

ARM-ETM Preprocessor AutoFocus II



At the start of 2007, Lauterbach will launch a new preprocessor version for the ARM-ETM. Together with PowerTrace II, AutoFocus II has been successfully tested with frequencies over 500 MHz.

The AutoFocus technology has been further refined to enable optimized sampling of trace signals for trace-port data rates at the boundary of what is technically feasible:

- 64 clock and 24 data delays with a resolution of 78 ps

- Low signal skew on all 40 trace channels
- Decoupling of the termination of clock and data channels

In addition to the existing comprehensive mechanisms for automatic preprocessor configuration and the self-test, there is now a three-dimensional eye finder for checking the quality of the ETM channels on the target hardware. This shows the data eyes for all ETM channels with timing error range of -1.8 to +4.9 ns as well as a voltage range from 0 to 3.3 volts. The third dimension is the channel number. The user can either analyze individual channels or see all channels superimposed. If the result of this check is that individual ETM channels have a smaller data eye than average, the hardware layout should be checked to see if these signals show any unusual features. Long lines, stub lines, and weak drivers can be some of the reasons for poor signal quality.

