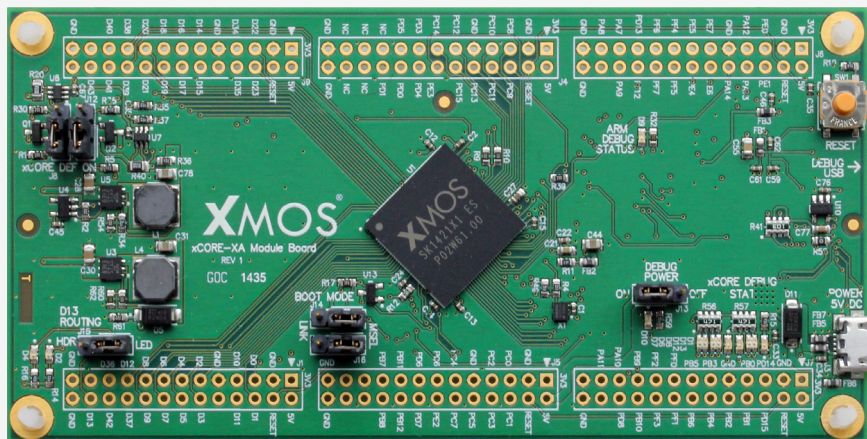# xCORE-XA™ Core Module

Development system for flexible multicore microcontroller with integrated ARM® Cortex®-M3

FEATURES

- 500 MIPS multicore microcontroller
    - 7 xCORE logical cores plus an ARM Cortex-M3 processor
    - 192KB RAM
    - 1024KB flash

- Digital and analog I/O, and peripherals, accessible on headers for maximum flexibility

- On-board real-time debuggers
    - xCORE xTAG
    - SEGGER J-Link OB

- Real-time power monitoring

- Extensible development system
    - Get started quickly and easily

- Easy to use with our free xTIMEcomposer™ tools

The xCORE-XA Core Module enables you to explore a new class of multicore microcontroller from XMOS and rapidly develop sophisticated embedded systems from a simple yet powerful platform.

The xCORE-XA Core Module features our eight core xCORE-XA device (XS1-XAU8A-10) which combines the low latency, deterministic processing of the xCORE multicore architecture with an ultra-low-power ARM Cortex-M3 core. The xCORE-XA delivers a total of 500 MIPS of processing power in a distributed parallel processing architecture.

To support the rapid prototyping of systems the development module can be mounted onto an application specific motherboard. Alternatively daughter boards may be plugged into it using the headers that expose the digital and analog I/O on the device.

The Core Module also features hardware debuggers for the xCORE and Cortex-M3 processors, and real-time power monitoring.
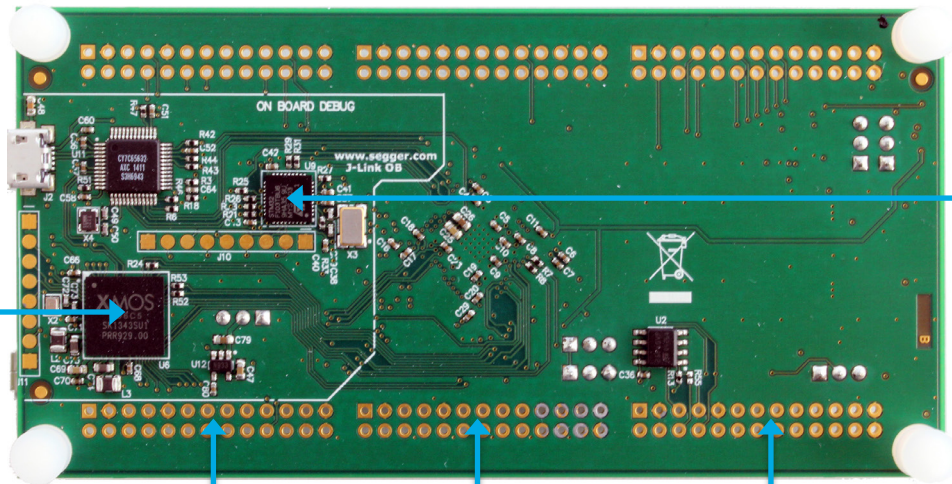
INTEGRATED DEBUGGERS, EXPOSED DIGITAL AND ANALOG I/O

xTAG xCORE debugger
- 1.25 MSPS application data capture
- xCORE-XA IC dynamic power monitoring
- 10Mbps JTAG debug

SEGGER J-Link ARM debugger
- GDB server
- 6 hardware breakpoints
- Up to 1Mbps download speed
- Up to 15MHz debug interface

ARM digital I/O   ARM analog I/O   xCORE digital I/O

Digital and analog I/O, and peripherals, all accessible on headers

DEVELOPMENT TOOLS

Our comprehensive, free-to-download development tools suite, xTIMEcomposer, provides everything you need to develop, debug and test applications based on xCORE multicore microcontrollers. xTIMEcomposer supports side-by-side debug of xCORE logical cores and the ARM Cortex-M3 processor, so you can develop your entire application within a single environment.

For more information and to download xTIMEcomposer go to http://www.xmos.com/tools.

ORDERING INFORMATION

Part number	Contents
XK-XAC-XA8	xCORE-XA Core Module

For pricing and availability, please visit our website for a list of our distributors.
http://www.xmos.com/distributors.