Time Domain Reflectometry (TDR)

Timing measurements of reflected signals in packaged parts. Comparison to a known good part establishes deviation point of failing part. Used to identify location of failure to substrate, interconnect or die. Each layer in the package may be inspected optically and probed electrically.

**TDR ON BGA, TWO PINS CHECKED**

As received

Die removed
**Time Domain Reflectometry (TDR)**

**TDR ON BGA, TWO PINS CHECKED**  
Top layer of substrate removed

![Image of TDR graphs showing substrate only, no die, and top layer of substrate removed.]

**TDR ON BGA, TWO PINS CHECKED**  
Last layer of substrate removed

![Image of TDR graphs showing substrate only, no die, and last layer of substrate remaining.]