Opella-XD

High-performance Ashling Debug Probe for Synopsys ARC-V & ARC Processors

Opella-XD is Ashling's high-performance Debug Probe for embedded development with support for multiple target architectures including Synopsys ARC-V & ARC powered systems.

Opella-XD works with Synopsys' MetaWare Development Toolkit & Ashling's ***RiscFree***™ SDK for advanced embedded system debugging & on-chip tracing.

Features

- Supports Synopsys' MetaWare Development Toolkit, Ashling's ***RiscFree*** & GNU GCC GDB Debuggers for advanced embedded system debugging & on-chip tracing.

- Supports ARC-V RMX, RHX & RPX RISC-V ISA based processors.
- Supports ARC EM, EV, HS, NPX & VPX processors.
- Up to 3MB/s download speeds making it suitable for large, complex, software-intensive projects.
- Supports JTAG, EJTAG, cJTAG & CoreSight™ SWD & DAP debug interfaces with fine-grained adjustment of clock frequency from 1kHz to 100MHz.
- Auto-conditioning ensures maximum possible download speed with fastest JTAG clock frequencies.
- Hot-plug support – allows connection to a running target without resetting or halting.
- Heterogeneous (e.g., ARC-V + ARC) & homogeneous debug support for multi-core SoCs sharing a single debug interface (e.g., via JTAG, cJTAG or CoreSight™ DAP & SWD).
- Supports 32-bit & 64-bit target devices.
- Powered by USB2 interface – no external power-supply required.
- Fast, trouble-free "Plug-and-play" installation & configuration.
- ***Opella-XD*** detects & automatically configures for the appropriate target voltage (0.9v to 3.6v).
- Low-level JTAG command-line console and APIs for device bring-up etc.
- Display/read/write of target system memory & peripheral registers.
- Support for on-chip hardware breakpoints – unlimited software breakpoints.
- Run/stop control of target application including go, halt, step over, step into & step out.
- Configurable Target-Reset & Test-Port-Reset, under full user control.
- Built-in diagnostics instantly show status of Target, Debug Probe & USB link.

Product	Order Code
Opella-XD Debug Probe (with 20-way 0.1" target interface)	OPELLA-XD
Optional 14-way 0.1" adapter for EJTAG targets	AD-EJTAG-14
Optional 10-way 0.05" adapter for MIPI/CoreSight targets	AD-CS-10
Optional 6-way cJTAG/JTAG 0.1" adapter	AD-ARC-6JTAG