Available from Freescale:

InterNiche Technologies and Freescale have collaborated to provide an OEM version of InterNiche's NicheLite™ optimized for the Coldfire architecture. Coldfire TCP/IP Lite provides the functionality of NicheLite and is RFC compliant.

Key Features

• Address Resolution Protocol (ARP)
• Internet Protocol (IP)
• Internet Control Message Protocol (ICMP)
• User Datagram Protocol (UDP)
• Transmission Control Protocol (TCP)
• Dynamic Host Configuration Protocol (DHCP) Client
• Bootstrap Protocol (BOOTP)
• Trivial File Transfer Protocol (TFTP)

Features

• Includes two operating systems:
  SuperLoop: a very fast, do-forever loop running various tasks and applications in a run-to-completion model. Since each "task" executes in the context of the main loop there is no task-switching overhead nor inefficiencies due to poorly tuned task stacks.
  NicheTask: a cooperative multi-tasking scheduler. In this architecture, tasks each have their own call-stack and voluntarily relinquish control back to the master scheduler. More information on NicheTask can be found at http://www.FreeRTOS.com
• TCP - Supporting InterNiche's Light-Weight API, and a Zero-Copy option.
• IPv4, without fragmentation/reassembly
• ARP
• ICMP
• Ping
• TFTP
• NicheTool
• NicheFile VFS
• Mini-Sockets API
• Single Ethernet interface
• TFTP client
• TFTP server

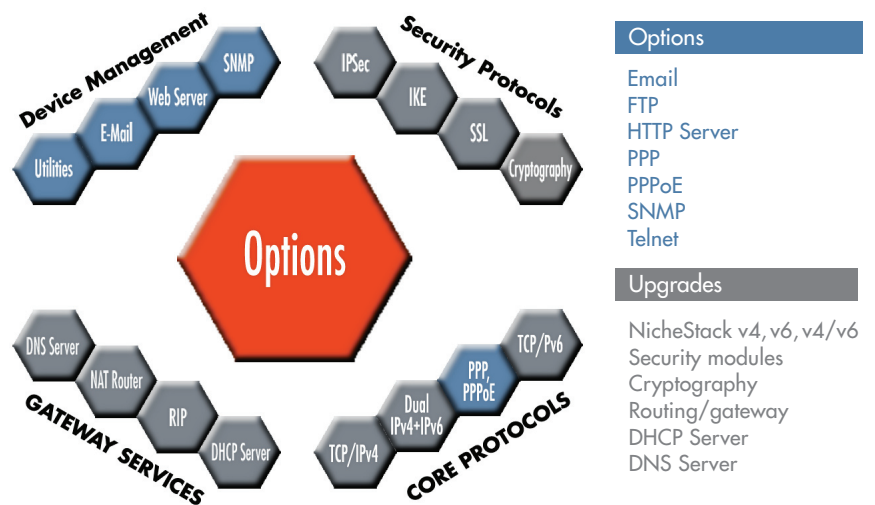# Optional InterNiche Protocol Modules for Coldfire TCP/IP Lite by InterNiche

Product Overview for ADD ON MODULES to Coldfire TCP/IP Lite

InterNiche's optional protocol modules have been developed from the ground up to address the needs of low cost embedded systems. The result is a modular solution that is functionally comprehensive, requiring minimal system and memory requirements, and is tuned for both portability and performance.

NicheStack™ SNMP(v1, v2c or v3) are fully compliant agent implementations enabling industry standard device monitoring with SNMP management workstations. The complete SDK includes a MIB Compiler tool.

NicheStack HTTPServer™ is an innovative robust embedded web server that has been designed specifically to optimize size, performance and support for dynamic data displays and important security features.

Protocol Options: A variety of optional protocols support solutions for specific applications including Point to Point Protocol (PPP), PPPoE, Telnet and FTP.

Options

Email
FTP
HTTP Server
PPP
PPPoE
SNMP
Telnet

Upgrades

NicheStack v4, v6, v4/v6
Security modules
Cryptography
Routing/gateway
DHCP Server
DNS Server

For more information:
sales@iniche.com /+1 408 540 1160
sales-europe@iniche.com /+31 23 373 7062

interniche technologies, inc.

InterNiche Technologies Upgrade

NicheStack™ IPv4 and NicheStack™ IPv6 are fully compliant suites of protocols for Internet, Intranet, and LAN connectivity for use on either IPv4 or IPv6 networks. These portable TCP/IP stacks are complete SDKs for developers of networked devices. IP layers can be configured as a standard client machine, an IP router, or as a multi-homed server.

NicheStack Dual™ IPv4/v6 is an implementation of TCP/IP designed for applications requiring both IPv4 and IPv6 protocol support. NicheStack Dual enables developers to take advantage of this next-generation Internet Protocol, and supports IPv6 over IPv4 tunneling to allow routing through traditional networks.

Security Toolkits allow developers to quickly add secure communication and high-performance VPN capabilities to existing applications. These toolkits are device optimized implementations of industry standard SSL, TLS, IPSec and IKE protocols with seamless integration to all NicheStack TCP/IP products. Integrated CryptoEngine™ technology optimizes uses of available HW acceleration.

NAT, RIP, DNS and DHCP are software modules supporting gateway and protocol bridge implementations. NicheStack NAT and DHCP support private IP address assignment for up to 64,000 devices, and using the Domain Name System (DNS) Server enables a local namespace database that can be queried by other devices. RIP enables dynamic gathering and exchange of IP addresses in a multi-port device implementations.

For further information on any of these products or services please call, email or visit our web site.

Phone: +1 408 540 1160   Europe: +31 24 373 7962
Fax: +1 408 540 1161   sales-europe@iniche.com
Email: sales@iniche.com

InterNiche Technologies, Inc.
51 E Campbell Ave, Suite 160
Campbell, CA 95008
USA
www.iniche.com

For more information:
sales@iniche.com /+1 408 540 1160
sales-europe@iniche.com /+31 23 373 7062

interniche
technologies, inc.