

sliceKIT SELECTOR GUIDE

A FLEXIBLE DEVELOPMENT KIT FOR MULTICORE MICROCONTROLLERS

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

The sliceKIT core board features our L2 multicore microcontroller and supports up to four I/O slice cards. With a growing number of slices available (you can even add your own), sliceKIT provides a virtually limitless range of combinations.

sliceKIT STARTER KIT

Provides everything you need to build applications using xCORE multicore microcontrollers. Includes a core board based on the L2 xCORE multicore microcontroller with 16 logical cores; GPIO sliceCARD; Ethernet sliceCARD; XTAG2 USB-JTAG debug adaptor; JTAG adaptor; and power supply. Gives you access to a wide range of applications, demonstrations, examples and tutorials.

Order # XK-SK-L2-ST





AUDIO SLICE

The audio sliceCARD provides audio and MIDI connectivity to sliceKIT. Four audio input and four audio output channels are provided on the sliceCARD via an I2S interface to audio codecs and 3.5mm jacks. The xSOFTip I2S component drives all 4 channels in both directions at sample rates up to 192kHz. Additional features include an SPDIF output, MIDI input and output connectors.

Order # XA-SK-AUDIO

ETHERNET SLICE

The Ethernet sliceCARD includes a 10/100 Ethernet PHY, RJ45 connector and MII interface to the xCORE multicore microcontroller. Whether you want a TCP stack and webserver, highly responsive, low latency command and control over UDP, your own custom protocol, or even two Ethernet ports – xCORE gives you the flexibility to do it.

Order # XA-SK-E100





INDUSTRIAL SERIAL SLICE

The IS-BUS sliceCARD provides flexible serial connectivity for industrial applications. It includes transceivers for CAN at 1Mbps, LIN at 20Kbps as well as a RS485 at 12Mbps, backed up by associated xSOFTip blocks. All three interfaces may be used simultaneously when connecting via the 0.1" headers. Alternatively one interface can be routed to the DB9 connector.

Order # XA-SK-ISBUS



SDRAM SLICE

The SDRAM sliceCARD provides an 8Mbyte external random access memory. With clock speed of up to 50MHz and data rate up to 80Mbyte/s, it is perfect for any application where a large external data buffer is required: image buffering for a display controller, audio buffering for effects, or data capture, processing and logging. Order # XA-SK-SDRAM





GPIO SLICE

The GPIO sliceCARD provides a collection of features including four LEDs, two pushbuttons, RS232 and four-channel ADC. It allows simple input/output functions to be evaluated easily, and provides I/O expansion to connect your sliceKIT to other systems. The quick start guide will help you get up and running with sliceKIT in seconds.

Order # XA-SK-GPIO

LCD SLICE

The Display sliceCARD allows the xCORE multicore microcontroller to directly drive a 480 x 272 RGB display (included but not pictured) without the use of an external controller, via a parallel RGB interface. The SDRAM slice could be a useful addition. The LCD xSOFTip can easily be modified for display sizes up to 800 x 600 pixels.







MULTI-UART SLICE

The Multi-UART sliceCARD provides eight 115.2 Kbaud Full Duplex UARTs connected to two 8-bit ports. It allows you to efficiently implement multiple fast RS232 or TTL UARTs. This sliceCARD along with the Ethernet sliceCARD and the associated xSOFTip also form the basis of a fully featured Ethernet-to-multi-serial reference design.

Order # XA-SK-UART-8

WI-FI SLICE

The wi-fi sliceCARD uses a high performance $2.4 \, \text{GHz}$ WLAN module to bring $802.11 \, \text{b/g}$ wireless connectivity to sliceKIT, with throughput of up to $7 \, \text{Mbps}$. Using the ready-built xSOFTip SPI component, it allows you to easily integrate the wireless module into your application. Our xSOFTip Explorer tool includes demo apps and full documentation to get you started quickly.

Order # XA-SK-WIFI-TIWISL





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 as well as expansion slots for four I/O slices and further core boards.

Order # XP-SKC-L2

OUTSTANDING SUPPORT FOR EARLY DEVELOPMENT

AT XMOS we want to make it easy to develop with our chips. sliceKIT is supported by our free-to-download xTIMEcomposer Studio design environment, allowing you to design deterministic embedded applications within a familiar software flow. 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.

For more information visit www.xmos.com/slicekit or email info@xmos.com

