

# Opella-XD-ARM

## Ultra-high-speed JTAG Debug Probe

### Overview

Ashling's **Opella-XD JTAG** is an ultra-high-speed Debug Probe for embedded development on ARM™ RISC cores.

Advanced features of Opella-XD include:

- Fast, easy-to-install USB 2.0 High-Speed Interface (480Mb/s)
- Opella-XD supports all popular ARM™ cores, using ARM Ltd.'s EmbeddedICE™ or EmbeddedICE-RT™ on-chip debug interfaces.
- Supports all popular hardware debug protocols
- Semi-hosting, DCC, RT and RealMonitor debug support
- Unique Auto-conditioning Probe provides maximum possible download speed to target with fastest JTAG clock frequencies
- Hot-plug support allows post-mortem debugging
- Fast, trouble-free Plug-and-Play installation
- Small, versatile Target Probe Cable fits on any target board
- Fast in-target Flash Programming
- Wide target voltage range: 0.9V to 3.6V
- Versatile Target-Reset and Test-Port-Reset support
- Works with Windows and Linux hosts
- Built-in diagnostics instantly show status of Target, Debug Probe and USB link
- Universal Hardware-Debug platform for all popular target architectures and compilers



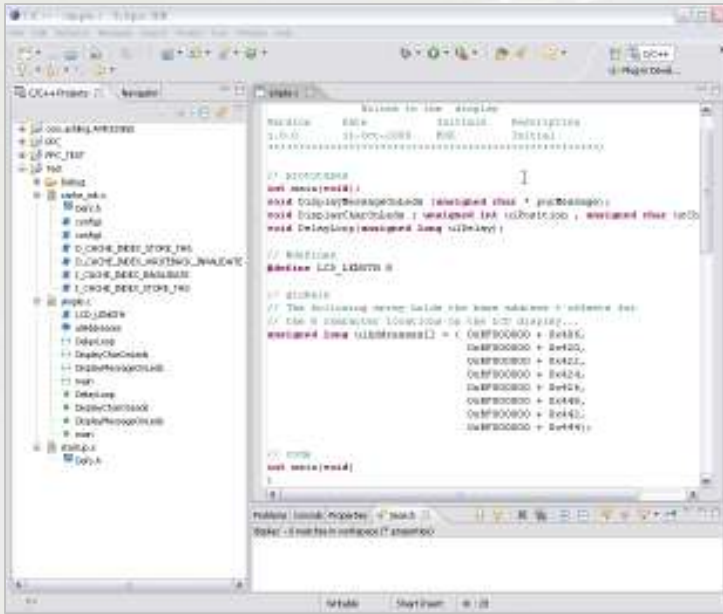
Benefits of **Opella-XD** to the embedded hardware developer:

- Accelerates the entire embedded-hardware debug process: ultra-fast installation, code download and flash programming saves time at every code rebuild
- Instantly autoconfigures to target system
- Long-term investment: works with all popular target architectures and compilers
- Helps with the most difficult debugging tasks: hardware bring-up, operating-system booting, post-mortem debugging
- Future-proof: works with latest hardware-debug protocols, all popular host operating-systems
- Compact, easy-to-install target probe cables support all popular debug interfaces

### Opella-XD Debug Probe Specification

- High-speed USB2.0 (480Mb/s) interface to host PC or Linux workstation
- Target JTAG clock rates up to 100MHz
- Auto-conditioning for fast JTAG clock frequencies
- Configurable Target-Reset and Test-Port-Reset, under full user control
- Fine-grained adjustment of JTAG clock frequency from 1KHz to 100MHz
- Supports target operating voltages from 0.9V to 3.6V. Opella-XD detects and automatically configures for the appropriate target voltage.
- Supports RTCK adaptive clocking of debug data from target
- "Hot-plug" support; allows connection to a running target without resetting or halting
- Fully powered by USB interface; no external power-supply needed
- Support for all on-chip hardware breakpoints; unlimited number of software breakpoints

## AsIDE Integrated Development Environment for ARM™ development



**AsIDE** is Ashling's Integrated Development Environment for ARM™ application development. The AsIDE-ARM package, which is based on the open-source Eclipse and GNU GCC compiler tools provides a powerful and convenient development environment for ARM™-architecture based applications.

### AsIDE features include:

- Powerful programmers editor with configurable language-specific color coding, search and replace and symbol/class browser
- Full Project Management support including project and make-file generation
- Version control management interface to all popular version control packages
- Context sensitive error browsing for compiler tools output: AsIDE highlights the offending line in the relevant source file
- Support for Windows XP/Vista and Linux x86 platforms
- Simple, intuitive, point & click install

## Ashling RDI-ARM Drivers

**Ashling ARM RDI Drivers** – Software package that allows Opella-XD-ARM to be used with third-party debuggers, such as ARM's RealView, GNU GDB, Keil uVision and IAR's Embedded Workbench. All RDI compliant debuggers are supported. In addition, the software package includes a GDB Server driver allowing Opella-XD to work with the open-source GDB based debugger. The AsIDE-ARM IDE includes the Ashling RDI Drivers

## Broad Device Support

All ARM™ cores are supported including ARM9, ARM9E, ARM10, ARM11 and Cortex-A devices. In addition, Opella-XD supports devices from the following ARM™ licensees: Atmel, NXP, OKI, Samsung, Sharp, Sony and TI. Other devices are continuously being added, hence, 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 .1" IDC EmbeddedICE debug cable.  | TPAOP-ARM20   |
| ARM RDI Drivers  | RDI-ARM       |
| AsIDE for ARM Integrated Development Environment   | AsIDE-ARM     |

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Ashling Microsystems Ltd. is certified to I.S. EN ISO 9001:2000, NSAI Registration No. 19.09069.

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