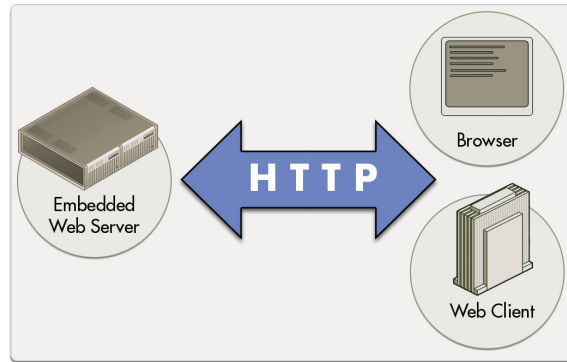


RomPager®

Flexible Embedded Web Server Toolkits

RomPager Benefits

- Proven technology deployed in 15+ million devices around the world
- Compatible with all standard browsers
- Support for HTML 2.0, 3.2 and 4.0
- HTTP 1.0/1.1 Support
- An interface to SNMP-style set and get routines
- Dynamic HTML creation
- Small RAM/ROM footprint through intelligent compression techniques
- Highly portable via field proven abstraction layer (Hardware, RTOS and TCP/IP stack)
- Interface files for leading RTOS vendors provided
- Delivered as standard ANSI-C source code
- Efficient Internationalization support
- Flexible Security and External Security support
- Standard and Extended HTTP header support
- Compilation switches for size, feature and speed trade-offs
- URL State Management support



The RomPager® suite of products enable your engineering team to leverage proven Web-based technologies in your networked embedded device. Hundreds of customers have utilized Allegro's technology in 15+ million devices shipped to markets around the world. Recognized as the most widely used OEM embedded Web server on the market today, Allegro's RomPager Basic, Standard and Advanced toolkits offer a rich set of features, unprecedented flexibility along with unparalleled performance to meet your development needs.

The web browser has become the ubiquitous interface for network enabled applications. Universal acceptance and familiarity with Web browser technology has seen its effective utilization in many differing applications. Now, device developers are using Web technology to create excellent graphically oriented interfaces that enhance product configuration and management without requiring excessive implementation overhead.

RomPager Basic

The RomPager Basic Web Server is a basic Hyper Text Transfer Protocol (HTTP) engine that serves content to browsers and other Web clients. Fully compliant with HTTP 1.0/1.1 specifications, the RomPager Basic Web server offers superior performance and can be configured to handle thousands of concurrent requests. RomPager Basic also provides access to a high performance CGI-style interface, optional file system support and the ability to dynamically generate HTML giving your engineering team flexibility to design a Web based interface of their choice. The toolkit is delivered as standard ANSI-C source and built upon a highly portable and field proven abstraction layer enabling it to work with any RTOS or TCP/IP stack.

RomPager Standard

Building upon the RomPager Basic Web Server, the RomPager Standard toolkit adds the ability to serve web objects (HTML, GIF, JPEG, Applets, etc.) from multiple sources: an optional file system, CGI-style User Exit functions and ROM. Delivered as part of the toolkit, the PageLoader Web-to-C compiler gives your engineering team a powerful tool that simplifies the process of converting Web objects to ANSI-C structures. The generated source is compiled and later linked with the RomPager Standard modules along with your application allowing the Web server to present Web objects directly from ROM. Additionally, RomPager Standard provides the ability to dynamically insert variables into HTML pages served from any source.

Allegro Software Development Corporation
1740 Massachusetts Avenue
Boxborough, Massachusetts
01719

