

goNET

Modern technologies such as browsers and web servers open up new possibilities for visualisation and communication in the world of embedded systems and automation.

Communication over Ethernet with TCP/IP, HTTP is widely used in embedded applications.

goNET is the connectivity software solution for applications in markets such as building automation, industrial automation, medical, white goods, instrumentation.

goNET is a powerful connectivity software package for the NEC V850 32-bit RISC microcontroller family.

No royalties are involved with goNET, just a simple product license at very low cost.

goNET is a ready-to-go software package and gives you an easy start into the world of embedded connectivity.

goNET includes the efficient real time operating system embOS from Segger, the TCP/IP stack and web-server from iniNet and the Ethernet driver.

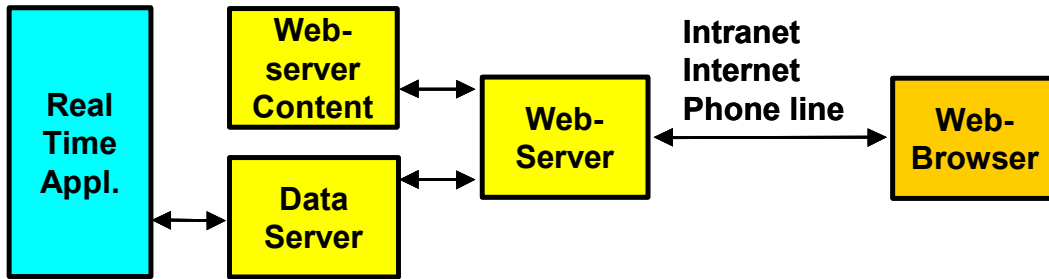
goNET makes it possible to implement the TCP/IP communication and the real time application easily on one single microcontroller. The real time operating system handles the application and communication tasks. The protocol stack enables the communication with TCP/IP and the web-server allows HTML pages to be served for visualisation and user interface.

Target Markets

- Building automation
- Industrial automation
- White goods
- Medical
- Instrumentation
- Visualisation terminals
- Home appliances
- Security
- Retail, vending machines

Features

- Ready to use
- No royalties
- Optimised for embedded applications
- Powerful and flexible
- Real time operating system embOS
 - Fast and efficient
 - small memory footprint
 - embOSView, for profiling tasks
 - object code
- TCP/IP stack
 - Source code
 - multiple Sockets Berkeley Socket API
 - small memory footprint (15kB RAM, 35kB ROM)
- Web-Server
 - cgi-call interface
 - file system for HTML pages
- Drivers
- IAR and Green Hills compiler supported
- Virtual Private Infrastructure (VPI) compatible
- Support service package available



goNET includes all the modules needed to implement web-technology in embedded devices in an efficient way.

embOS

The real time operating system embOS used in goNET is designed to offer the benefits of a multitasking operating system to embedded systems. The kernel is fully interruptible and so efficient that it can be used in very time critical applications. The memory footprint is so small that it is well suited for single-chip applications, leaving maximum room for the user-program. Despite its size and efficiency, it features the entire palette of communication mechanisms such as mailboxes, events and different kinds of semaphores. All tasks and communication instances can be dynamically created, deleted and configured. embOS is fully priority controlled and if no task is ready, it automatically puts the CPU in to a power-saving mode in the idle-task.

TCP/IP stack

The TCP/IP stack is designed and optimised for embedded systems with limited resources, without restriction to the socket management. The TCP/IP stack supports multiple sockets, which can be created dynamically and handled in parallel with an optimal memory management. This is important that multiple applications and/or clients can be served as in web-server and many other applications. The stack supports the standard Berkeley socket API, which simplifies cross-platform development. The small memory footprint and resource usage combined with good performance makes TCP/IP stack used in goNET ideally suited for embedded applications.

Web-Server

The embedded web-server included in goNET has a file system for web content (HTML pages) and supports cgi-calls. The web-server is the key element in web-based applications and allows an easy integration into VPI.

Graphical programming of user interfaces and visualisations (Java-Applet) is possible with SpiderControl™ Editor.

Virtual Private Infrastructure

goNET is VPI compatible.

VPI provides secure access to distributed systems via an Internet portal. The devices are connected over communication channels such as dial-up, GSM/GPRS, leased lines, ADSL, cable, etc. VPI can manage alarms and databases can also easily be integrated.

- Secure
- Easy to manage
- Scalable, flexible
- Use of existing infrastructure

The **VPI-Initiative**, an initiative by and for the industry, drives the VPI technology and establishes the standard.

Starter Kit p@ac

The p@ac Starter Kit is an ideal evaluation platform for goNET and embedded connectivity applications. It features the V850E/MA1 microcontroller, 10/100Mbit/s Ethernet, serial interface, connector for a Wintec embedded modem and all I/Os are available on expansion connectors.

Microcontroller supported

- NEC V850 family
 - V850/Sxx
 - V850ES/xxx
 - V850E/xxx
- Others on request

Your Unique Office:

Embedded connectivity solutions by:



<http://www.unique.eu.memec.com>

