

Pulse Response Comparison

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Time Domain Methodology

April 4, 2012

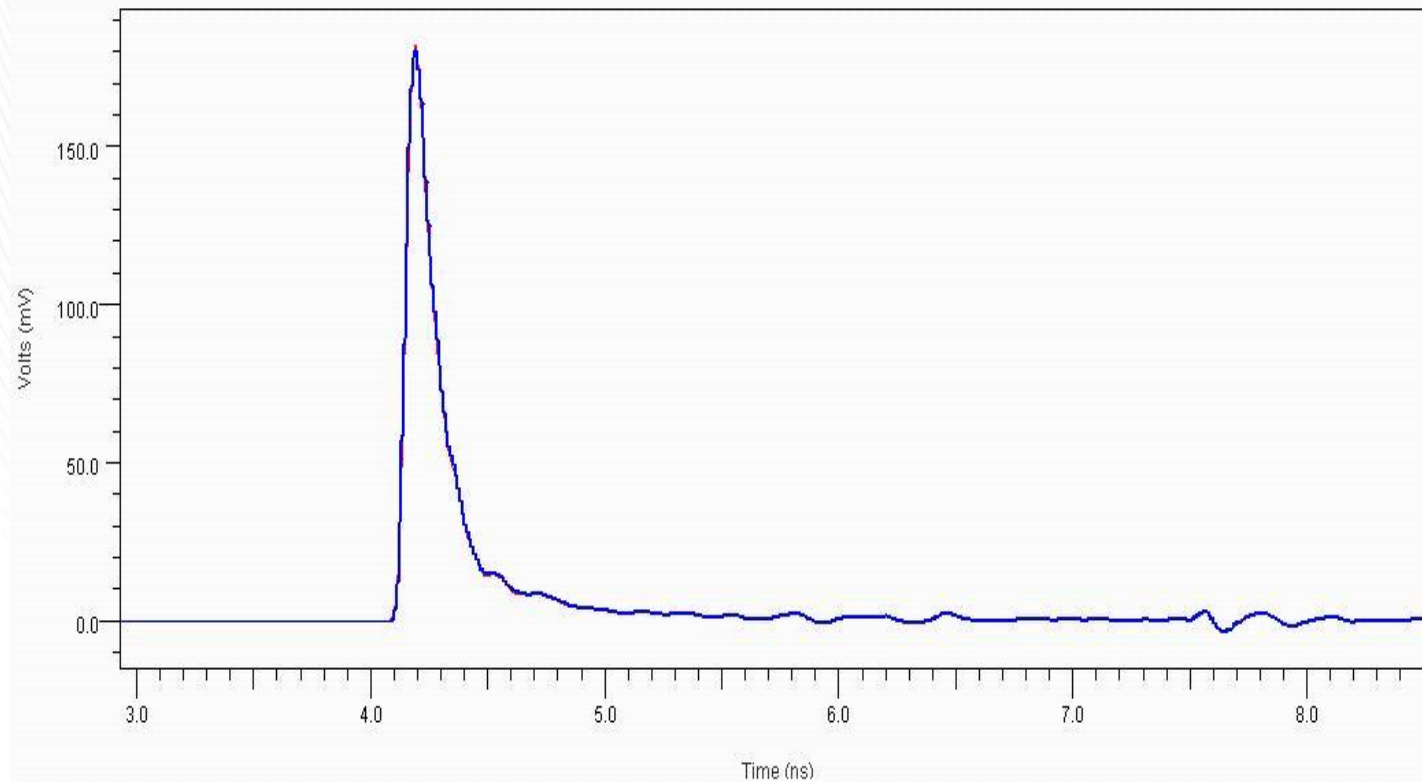
Channels

- Channels
 - Thru_S06-P20-10-AB_S14-P23-04-CD_NNN.s4p
 - FEXT_S14-P23-03-AB_S06-P20-10-CD_NNN.s4p
- 38ps UI
- No Package
- 1V Peak to Peak Input Voltage
- Tx
 - 50 Ohm Single Ended Impedance, no C_Comp (Cdie)
- Rx
 - 50 Ohm Differential Impedance, no C_Comp (Cdie)
- 32 Samples per UI
- Comparing to Mellitz Pulse Response (March 29, 2012)
- Colors
 - Red QCD
 - Blue Mellitz

