

### GET CONNECTED WITH SOFTWARE DESIGNED SILICON

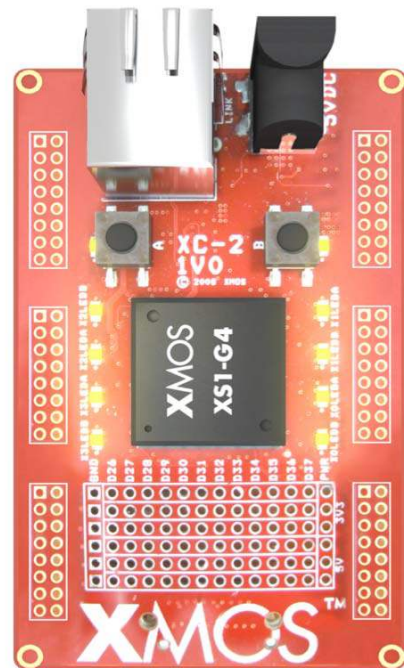
The XC-2 Ethernet Kit provides a rapid and cost effective route for developing ethernet connected designs in XMOS silicon. Based around the four-core XS1-G4 programmable device from XMOS, the XC-2 Kit provides the hardware needed to connect to a 10/100 Ethernet system using an RJ45 socket.

The credit card sized XC-2 board is easily interfaced to your development system using 0.1" pitch expansion, or you can add your own components using the on-board 0.1" pitch through-hole prototyping area.

### RAPID DEVELOPMENT OF YOUR SYSTEM

The XC-2 Ethernet Kit comes with reference designs and examples including a software MII/MAC function and embedded web-server that are available as source code.

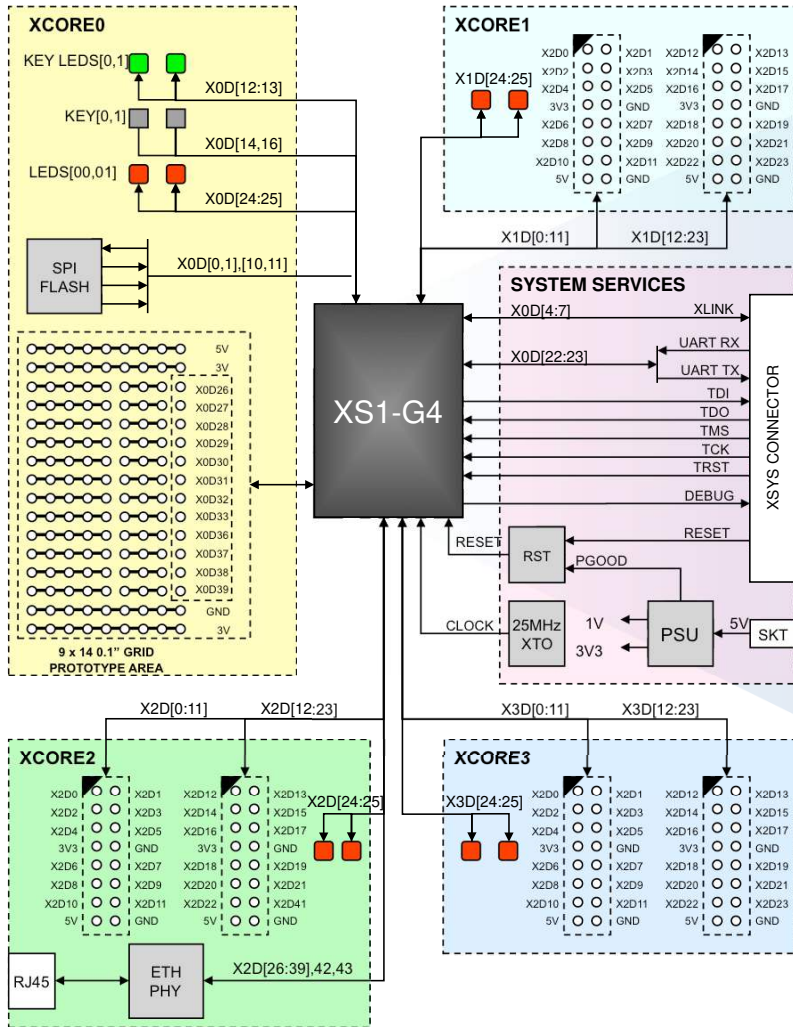
You can download and debug your applications on the XC-2 Card using the XTAG connector. Alternatively you can program your application into the on-board SPI flash from the XS1-G4 device or the external header, providing standalone operation.



### XC-2 ETHERNET KIT AT A GLANCE

- XC-2 Card features:
  - XS1-G4 four-XCore™ 400MHz device: 1600 MIPS, 256KB RAM, 32KB OTP
  - RJ45 ethernet socket
  - Two pushbuttons
  - 10 user LEDs
  - 84 pins user I/O expansion total from four XCores™
  - External link and XSYS debug interface
  - Credit card size (85 x 54 mm)
- XTAG Connector
- USB Cable
- 5V external PSU
- Comprehensive software development tool suite
  - XC, C and C++ compilers, linker and mapper
  - Simulator and visual debugger
  - Supports Windows XP SP2, Red Hat Linux 4.6 and OS X 10.4
- Example software available as source code
  - 10/100 Ethernet MAC/MII driver code
  - TCP/IP and UDP stack
  - Embedded web server
  - Interactive driver demo over ethernet

## XC-2 ETHERNET CARD BLOCK DIAGRAM



### XS1-G4 Features

- Four 32-bit XCore™ event-driven processors
  - 1600MIPS performance
  - 256KBytes single-cycle SRAM
  - 32 concurrent threads
  - 400M events per second
- Up to 256 input/output pins
  - 10ns timing resolution
  - Serialisation and logic functions
- Compact 16/32bit ISA
  - 32 x 32 → 64bit MAC
- Communication channels
  - 128 channel ends
  - Scalable and deterministic on and off-chip communication

## SOFTWARE DEVELOPMENT

XMOS provides development tools to take your design from concept to volume production.

The tools are based on a standard embedded software flow that supports XC, C and C++. XC includes extensions to C for concurrency, communications, and timed input-output operations. As well as providing compilers and a debugger, the tools include utilities for deploying compiled binaries onto your development board.

The tools are intuitive and easy to use, and can be driven from the XMOS Development Environment (XDE) or the command line.

The tools can be downloaded free of charge for Windows, Mac and Linux platforms from [www.xmos.com](http://www.xmos.com).

