

About Arcturus Networks

Arcturus Networks produces embedded firmware and hardware solutions for the networking and communications industry. Focusing on the converging technology of data, voice and streaming media, Arcturus provides firmware and hardware reference platforms for Internet Attachment Devices (IAD's) specializing in Residential Gateway (RG) and SOHO Routers.

Arcturus Products

The Arcturus product suites consist of modular firmware including a royalty free embedded OS with full TCP/IP support. In addition to basic networking, Arcturus offers support for advanced routing and streaming media including voice. The Arcturus Management and Configuration suite includes seamless support for SNMP and Web based configuration and management as well as customer specific front end plugins. In an effort to assist OEM developers expedite their application development, Arcturus also offers fully compatible hardware reference platforms and design integration. Arcturus solutions enable the turnkey development of IAD or Residential Gateway products on various SOC based microcontrollers.

Firmware and Development

Arcturus is committed to furthering industry development and as such has adopted a leadership role with innovative public development projects such as the uClinux embedded OS initiative. In addition to this public work Arcturus recognizes the need for sustainable advancement and quality assurance within public development efforts. Arcturus Firmware and Development acts as a bridge between proprietary and open source models, leveraging either where appropriate and releasing or protecting IP where applicable.

195 The West Mall Suite 608
 Toronto, Ontario
 Canada, M9C 5K1
 tel +1 416.621.0125
 fax +1 416.621.0190

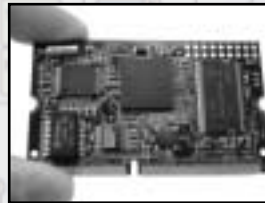
sales@arcturusnetworks.com

uCdimm ColdFire 5272 Reference Kit

The Arcturus™ uCdimm™ ColdFire 5272 microcontroller features the powerful Motorola processor and includes 10baseT and 100BaseT Ethernet controllers, QSPI highspeed serial interface, two RS232 serial interfaces, parallel I/O, USB functionality and chip selects all in a compact 1.7 inch x 2.7 inch soDIMM form factor. The Arcturus uCdimm ColdFire 5272 coupled with the specifically designed uCevolution™ development platform allows developers broad access to ColdFire features and simple integration into OEM production. The uCdimm ColdFire 5272 provides the horse-power and connectivity idea for a robust internet attached device.

From Prototype to Production

The uCdimm's tiny form factor and standard soDIMM backbone connector make incorporating the uCdimm into your embedded development or OEM application quite literally a snap.



Ideal LAN / WAN Solution

The uCdimm ColdFire 5272 with dual Ethernet connectivity is ideal for any LAN/WAN router solution and is net-ready right out of the box courtesy of powerful uClinux™ embedded operating system. With uClinux, the uCdimm is equipped complete with a run-time, royalty-free TCP/IP stack as well as file system support for external NFS file systems. In addition, uClinux with optional Arcturus firmware can provide all of the secure routing functionality associated with a full blown Linux system: Firewalling, Port and Network Address Translation and Virtual Private Networking -all embedded and in a modular, integration ready form factor! Arcturus provides you with the hardware, the design, the tools and the uClinux OS to ensure your product gets to market fast!

Kit Includes

- uCdimm ColdFire Microcontroller Module
- uCevolution Development Platform
- uClinux ColdFire software CD
- Cable kit including
 - 2 Ethernet (1 x-over)
 - 1 serial
- Power Supply
- Manual
- Reference Manuals



uCdimm Features

- Motorola ColdFire RISC core
- 2 MB FLASH ROM
- 8 MB SDRAM
- 10BaseT Ethernet
- 100BaseT Ethernet
- On board MAC for DSP
- 2 RS232 serials
- 1 QSPI (queued) serial
- USB functionality
- 2x 16bit & 1x 4bit parallel I/O
- Chip selects available
- 2 PWM output
- Software watchdog timer
- 4 hardware interrupts
- Power management
- 1.7" x 2.7" 144 pin soDIMM form factor
- uClinux OS preinstalled
- TCP/IP SLIP and PPP
- Cost-effective

Ideal For

- Industrial Controller
- SOHO Router
- VPN Solution
- Digital Audio
- Protocol Conversion
- LAN / WAN Gateway
- Home automation
- Network Monitoring
- Remote Sensing

www.arcturusnetworks.com

About Arcturus Networks

Arcturus Networks produces embedded firmware and hardware solutions for the networking and communications industry. Focusing on the converging technology of data, voice and streaming media, Arcturus provides firmware and hardware reference platforms for Internet Attachment Devices (IAD's) specializing in Residential Gateway (RG) and SOHO Routers.