Thru



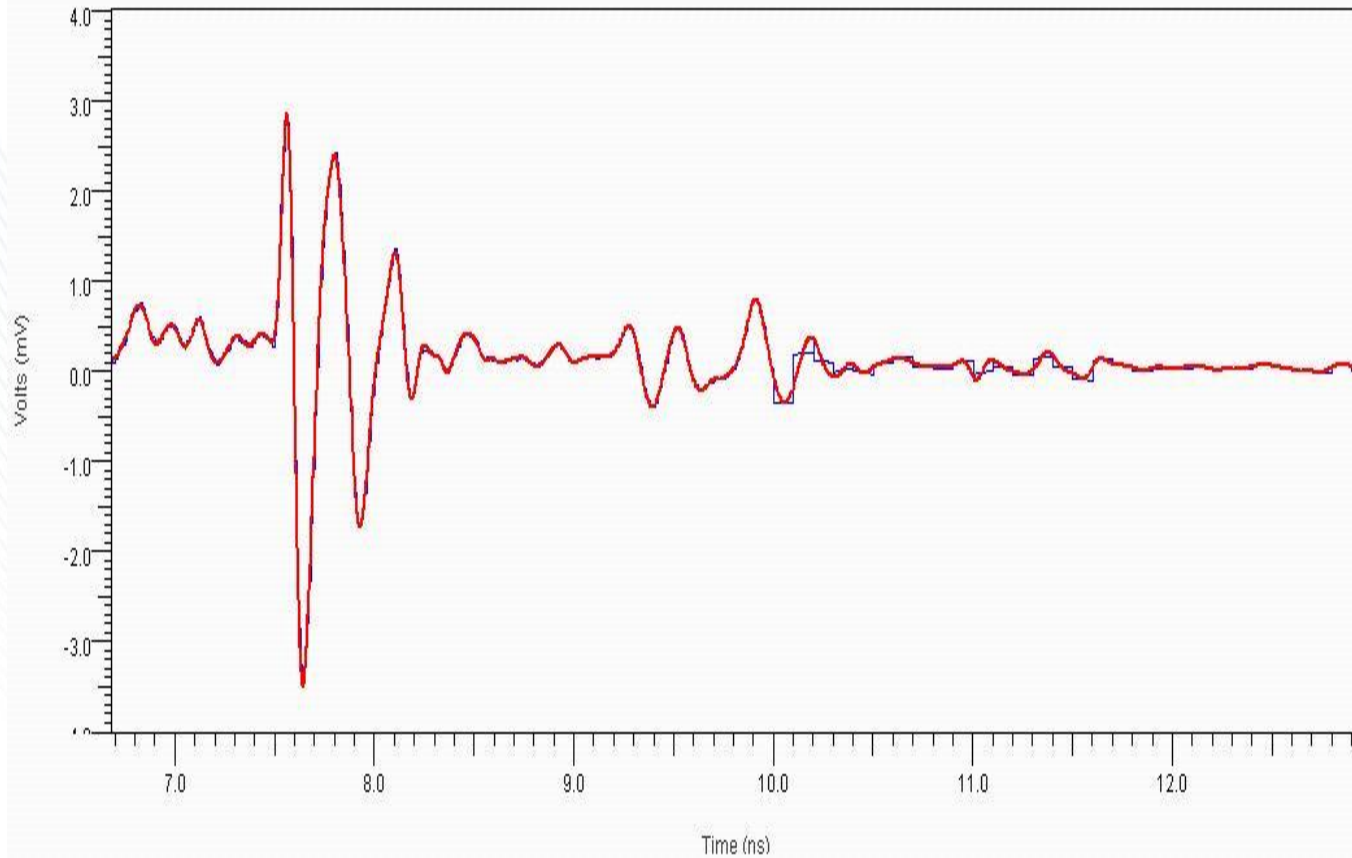
Pulse Response
QCD Red, Mellitz Blue



Thru

SiSoft™

Pulse Response
