

sliceKIT

sliceKIT MODULAR DEVELOPMENT SYSTEM

Evaluating and developing with xCORE™ multicore microcontrollers is easy thanks to our range of flexible design kits, called sliceKIT™.

sliceKIT provides everything needed to develop, debug and prototype xCORE applications. Based on a core board which can be configured with a number of I/O extension cards (slices), sliceKIT is supported by the xTIMEcomposer C-based design environment and the xSOFTip™ library of soft peripherals.



A FLEXIBLE DEVELOPMENT KIT FOR MULTICORE MICROCONTROLLERS

sliceKIT is a unique development system for flexible, scalable xCORE multicore microcontrollers. Just as xCORE devices allow you to configure exactly the microcontroller you need, so sliceKIT allows you to build exactly the system you want.

You chose the type and specification of your interfaces and peripherals.

The possibilities are endless. For example, you might have an Ethernet to UART bridge consisting of the Ethernet and multiple UART slices. You now need to add support for a second Ethernet interface.

Easy! Simply add another Ethernet slice to your hardware, a second Ethernet block to your xCORE design and fill in the code between the peripherals.

You can choose between sliceKIT core boards based on our xCORE-General Purpose, xCORE-Analog and xCORE-USB 16-core

general multicore microcontrollers. All deliver deterministic, responsive processing to handle a variety of peripheral interfaces, data processing and control tasks. The core boards support up to four I/O sliceCARDS, and with a growing number of slices available, sliceKIT provides a vast range of combinations to help you prototype your system quickly.

Each I/O slice is supplied with a demo application allowing you to get up and running quickly. The result is a framework of peripherals and I/O providing you with an exact fit chip for your system.

xCORE devices with our range of xSOFTip software blocks provide you the flexibility, and sliceKIT provides the hardware to prototype it. Once you've built your system, you can write, compile and debug your design in C, taking advantage of powerful timing analysis tools and instrumentation within our xTIMEcomposer Studio™ integrated design environment.

- Modular application development environment
- Powerful 16-core General Purpose, Analog or USB multicore microcontrollers
- Extensive range of I/O slices supporting Ethernet, audio, GPIO, SDRAM, graphics LCD, MUART, WiFi, CAN, LIN, RS232, USB and analog I/O
- Fully integrated with xTIMEcomposer design tools
- Supported by xSOFTip blocks
- Expandable
- Rapid prototype and debug
- Ready-configured packages including core board and I/O

sliceKIT CORE BOARDS

You can choose between boards based on any one of three 16-core xCORE devices:

- xCORE-General Purpose
- xCORE-Analog, with on-chip 8-channel 12-bit ADC, DC/DC conversion, timers and power management
- xCORE-USB, with on-chip USB PHY

Each board provides the xCORE device with power, clocking and debug access, as well as expansion slots for four or five I/O slices, depending on core processor type.

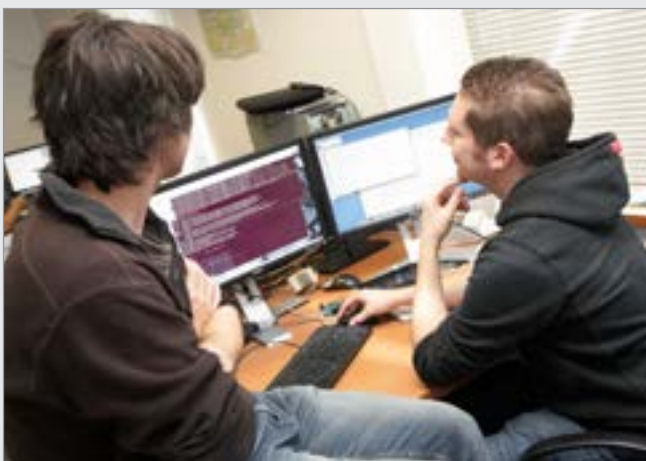


I/O SLICES

A choice of slices connect to the core board. The simple PCIe style connector specification enables low-cost slices and makes it easy to design your own slice. Our current range supports: Ethernet; GPIO; LCD graphics; audio; UART; SDRAM; CAN; LIN; RS232; WiFi; analog; USB. The choice is growing daily: check www.xmos.com for the latest list.

xSOFTip and xSOFTip Explorer

XMOS provides xSOFTip - a comprehensive selection of soft peripheral IP and processing blocks backed up by software libraries and drivers. To make choosing and deploying xSOFTip as easy as possible, we provide a free of charge tool called xSOFTip Explorer™. Our graphical tool allows you to browse xSOFTip blocks from our library and configure them to your specification to create a custom chip that exactly meets your needs.



DEVELOPMENT FLOW

sliceKIT is fully integrated with the xTIMEcomposer Studio, which comprises a highly efficient compiler, debugger and device programming tools. In addition it includes advanced IP configuration tools, cycle-accurate simulation with waveform view, high speed in-circuit instrumentation and a unique timing analyzer, which guarantees timing of your code. You can browse our extensive library of xSOFTip from within the xTIMEcomposer environment, integrate those blocks rapidly with your own code, then test on the sliceKIT target, shortening your development time and speeding your time to market.

MORE INFORMATION AND AVAILABILITY

You can start work quickly and easily with a sliceKIT package, which consists of a core board, slices suitable for the target device on your chosen core board, a power supply and xTAG adapter, allowing direct interfacing between the board and a host PC.

Core boards and slices are also available individually.

See our sliceKIT selector guide and Starter Kit product brief for more information