Arcturus Products

The Arcturus product suites consist of modular firmware including a royalty free embedded OS with full TCP/IP support. In addition to basic networking, Arcturus offers support for advanced routing and streaming media including voice. The Arcturus Management and Configuration suite includes seamless support for SNMP and Web based configuration and management as well as customer specific front end plugins. In an effort to assist OEM developers expedite their application development, Arcturus also offers fully compatible hardware reference platforms and design integration. Arcturus solutions enable the turnkey development of IAD or Residential Gateway products on various SOC based microcontrollers.

Firmware and Development

Arcturus is committed to furthering industry development and as such has adopted a leadership role with innovative public development projects such as the uClinux embedded OS initiative. In addition to this public work Arcturus recognizes the need for sustainable advancement and quality assurance within public development efforts. Arcturus Firmware and Development acts as a bridge between proprietary and open source models, leveraging either where appropriate and releasing or protecting IP where applicable.

195 The West Mall Suite 608
Toronto, Ontario
Canada, M9C 5K1
tel +1 416.621.0125
fax +1 416.621.0190

sales@arcturusnetworks.com

uCevolution Development Platform

The innovative Arcturus uCevolution development platform offers all the benefits of a traditional development board, plus the ability to easily swap processor cores. The uCevolution and uCdim equipped with the powerful uClinux embedded operating system provide the necessary tools for rapid embedded development and prototyping. By using the Arcturus uCdim family of microcontroller modules, developers gain increased ease in cross-porting to new CPU architectures and feature sets. Future uCdim microcontroller modules will include FPGA, ARM, ColdFire and StrongARM.

Hardware Features

- Standard Ethernet connector
ETH/DSL switchable Ethernet connector
- Two serial ports
a standard DCE serial port, and a DCE/DTE serial port that allows for either type connection
- Serial port activity indicators (Tx& RxD)
to provide the user constant visual confirmation of data flow
- Health indicator that can provide constant visual indication of health status of DIMM module
- Two USB ports
- USB speed switch (hi/lo)
gives users flexibility to access both hi and lo speed USB devices
- USB power switch allows the use of independent or host-powered USB devices
- LCD/LCD touch screen connector w/ power supplies for 3.3v & 12v enables the connection of an external LCD/LCD touch screen module
- DIMM layout extension for prototyping with 100mil pad distance accelerates design of schematics for prototyping
- Small footprint switching power supply with power LED that requires no heat sinking
- JTAG controller allows access to on-board debug facilities of different interfaces
- Reset button with LED indicator
- 4 interrupt buttons to easily generate interrupts
- 8 bi-directional controls with LED indicators to easily test functionality of I/O
- 3.9" x 1.8" prototyping area ensures ease-of-use
- Generic power supply input (AC/DC)
- Ground and power supply testing points

From Prototype to Production

The uCevolution is ideal for development with your uCdim. Equipped with all the standard connectors required to give you maximum access to the functionality of your module. The uCevolution gets you up and running in a snap, and makes development, prototyping and debugging fast and convenient.



Extensible

In addition to all the benefits of a traditional development board, the Arcturus uCevolution offers the flexibility to change processor cores as easily as snapping in a memory card. The uCdim standardized I/O bus ensures developers consistent access to features common among different uCdim family members. The uCevolution also contains more than seven square inches of on-board prototyping space. The uCevolution is far more than just a host board it is an evolving development and prototyping platform.

Kits Include

- uCdim micro-controller module
- uClinux software CD
- Serial cable
- Ethernet cable
- Cross Over-cable
- Reference Guide
- Programming Manuals



www.arcturusnetworks.com