Available from NXP:
InterNiche Technologies and NXP have collaborated to provide an OEM version of InterNiche's NicheLite™ optimized for the LPC architecture. NicheLite for LPC provides the functionality of NicheLite and is RFC compliant.

Key Features

- Transmission Control Protocol (TCP) supporting InterNiche's lightweight API, and a Zero-Copy option
- Internet Protocol (IPv4), without fragmentation and reassembly
- User Datagram Protocol (UDP)
- Address Resolution Protocol (ARP)
- Internet Control Message Protocol (ICMP)
- Dynamic Host Configuration Protocol (DHCP) Client
- Name Service (DNS) Client
- Bootstrap Protocol (BOOTP)
- Trivial File Transfer Protocol (TFTP), client and server
- Ping
- NicheTool™
- NicheFile™ VFS
- Single Ethernet interface
- No "GPL Contamination"

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 or inefficiencies due to poorly tuned per-task stacks.
- NicheTask: a cooperative multi-tasking scheduler. In this architecture, tasks each have their own call-stack and voluntarily relinquish control to the master scheduler. More information on NicheTask can be found at http://www.NicheTask.com

For More Information

Please visit:

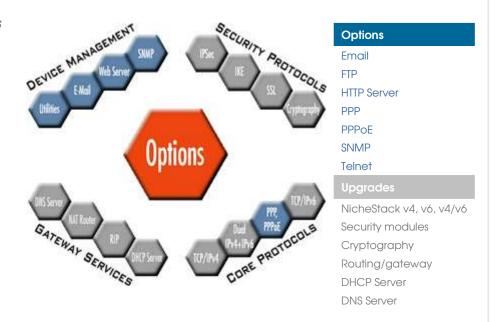http://www.nxp.com/microcontrollers

Optional InterNiche Protocol Modules for NicheLite for LPC

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, FTP, SMTP and POP3.

Options

Email

FTP

HTTP Server

PPP

PPPoE

SNMP

Telnet

Upgrades

NicheStack v4, v6, v4/v6

Security modules

Cryptography

Routing/gateway

DHCP Server

DNS Server

interniche technologies, inc.

Available Upgrades

For customer applications requiring multiple device interfaces, a BSD Sockets API or IPv6, InterNiche offers a broad suite of modules built with the same degree of stability and portability as its NicheLite product. Below are a few example products and toolkits (a complete list can be found at http://www.iniche.com)

NicheStack IPv4 is a complete TCP/IP protocol stack designed from the ground up for connected device implementations. NicheStack combines small size, extreme portability, high performance without compromise in RFC compliance. Supporting a wide variety of physical interfaces, NicheStack's IP layer can be configured as a standard client machine, an IP router, or a multi-homed server. As a comprehensive device networking package, FTP, Telnet, DNS, DHCP and IGMPv1/v2 components are included as standard. NicheStack IPv4 provides an economical, solid protocol platform for InterNiche's optional PPP, Web Server, Web Browser, DHCP Server, Email, SNMP, RTP/RTCP and routing products where they are required.

NicheStack Dual (IPv4/IPv6) offers a unique and flexible combination of networking support for devices that must operate in today's IPv4 based networks and be compatible with future upgrades to IPv6 environments. NicheStack Dual is a device optimized protocol stack that handles simultaneous IPv4 and IPv6 networking traffic in a seamless and efficient manner. IPv4 and IPv6 communications can be established on a connection by connection basis offering the greatest flexibility in run-time flexibility and equipment interoperability.

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
Fax: +1 408 540 1161
Email: sales@iniche.com

Phone: Europe: +31 24 373 7962
Email: sales-europe@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 24 373 7962

interniche technologies, inc.