

## Serial ETM

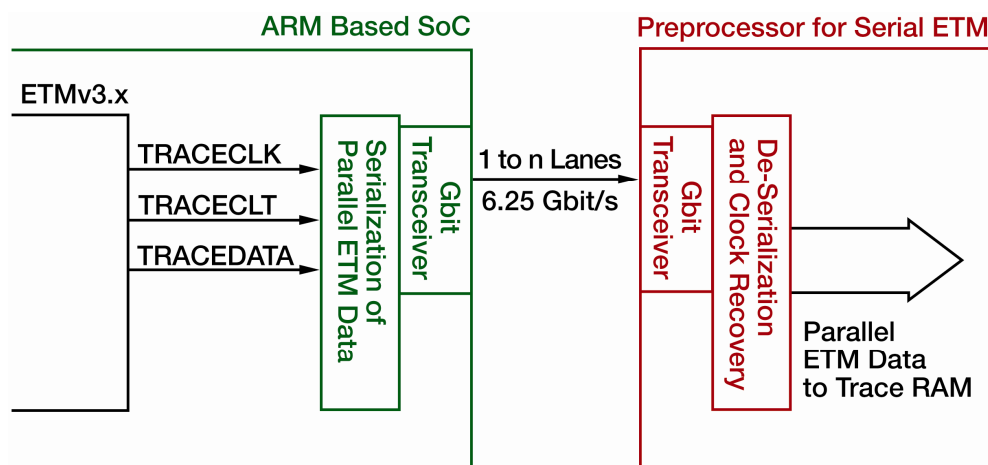
To implement very large trace-port bandwidths with only a few transmission lines, Lauterbach is working on a concept for the serial transmission of ETM data. Data rates of up to 6.25 Gbit/s are being targeted in the first generation.

Many manufacturers are already offering Gbit-PHY transceivers on their ASICs, so it is logical that these could be used for the trace port as well. This enables the trace-port bandwidth to be increased and/or the number of pins to be reduced.

In consultation with ASIC manufacturers, the serialization of ETM data on the ARM-SoC is planned based on the Xilinx Aurora Protocol.

The serial preprocessor on the development tool side will receive data by means of a multi-Gbit transceiver and handles the de-serialization and clock recovery. The parallel ETM data recovered in this way is then saved as usual in the trace RAM of the PowerTrace II.

The current version of PowerTrace II can be used with the serial preprocessor without any modification, thus once again demonstrating the flexibility of the modular concept designed into all Lauterbach tools.



Andrea Martin, February 2007