

Tektronix TDS3000B Series

Tektronix DPO vs. Agilent Mega-Zoom

When Does “Mega” Equal 1 Million ?

The Narrow Conditions of Agilent’s 1 Million Point Record Length

- When only one of channel 1 or 2 is turned on and / or only channel 3 or 4 is turned on (this is called “half-channel” mode)
- Logic channels are turned off
- Single shot mode
- Normal acquire mode, or Average set to 1
- Horizontal mode set to main

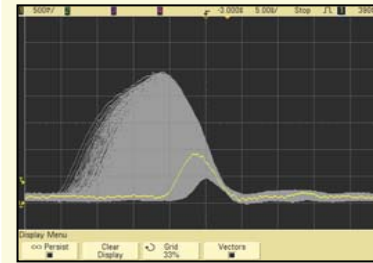
ALL of the above must be applied simultaneously

Why Mega-Zoom is NOT The Answer

- ✗ Does not always have 1 million points of record
- ✗ No direct control of record length
- ✗ No direct read-out of record length
- ✗ Mega-Zoom cannot reliably find random glitches
- ✗ Mega-Zoom is not DPO

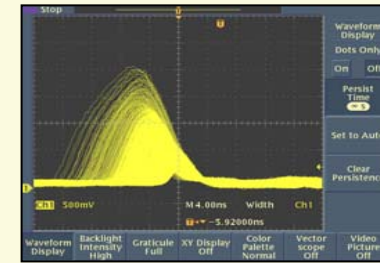
Meta-Stable Pulse - Persistence Mode

✗ DSO6000A Mega-Zoom



- ✗ No gray scale capability in persistence mode, running or stopped
- ✗ No variable persistence capability

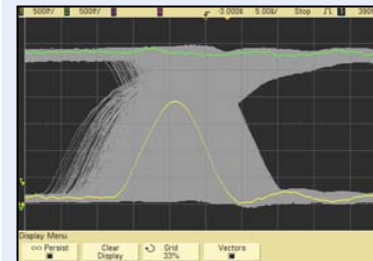
✓ TDS3000B DPO



- ✓ Gray-scale persistence capability, running or stopped
- ✓ Variable persistence capability

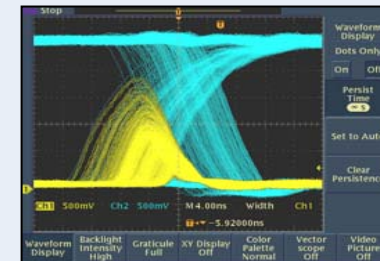
Meta-Stable Pulse - Two Active Channels

✗ DSO6000A



- ✗ No color differentiation between channels when stopped
- ✗ Cannot distinguish between the persisted areas contributed by each channel

✓ TDS3000B



- ✓ Each channel represented by different colors
- ✓ Intensity scaling preserved when stopped