QCD Red, Mellitz Blue

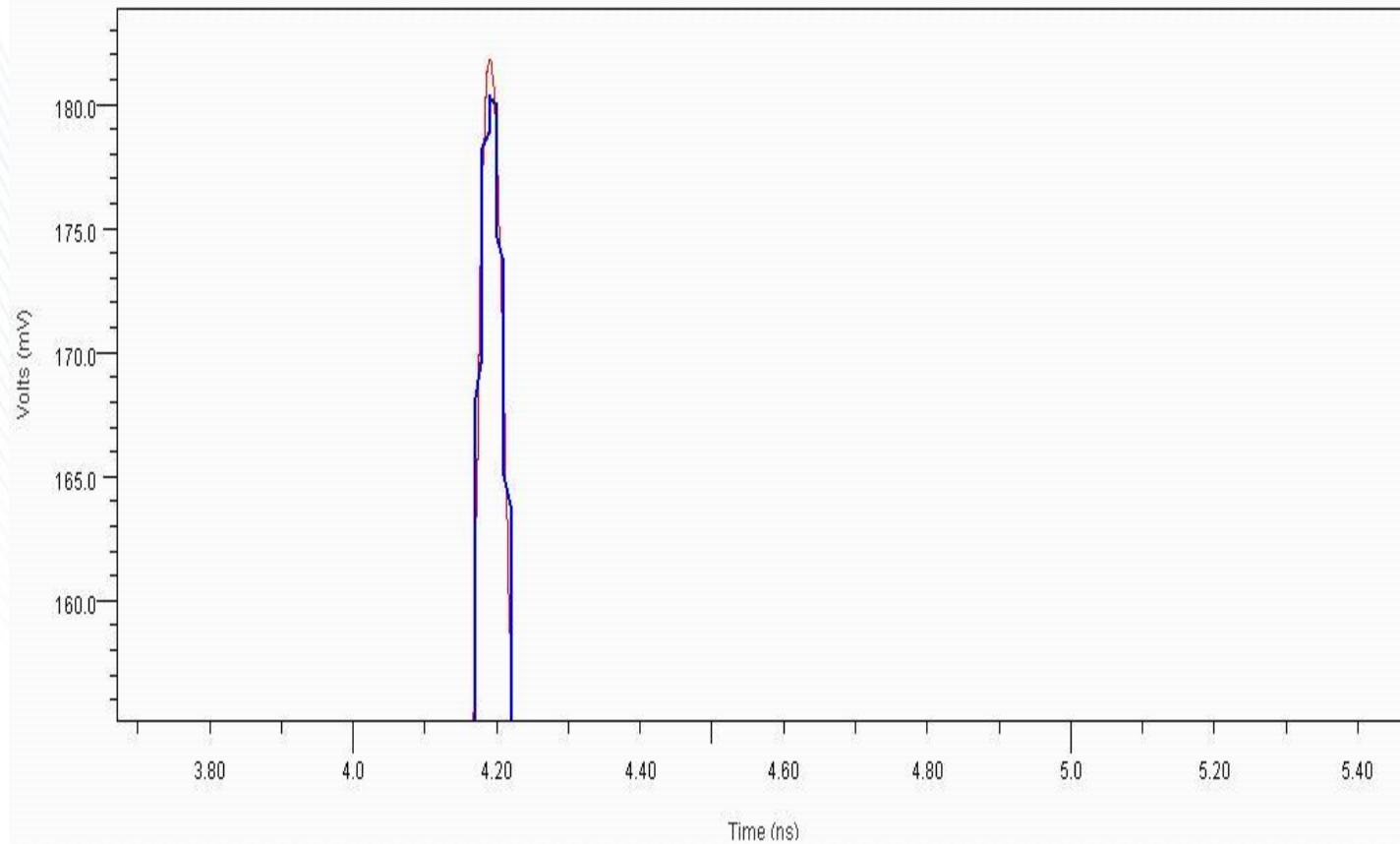


Thru



Pulse Response

QCD Red, Mellitz Blue

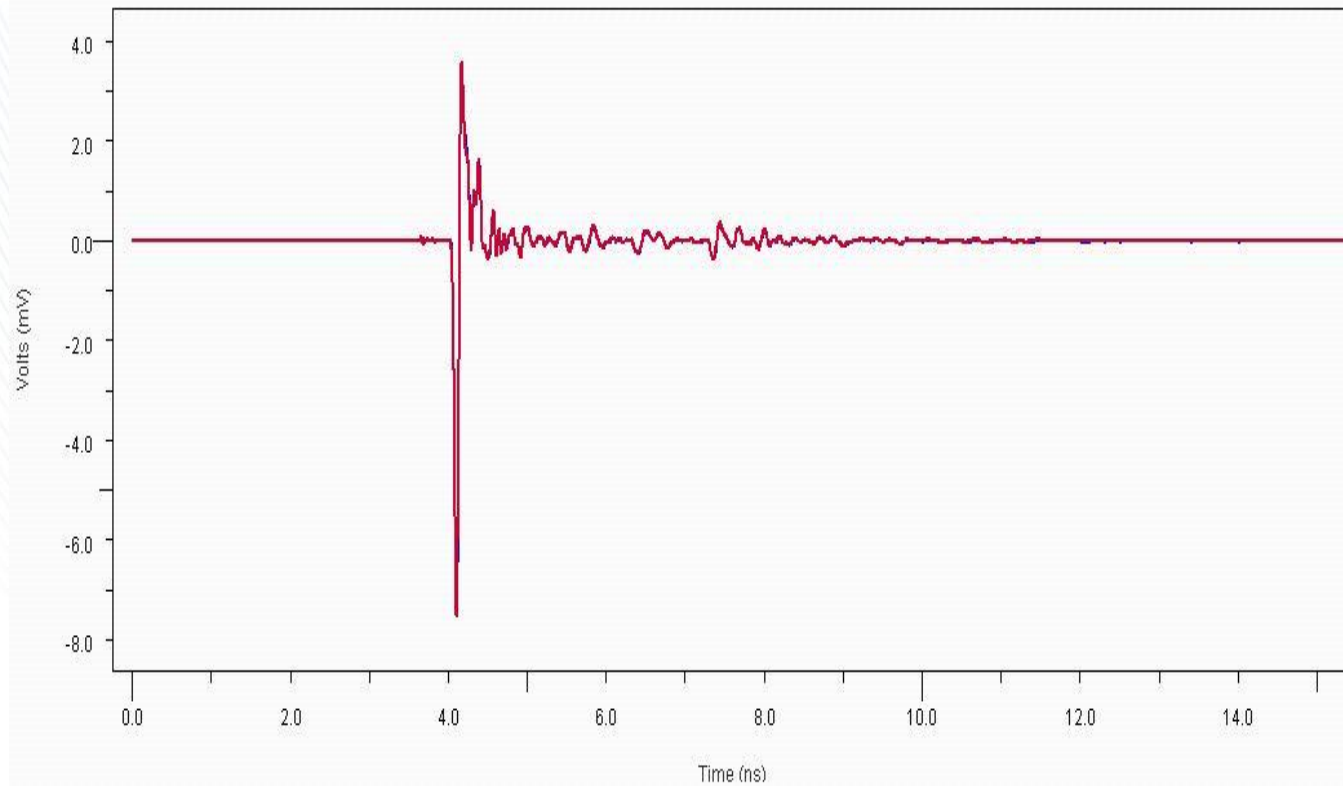


