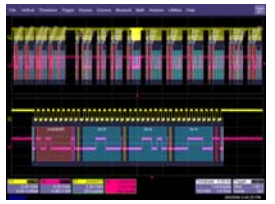
### **Tektronix** MSO/DPO4000B Series

- ✓ Simple time-correlated and labeled bus form display with color coded decode.
- ✓ Large easy to read tabular view with timestamp.
- ✓ View all packets in memory whether on screen or not.
- ✓ Wave Inspector ® controls seamlessly integrate serial into automated search.
- ✓ Search the entire record whether on screen or not.



### **LeCroy** WaveRunner Xi-A Series

- ✗ Overlaid color coding obscures waveforms, is difficult to read, and waveforms are not labeled.
- ✗ Table of packets in lower half of display only.
- ✗ Only displays packets that are visible on screen.
- ✗ Serial decode search is completely separate from WaveScan™.
- ✗ Searches only serial decode information on screen and does not place marks.



## Navigation and Search

### **Tektronix** MSO/DPO4000B

- ✓ Dedicated Wave Inspector® front panel controls to quickly navigate and search through long records.
- ✓ Same controls for analog, digital, and serial and parallel bus waveforms.
- ✓ Search events found counter.
- ✓ Automated search marks.

### **LeCroy** WaveRunner Xi-A

- ✗ Horizontal position used to scroll through data. Zoom uses multiple windows with multiplexed knobs.
- ✗ Serial decode search completely separate from WaveScan™.
- ✗ No search events found counter.
- ✗ No marks (user or automated).

## Key Specifications Comparison

| | **Tektronix** MSO/DPO4000B Series | | **LeCroy** WaveRunner Xi-A Series | |
|---|---|---|---|---|
| **Channels** | ✓ | 4 (+16 digital MSO) | ✓ | 2, 4 (+18 to 36 with optional MSO) |
| **Bandwidth** | ✓ | 350 MHz, 500 MHz, 1 GHz | ✓ | 400 MHz, 600 MHz, 1 GHz, 2 GHz |
| **Max. Sample Rate** (All channels on) | ✓ | 5 GS/s (1 GHz models)<br>2.5 GS/s (other models) | ✓ | 5 GS/s |
| **Max. Record Length** (All channels on) | ✓ | 20 M points | ✗ | 12.5 M points |
| **Serial Triggering and Decode** | ✓ | I²C, SPI, USB, Ethernet, CAN, LIN, RS-232/ 422/485/UART, FlexRay, I²S/LJ/RJ/TDM, MIL-STD-1553 | ✓ | I²C, SPI, CAN, LIN, RS-232/UART, FlexRay, I²S/LJ/RJ/TDM, MIL-STD-1553 (no USB, Ethernet) |
| **Standard Passive Probe** | ✓ | 1 GHz, 3.9 pF, 10 MΩ (1 GHz models)<br>500 MHz, 3.9 pF, 10 MΩ | ✗ | 500 MHz, 9.5pF, 10 MΩ |

www.tektronix.com/mso4000B

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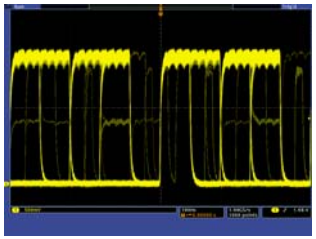
## Competitive Fact Sheet

## Discovering an Intermittent Pulse

### **Tektronix** MSO/DPO4000B Series

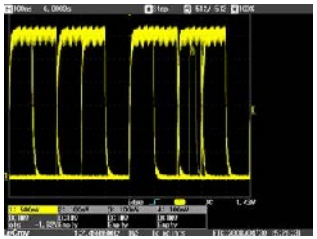
Infinite persistence stopped after 10 second capture



- ✓ 50,000 wfms/s capture rate.
- ✓ As shown, many glitches and intermittent pulses are captured in 10 seconds.
- ✓ Persistence available in any capture mode.

### **LeCroy** WaveRunner Xi-A Series

Infinite persistence stopped after 1 minute capture



- ✗ Waveform capture rate not specified for normal acquisition.
- ✗ As shown, few glitches or intermittent pulses are captured in 1 minute.
- ✗ Persistence not available in WaveStream™ high speed capture mode.

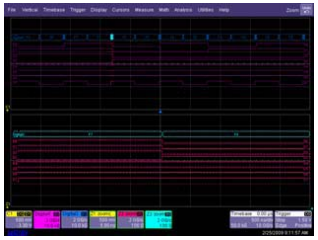
## Digital Debug with MSO

### **Tektronix** MSO4000B

- ✓ Per channel digital thresholds enable analysis of multiple logic families.
- ✓ Clocked or unclocked parallel bus decode.
- ✓ Event table for parallel bus decode.
- ✓ Green trace for logic highs (1), blue trace for logic lows (0).
- ✓ Channels can be displayed as a bus and/or individual signals.
- ✓ Digital channels can be grouped and/or independently moved in the display.

### **LeCroy** WaveRunner Xi-A + MSO

- ✗ Digital thresholds limited to one per 9-channel digital probe pod. Limited ability to analyze multiple logic families.
- ✗ No clocked parallel bus decode.
- ✗ No event table for parallel bus decode.
- ✗ No color difference between a logical low and high value.
- ✗ Channels displayed as a bus waveform or as individual signals, but not both at the same time.
- ✗ Digital channels must be displayed in hardware order.



## Dedicated Front Panel Controls

### **Tektronix** MSO/DPO4000B

- ✓ Per-channel vertical controls.
- ✓ Wave Inspector® controls make navigation and search easy.
- ✓ Quick front panel access to Math, Reference, Bus Setup, and Measurements.

### **LeCroy** WaveRunner Xi-A

- ✗ Multiplexed vertical controls.
- ✗ Windows UI requires using a touch screen and/or a mouse.

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