[TriCore] CombiProbe for TriCore Use Cases

2024-06-21 - Comments (0) - TriCore

The prevalent use case of CombiProbe for TriCore is DAP Streaming, introduced by Lauterbach in 2017.

The CombiProbe:

- Has 512 MByte of trace memory
- Supports debug port type DAPWide and DAP4
- Supports a high clock rate of the debug port (up to 160 MHz)

These key features make it a perfect fit to support DAP Streaming for the AURIX™ TriCore™ microcontrollers.

In April 2023, Lauterbach introduced the AUTO26 Debug Cable V3. Thanks to its improved design, the V3 cable combined with a suitable PowerDebug module (e.g., PowerDebug PRO, PowerDebug E40, or PowerDebug X50) offers an additional configuration to be used for DAP Streaming.
See the following link for more details:

DAP Streaming with Debug Cable for TriCore AURIX

Nevertheless, CombiProbe for TriCore is still required for:

- DAP Streaming using older Power Debug Modules (e.g., Power Debug Interface USB 3.0, PowerDebug II).
- Correlation with Mixed-Signal Probe
  Connected to port B of a CombiProbe 2, a Mixed-Signal Probe can be used to record digital and analog signals, which can be correlated to the recorded program flow. This way it is easy to verify signal-timings which are initiated by the application software, or to calculate the power consumption of specific program parts.
- Starting from June 2024, TRACE32 provides dual AUTO26 whisker support for CombiProbe. This allows to debug two different TriCore™ systems simultaneously using the same tool. DAP streaming from both targets is also supported.