FEXT



FEXT Pulse Response

Subtitle

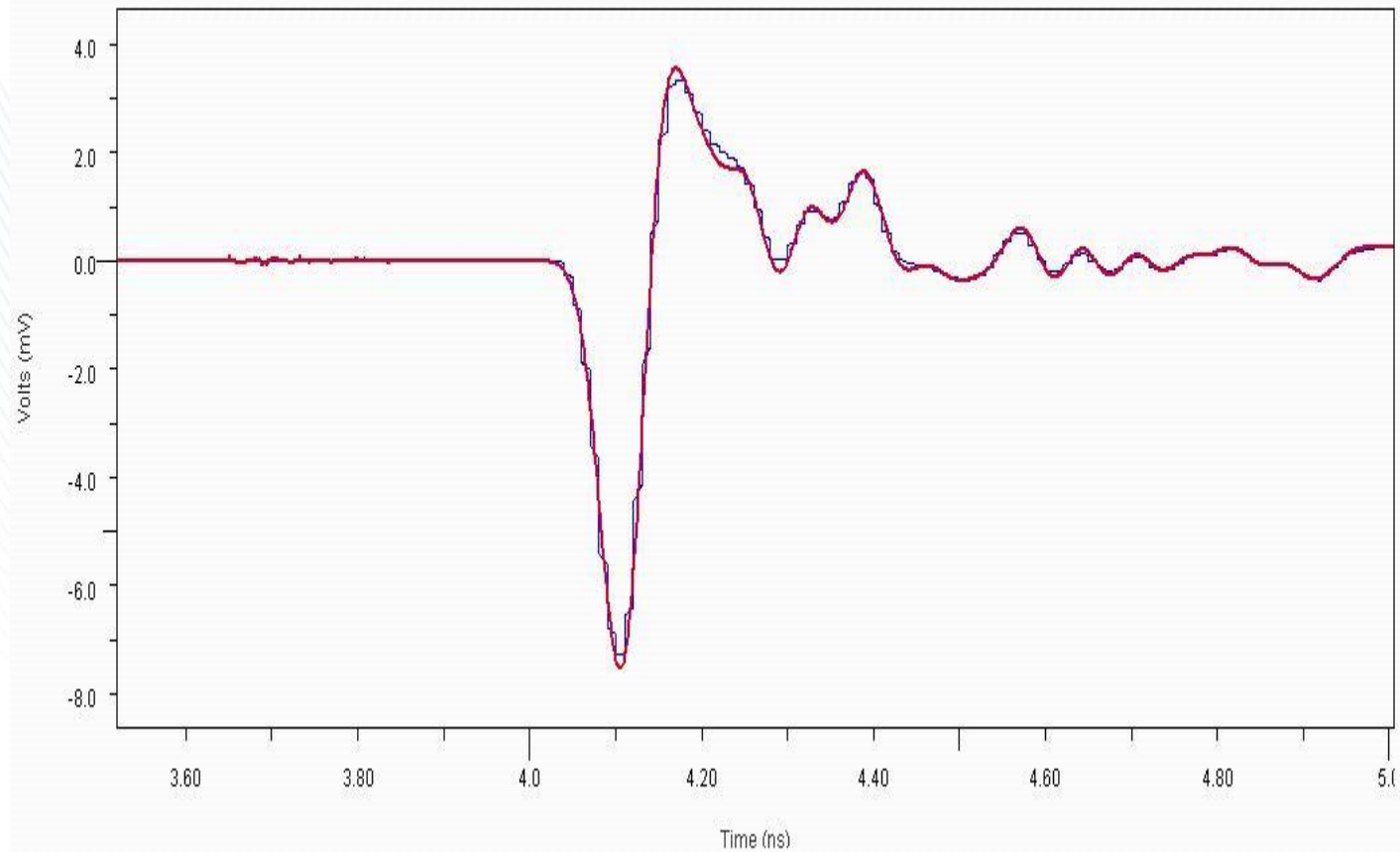


FEXT



FEXT Pulse Response

