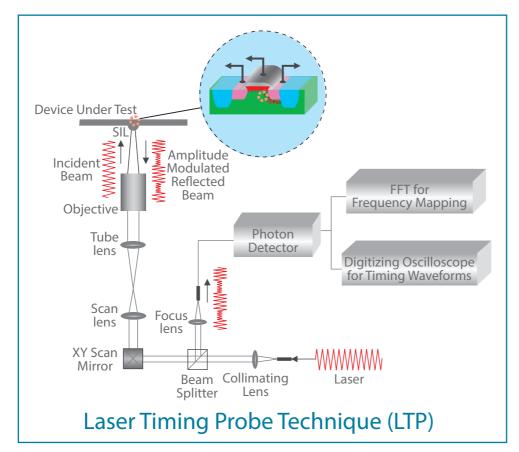
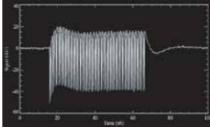
## SEMICAPS LTP

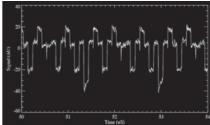
## LASER TIMING PROBE TECHNIQUE



Frequency mapping image to locate nodes at specified frequency



Single point waveform measurements to show signal delay of 15 us



Timing waveform showing 4 states from a 3-state inverter

## **Features**

- Non-invasive backside detection of waveforms/logic within a die using a CW laser
- FFT Frequency Mapping to quickly trace signal paths inside a die
- Best-in-class:
  - · Resolution with Centric and Aplanatic RSILs
  - Bandwidth up to 12 GHz
  - Test loop lengths up to 1000 ms
  - Measure rise times < 40 ps</li>
- Optional:
  - SOM with 1064 nm and 1340 nm lasers
  - PEM with ultra low-noise InGaAs camera (LN2 or TE cooled)
- Device Thermal Control



**SEMICAPS LTP 3000** 

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Excellence In Innovation