UAD2^{next}

The **Universal Access Device2^{next}** is the powerful successor of UAD2+ and is the new all-in-one device in PLS's UDE target access device family. It combines the state-of-the-art debugging features of the UAD2pro with trace capabilities, which makes it ideal for efficient debugging, test and system-level analysis.

The UAD2^{next} acts as a bridge between the base model UAD2^{pro} and the high-end tool UAD3+. Besides a large number of powerful debug and trace interfaces, such as DAP, SWD, JTAG, cJTAG and LPD, the UAD2next also supports CAN and ASC interfaces for access to the target. Robust trace modules, which can be easily plugged in as needed, ensure a fast and efficient transfer of trace data from the target into the UAD2^{next}.

Together with the Universal Debug Engine® (UDE) the UAD2^{next} provides a comprehensive and powerful support even for the latest heterogeneous multi-core SoCs.

- High performance debug access to AURIX 2nd TC3 Generation, AURIX TC2, TriCore, PowerArchitecture, Cortex-R, Cortex-M, Cortex-A, S32V234, XC2000, XE166, XMC4500, Arm7, Arm9, Arm11, SuperH SH-2A, RH850
- ASC and CAN/CAN FD target interfaces (ASC and CAN debugger). CAN FD available upon request.
- Plug-in modules for parallel and serial trace
- USB3 or Gigabit-Ethernet for connecting UAD2^{next} to the PC
- Proven and robust aluminum housing 17.0 x 14.5 x 5.5 cm
- Passive Cooling.

The UAD2^{next} is optimized for high-speed debug communication between UDE running on the host PC and the target system.

- Proven target adapter solution already used for UAD2^{pro} and UAD3+ offers fastest and reliable target access for state-of-the art debug interfaces **DAP, SWD, JTAG, cJTAG, LPD**.
- Ready for upcoming debug interfaces without replacing the base UAD2^{next} device.
- High-speed debug access with up to **160 MHz** shift clock and **1.65 – 5.5 Volts I/O voltage**.
- Galvanic isolated target adapters (RF coupler technology with 1,000 VRMS isolation) available.
- Longer distances between UAD2^{next} and target system. Up to 0.5 m possible, 2.0 m on request.
- Connectors for ASC and CAN/CAN FD*) with galvanic signal isolation up to 1,000 VRMS.
- Support for **DXCPL** (DAP over CAN Physical Layer).

For trace based debugging, measurement and system-level analysis the UAD2^{next} can be extended with target specific trace modules.

- **Easy mounting plug-in modules for a wide range of trace interface**
- **Aurora trace** connector (up to 2 lanes)
    - Samtec ERF8 HS22 ASP-137969-01
    - Samtex ERF8 HS34 ASP-137973-01
    - Samtec ERF8 HS40 ASP-133811-01
    - Additional custommer specific trace connector
- Easy mounting plug-in modules for a wide range of trace interface
- Up to 12-bit parallel trace.
- 2 Lane serial trace for up to 1.25 GBit/s.
- 512 MBytes internal trace memory.
- Ready for Arm CoreSight ETM, STM, ITM, PTM, Xilinx FTM, for NEXUS class 3 parallel / serial AURORA trace, HSSTP AURORA trace and for Infineon MCDS.