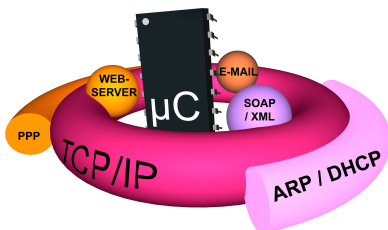


sevenstax Ethernet 3.3

The sevenstax Ethernet 3.0, a collection of drivers and protocols, enables sevenstax embeddedTCP as well as third party ones to take an active part in Local Area Networks. Although the sevenstax Ethernet protocols are designed to run in small, embedded systems, they also can be used to connect a fully equipped TCP/IP implementation such as 4.4 BSD stack to the LAN.

The sevenstax Ethernet Drivers and auxiliary protocols are completely new implemented with the result of a lean, fast and efficient software, containing all the functionality required for TCP/IP running on the Ethernet LAN. Platform independent source code and samples are well documented to speed up integration into existing or planned products.

In short, when unit cost is of direct influence and a high level of system security is required, that is when the advantages of sevenstax Ethernet are most evident.



Characteristics:

- Small memory footprint.
- Suitable for use in small micro controllers.
- Portable ANSI C code.
- Use BOOTP when DHCP is not available in the network.

- Seamless integrated with sevenstaxTCP/IP but can also be used with 3rd party TCP's.
- Easy integration into existing software because of simple interface.
- Runs without or with an OS such as embOS, CMX-RTX, eCos.
- Hardware Abstraction Layer (HAL) which allows to plug in various Ethernet Controller drivers.
- Minimal development time. Only an Ethernet Controller driver has to be developed.

Content:

- ARP (Address Resolution Protocol) automatically converts IP addresses into Ethernet addresses.
- BOOTP (Bootstrap Protocol) to obtain IP address from BOOTP servers.
- DHCP (Dynamic Host Configuration Protocol) to obtain IP address from DHCP servers.
- HAL (Hardware Abstraction Layer)

- Sample driver for LAN91C96, LAN91C111 and CS8900A.

Memory & System Requirements:

ROM in Bytes (16 bit CPU):

HAL:	937
ARP:	1300
BOOTP:	451
DHCP:	1526

RAM in Bytes:

HAL:	3064(incl. buffers)
ARP:	15 without cache
BOOTP:	14 + 300 buffer
DHCP:	97 + 564 buffer

Some memory for Ethernet Controller driver

32-bit timer/counter with an resolution of 1ms

What you get:

- well documented source code
- detailed API-documentation
- sample-code and driver
- configurations manual
- porting guide

sevenstax GmbH is specialized in developing systems with high requirements regarding operating security but reasonable hardware costs. The integration of communication technology, especially the Internet, with all kind of systems is our key know how. Our software is adaptable to customer's systems and requirements – as result you will get a tested and well operating adaptation.

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