RomPager® Web Server Features

Web Server Toolkits for Embedded Devices

The RomPager Embedded Web (HTTP) Server toolkits are designed for the embedded device marketplace. They will work with any TCP stack that supports standard socket calls as well as stacks with high-performance non-socket interfaces. They have been integrated with all the major RTOS environments, but have their own lightweight scheduler, so they will run in RTOS-less environments as well. The RomPager toolkits are provided as ANSI-C source code.

The RomPager Basic toolkit has the following features:

- HTTP 1.0/1.1 compliant
- Multiple concurrent requests
- Small memory footprint (7Kb-12Kb ROM, 2Kb RAM Base + 4Kb RAM/concurrent connection)
- GET, HEAD, POST support
- HTTP 1.1 persistent connection and chunked encoding support
- High performance CGI-style interface
- File system supported, but optional so it is not required
- Dynamic HTML support
- Form item decoding routines
- Caching support for calendar-clock, real-time clock and clockless environments
- Basic Authentication Security support
- Client-Side Image Mapping support
- Compliant with IETF standards (RFC 1945, RFC 2068, RFC 2616)

The RomPager Advanced toolkit is a full-featured Web server that includes all the features of RomPager Basic and adds the following:

- The Web Application Toolkit, which includes an HTML development environment and offline page compiler. The Web Application Toolkit supports:
  - Integrated variable data access for pages and forms
  - Integrated numeric conversion routines including support for hex, dotted-decimal, IP address, MAC addresses, DECnet addresses, etc.
  - Integrated Dynamic Content (HTML-level switches, loops, etc,)
  - Document and Application level compression for ROM-based pages, yielding the smallest Web application footprint in the industry.
  - HTML tokenization compression
  - User phrase dictionary compression
  - Integrated International language support
  - Server-Side Image Mapping support
  - Dynamic object list support
- Small memory footprint (10Kb-35Kb ROM, 3.5Kb RAM Base + 5Kb RAM/concurrent connection)
- HTTP 1.1 PUT, OPTION, TRACE support
- Digest Authentication
- External Password Validation
- IPP interface support
- State managment support (URL and HTTP Cookies)
- Distributed processor/machine architecture
- Compliant with IETF standards (RFC 1867, RFC 1945, RFC 2068, RFC 2069, RFC 2616, RFC 2617)
- Remote Host option provides integrated HTTP proxy for automatic remote object retrieval.

ALLEGRO SOFTWARE DEVELOPMENT CORPORATION
43 Waite Road • Boxborough, MA 01719
Telephone: 978 266 1375 • Fax: 978 266 2839 • www.allegrosoft.com