

TCP/IP (Ethernet) Stacks

Ethernet is the most widely-installed Local Area Network (LAN) technology in the world. Using Ethernet in embedded applications enables high-bandwidth data transfer and, in particular, lets the system connect to the Internet without using a computer. That opens up a number of possibilities, including the ability to report status to a web page or receive instructions remotely. TCP/IP stacks enable quick configuration of the required Ethernet network options and minimize your time to market. There are more than 20 NXP ARM MCUs with built-in Ethernet, covering ARM7, ARM9, and the new Cortex-M3. NXP uses essentially the same implementation across all three different ARM cores, so designers can save time and resources by reusing their Ethernet functions across multiple platforms. Please note that the table below only includes devices with an on-chip 10/100 Ethernet MAC peripheral. Many of the TCP/IP stacks listed here also run on LPC / LH devices that don't have an on-chip Ethernet peripheral (by using an external Ethernet MAC).

Supplier	TCP/IP Stacks	Supported Devices										Comments
		LPC175x	LPC176x	LPC236x	LPC237x	LPC238x	LPC245x	LPC246x	LPC247x	LH795xx	LPC32xx	
CMX	CMX-TCP/IP			•	•	•	•	•	•	•		-
	CMX-MicroNet	•	•	•	•	•	•	•	•			-
Express Logic	NetX	•	•	•	•	•	•	•	•	•	•	-
	NetX Duo	•	•	•	•	•	•	•	•	•	•	-
Green Hills	GHNet	•	•	•	•	•	•	•	•	•	•	-
IAR	PowerPac TCP/IP			•	•			•	•			-
InterNiche	NicheLite	•	•	•	•	•	•	•	•	•	•	-
	NicheStack			•	•	•	•	•	•		•	Many additional plugins available
Keil / ARM	RL-TCPnet			•	•	•	•	•	•		•	Part of RL-ARM
Mentor Graphics	Nucleus Ethernet										•	Easily ported to other NXP controllers
Micrium	µC/TCP-IP				•				•	•	•	-
Micro Digital	smxNS			•	•	•	•	•	•		•	-
NXP	NicheLite for LPC / LH	•	•	•	•	•	•	•	•	•		Free LPC/LH-specific NicheLite
OnChip	OT-NET			•	•	•	•	•	•			UDP,TCP,DHCP,DNS,ICMP,ARP
Quadros	RTXC Quadnet	•	•	•	•	•	•	•	•		•	Full-featured TCP/IP v4/6 solution
	RTXC Quark			•	•	•	•	•	•			Small footprint TCP/IPv4 solution
SEGGER	embOS/IP	•	•		•	•	•	•	•		•	-
SEVENSTAX	TCP/IP Stack	•	•		•		•	•		•	•	TCP, UDP, IP, ICMP, IGMP, NTP
Family		LPC1000		LPC2000						LH	¹⁾	¹⁾ LPC3000
Core		Cortex-M3		ARM7TDMI						²⁾	³⁾	²⁾ ARM720T ³⁾ ARM926EJ