+1 (978) 264-6600
www.allegrosoft.com

RomPager Advanced

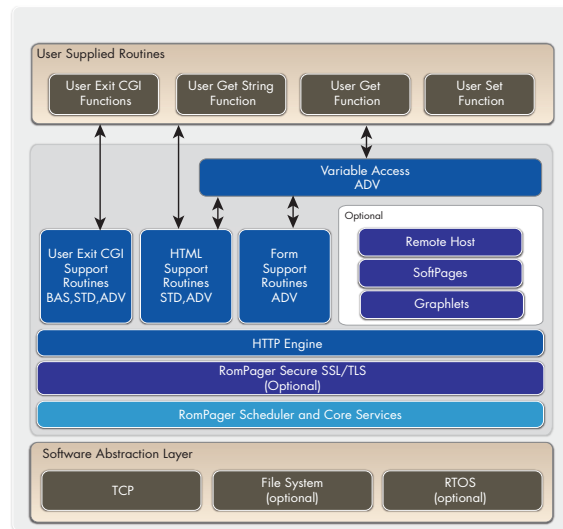
The RomPager Advanced Web Server toolkit is Allegro's premier Web server product offering the widest range of design flexibility. With support for all functionality built into the RomPager Standard Web server, the RomPager Advanced toolkit further expands the product feature set giving your engineering team unprecedented design flexibility. As part of the Advanced toolkit, the PageBuilder compiler includes all capabilities of the PageLoader Web-to-C compiler with the addition of significant features for compression, integrated variable data access, integrated dynamic content and much more. Additionally, the Web server engine itself offers HTTP Streaming and HTTP 1.1 PUT, OPTION and TRACE support. Advanced Security features are also included with support for Digest Authentication, external password validation and support for an internal security database with dynamic realm and security level configuration. Additional support is provided for state management (URL and HTTP Cookies) in addition to compliance with IETF standards (RFC 2069, RFC 2616, RFC 2617) along with Browser-based file upload support (RFC 1867).

SoftPages, Remote Host, Java Graphlets

The RomPager Advanced Web server gives developers even more choices when adding network connectivity to their device. Offered as an additional product, SoftPages provides for storage of HTML pages outside the executable image residing on a file system or other dynamic device. The HTML pages are parsed at runtime for dynamic content. This option allows for iterative changes to HTML pages in a device without the need to recompile. The Remote Host option provides an integrated HTTP proxy for automatic remote object retrieval from other networked servers. This can be useful for bridging collections of devices to a single browser window. Java Graphlets provide pre-integrated graphic control indicators for an embedded device. The Graphlets include line charts, bar charts and dial indicators.

RomPager Secure

Security is always a concern when dealing with devices connected to the internet. RomPager Secure addresses the need for advanced security with integrated TLS 1.0 and SSL 3.0 support. With support for a variety of cypher suites (RCA, DHE, RC4, DES, 3DES, AES, SHA, CBC and MD5) your development team can provide compatibility with all standard secure browsers. RomPager Secure also offers a built-in certificate authority, certificate import support and Basic and Digest Authentication under TLS/SSL. Compliant with IETF standards (RFC 2246 and RFC 3268), RomPager Secure provides RomPager Basic, RomPager Standard and RomPager Advanced with the advanced security functionality to meet your development team needs.



Highly Portable

All RomPager toolkits are highly portable across RTOS and processor families. Delivered in ANSI-C source code all products utilize a field proven abstraction layer to enable portability with any RTOS, TCP/IP stack and file system environment. Interface files for leading RTOS environments are provided.

Feature	Basic	Standard	Advanced
Full source code	✓	✓	✓
High Performance	✓	✓	✓
Small RAM/ROM footprint	✓	✓	✓
GET,HEAD,POST support	✓	✓	✓
HTTP 1.1 persistent connection support	✓	✓	✓
Chunked encoding support	✓	✓	✓
High performance CGI-style interface	✓	✓	✓
Optional file system support	✓	✓	✓
Dynamic HTML support	✓	✓	✓
Form item decoding routines	✓	✓	✓
Basic authentication security support	✓	✓	✓
Client-Side Image Mapping support	✓	✓	✓
PageLoader Web-to-C Compiler		✓	✓
Dynamic variable insertion in HTML pages		✓	✓
Compression of common HTML tokens		✓	✓
Sharing common HTML across pages		✓	✓
Sample HTML design templates		✓	✓
PageBuilder Web-to-C Compiler			✓
HTTP 1.1 PUT, OPTION, TRACE support			✓
HTTP Streaming support			✓
Digest Authentication			✓
External Password Validation			✓
State management support (URL, HTTP cookies)			✓
Browser-based file upload support (RFC 1867)			✓
Compression of user specific tokens			✓
Internationalization Support			✓
Internal Security Database			✓
Optional Java Graphlets			✓
Optional Remote Host			✓
Optional SoftPages			✓