Subtitle

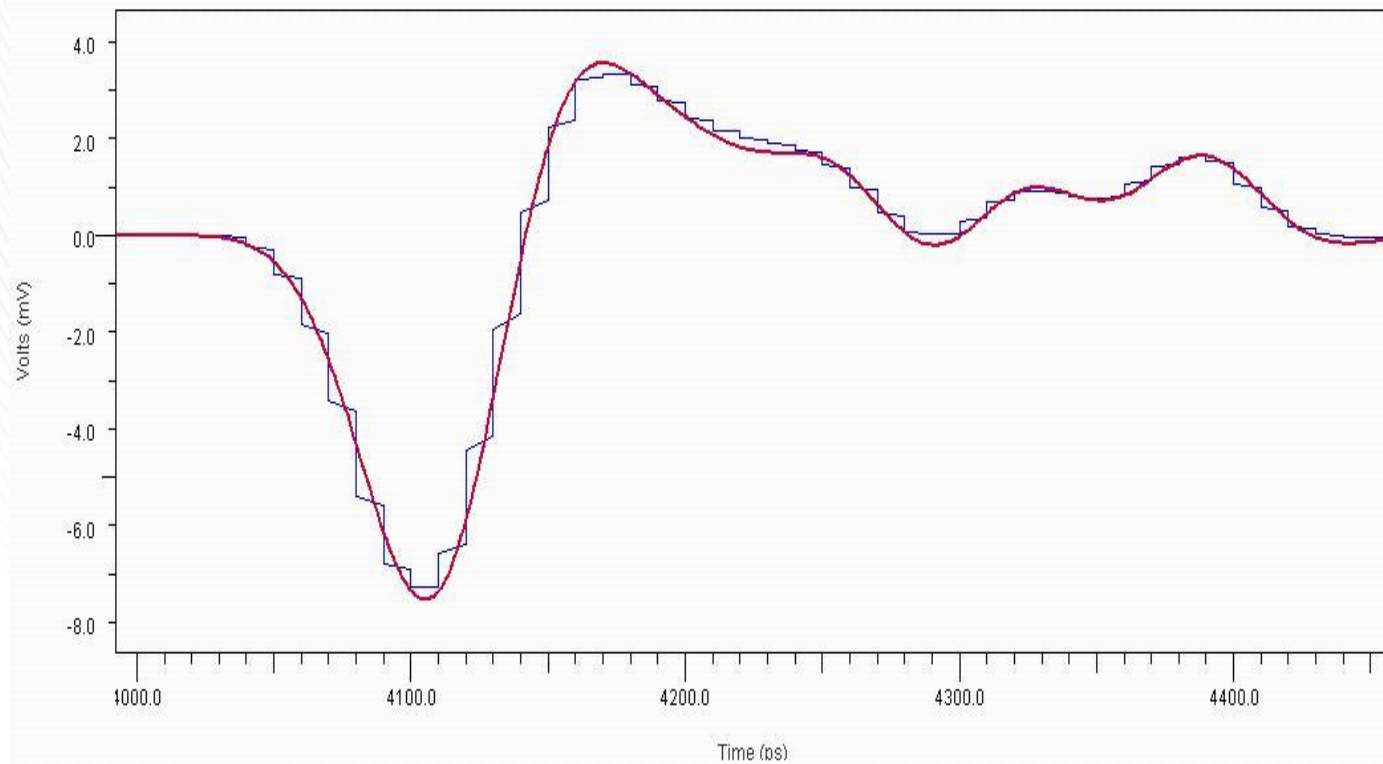


FEXT



FEXT Pulse Response

Subtitle



Conclusion

- Mellitz Pulse Response are “jagged” at 1.2 ps
 - This corresponds to $1/32$ UI
- General agreement $< \sim .1$ mV
- ~ 1 mV difference at main cursor