

XK-1A Development Board Quick Start Guide

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1 Introduction

The XK-1A is a low cost development board intended for exploring event-driven processor designs. It comprises a single XS1-L1 device, 128KBytes SPI FLASH memory, four LEDs and two press-button switches. Two XSYS Connectors let you link multiple XK-1A boards together in a chain and two banks of 0.1" IDC connectors are provided for connecting additional components to the XK-1A. An XTAG-2 debug adapter can be used to connect the XK-1A to a USB 2.0 port on a PC, providing a JTAG interface that can be used to load and debug programs on the board. The XK-1A can be powered directly from the XTAG-2 debug adapter or from an external 5V power supply.

To program the XK-1A you need to download a set of free Development Tools from the XMOS website. The tools let you write, load and debug programs on your development board using the XTAG-2.

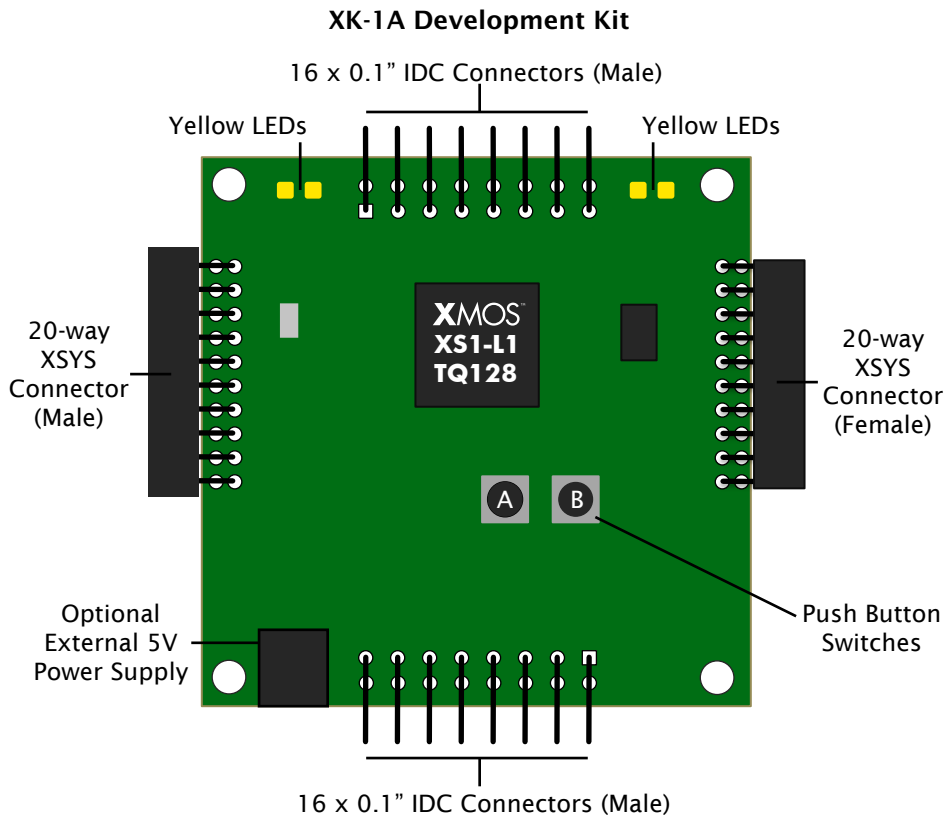
Further information on using the XK-1A and additional resources including the development tools is available from <http://www.xmos.com/xk1a>.

2 XK-1A Demos

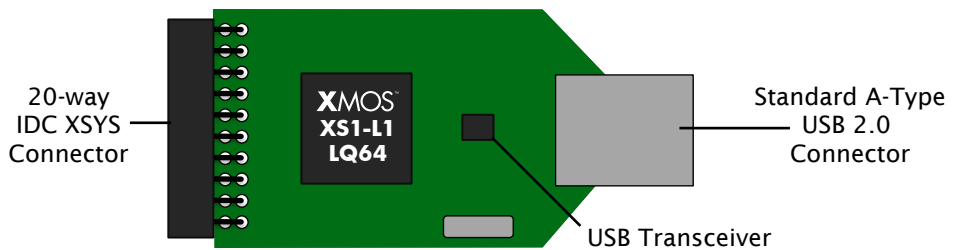
A set of demonstrations is pre-installed on the XK-1A board which you can use to test the hardware. Additional demonstrations can be downloaded from the XMOS web site, including an XK-1A tutorial which introduces the key concepts you need to understand when programming the XK-1A board.

We recommend that you install the XMOS Development Tools before you connect the XK-1A to your development system—see Section 3.

1. Connect the 20-way IDC header on the XTAG-2 to the left XSYS connector on the XK-1A board.
2. Plug the XTAG-2 into a USB 2.0 connector on your development system.
The XK-1A board starts up and flashes the four LEDs in sequence across the top of the board.
3. Press **Switch A** on the XK-1A to increase the speed that the LEDs flash.
4. Press **Switch B** to change the order that the LEDs flash.



XTAG-2 Connector



3 XMOS Tools Support

The XMOS Development Tools are provide in a single platform-specific downloadable file from

<http://www.xmos.com/tools>

Instructions on installing and using the XMOS Tools can be found in the XMOS Tools User Guide http://www.xmos.com/published/xtools_en. The following table provides a summary tools support for the XK-1 development board.

Minimum tools version required	9.9
Board support file	XK-1A.xn
USB-to-JTAG adaptor	XTAG-2
USB-to-JTAG driver	XMOS
Board Tutorial	Integrated into XDE and available as PDF

Hardware Guide	http://www.xmos.com/published/xk1hw
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4 Document History

Date	Release	Comment
2009-11-03	1.0	First release
2010-05-10	1.1	Added tools support section



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