# **Ashling Development tools for ARM™ RISC cores**



## Overview



Ashling's **Opella-XD** is a powerful JTAG debug probe for embedded development on ARM™ RISC cores.

Opella-XD works with Ashling's PathFinder debugger and third-party debuggers, such as ARM's RealView, Keil uVision and IAR's Embedded Workbench. A GDB Server driver is also provided allowing Opella-XD to work with the open-source GDB based debugger and Eclipse CDT.

PathFinder supports all third party ARM compilers, has target flash programming support for a broad range of devices, multiple user-configurable windows and a built-in script language.

## **Features of Opella-XD include:**

- Fast, trouble-free "plug-and-play" installation using USB 2.0 High-Speed Interface (480Mb/s)
- Up to 3MB/s download speeds particularly suitable for large, complex projects
- Fully powered by USB interface; no external power-supply needed
- Fine-grained adjustment of JTAG clock frequency from 1KHz to 100MHz. ARM RTCK support
- Multi-core support with full JTAG scan-chain configurability
- · Hot-plug support; allows connection to a running target without resetting or halting
- Supplied with 20-pin 0.1" Target cable. Optional 10-pin 0.05" adapter
- Detects and automatically configures for the appropriate target voltage from 0.9V to 3.6V
- Fast in-target Flash Programming
- Operates on Windows and Linux hosts
- Semi-hosting support (allows stdio calls between your target hardware and your host PC)
- Support for ARM and THUMB instruction-set debugging
- Support for all on-chip hardware breakpoints; unlimited number of software breakpoints
- Configurable Target-Reset and Test-Port-Reset, under full user control
- Built-in diagnostics instantly show status of Target, Debug Probe and USB link
- Universal Hardware-Debug platform for all popular target architectures and compilers

#### **Supported devices:**

- All ARM cores including ARM7<sup>™</sup>, ARM9<sup>™</sup>, ARM11<sup>™</sup>, Cortex-A<sup>™</sup>, Cortex-R<sup>™</sup> and Cortex-M<sup>™</sup> devices
- In addition, Opella-XD supports devices from many ARM licensees including: Atmel, Conexant, Freescale, Luminary, Marvell, NEC, NXP, OKI, Qualcomm, Renesas, Samsung, Sharp, Sony, ST, Toshiba, Trident and Texas Instruments. Please contact Ashling for latest support information

### **Order Codes**

Product	Order Code
Opella-XD for ARM Debug Probe. Includes USB 2.0 cable, documentation and diagnostic software	Opella-XD-ARM
ARM 20-way 0.1" IDC EmbeddedICE debug cable	TPAOP-ARM20
ARM 10-way 0.05" Adapter (for use with TPAOP-ARM20). Supports the Cortex Debug Connector	ADOP-ARM10
Opella-XD ARM Software (includes PathFinder, RDI and GDB Server)	Opella-XD-ARMSW

DS322-Opella-XD-ARM v1.8. Ashling Microsystems Ltd, National Technological Park, Limerick, Ireland. Tel: +353-61334466 Email: sales@ashling.com

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