sliceKIT

sliceKIT MODULAR DEVELOPMENT SYSTEM

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

sliceKIT provides everything needed to develop, debug and prototype xCORE applications. Based on a core board which can be configured with up to four I/O extension cards (slices), sliceKIT is supported by the xTOOLS C-based design environment and 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.

The sliceKIT core board features our 16-core general purpose multicore microcontroller to deliver the deterministic, responsive processing required to handle a variety of peripheral interfaces, data processing and control tasks. The core board supports up to four I/O slice cards, and with a growing number of slices available (you can even add your own), 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 multicore microcontroller
- Extensive range of I/O slices supporting Ethernet, audio, GPIO, SDRAM, graphics LCD, MUART, WiFi, CAN, LIN, RS232
- Fully integrated with xTIMEcomposer design tools
- Supported by xSOFTip blocks
- Expandable
- Rapid prototype and debug
- Ready-configured starter kit

sliceKIT CORE BOARD

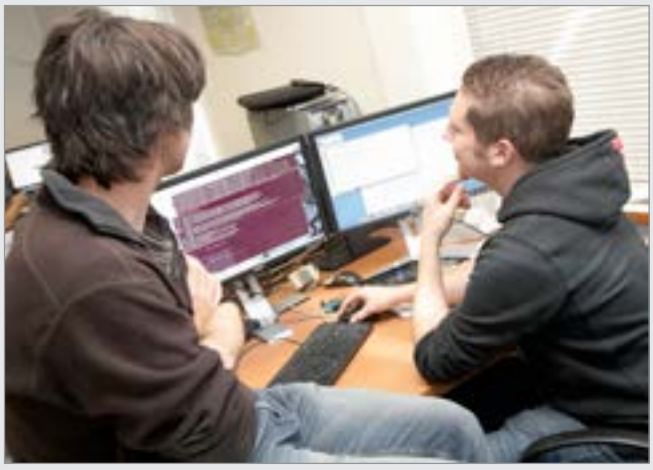
The sliceKIT core board holds the key to flexible I/O, and to deterministic real-time performance: the xCORE flexible multicore microcontroller.
The board provides the xCORE device with power, clocking, and debug access, as well as expansion slots for four I/O slices and further core boards.

I/O SLICES

We provide an extensive choice of slices that connect to the core board using low-cost PCIe style connectors, reducing the cost of slices and making it easy to add your own slice. Our current range supports: Ethernet; GPIO; LCD graphics; audio; MUART; SDRAM; CAN; LIN; RS232; WiFi. 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 the sliceKIT Starter Kit, which consists of a core board, GPIO and Ethernet slices, plus the xCORE 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