

# @Web Software TCP/IP PSTN/GPRS Modem Solution Evaluation Kit

GET YOUR APPLICATION CONNECTED



The @Web PSTN51S kit allows the user to evaluate the full range of options available for integrating TCP/IP software into Atmel® C51 Flash Microcontrollers.

## Key Features

- On-chip Full TCP/IP Stack
- Direct or PSTN & GPRS Modem Connectivity
- Internet to CAN Gateway
- Internet Services: HTTP, FTP, SMTP
- Flash MCU Supported:
  - T89C51CC01: with CAN Controller
  - T89C51AC2: with A/D Converter
  - AT89C51RC2/AT89C51RD2

## Applications

- Embedded Industrial Control
- Building Automation
- Remote Control
- Home Appliances
- Vending Machines
- Smart Card Readers
- Alarm Systems



Corporate Headquarters  
2325 Orchard Parkway  
San Jose, CA 95131  
USA  
TEL.: (1)(408) 441-0311  
FAX.: (1)(408) 487-2600

Europe  
Atmel SarL  
Route des Arsenalux 41  
Case Postale 80  
CH-1705 Fribourg  
Switzerland  
TEL.: (41) 26-426-5555  
FAX.: (41) 26-426-5500

Asia  
Room 1219  
Chinachem Golden Plaza  
77 Mody Road Tsimshatsui  
East Kowloon  
Hong Kong  
TEL.: (852) 2721-9778  
FAX.: (852) 2722-1369

Japan  
9F, Tonetsu Shinkawa Bldg.  
1-24-8 Shinkawa  
Chuo-ku, Tokyo 104-0033  
Japan  
TEL.: (81) 3-3523-3551  
FAX.: (81) 3-3523-7581

Product Contact  
La Chantreterie  
BP 70602  
44306 Nantes Cedex 3  
France  
TEL.: (33) 2 40 18 18 18  
FAX.: (33) 2 40 18 19 60

e-mail  
literature@atmel.com

Web Site  
http://www.atmel.com

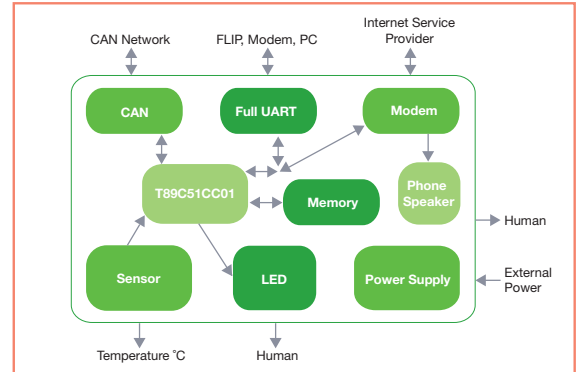


©Atmel Corporation, 2003  
Atmel Corporation makes no warranty for the use of its products, other than those expressly contained in the Company's standard warranty which is detailed in Atmel's Terms and Conditions located on the Company's web site. The Company assumes no responsibility for any errors which may appear in this document, reserves the right to change devices or specifications detailed herein at any time without notice, and does not make any commitment to update the information contained herein. No licenses to patents or other intellectual property of Atmel are granted by the Company in connection with the sale of Atmel products, expressly or by implication. Atmel's products are not authorized for use as critical components in life support devices or systems. Atmel® is a registered trademark of Atmel. Other terms and product names may be trademarks of others.

Ref.: 4002B-8051-02/03/10M

Atmel has developed the @Web PSTN51S TCP/IP protocol stack for its C51 Flash Microcontrollers to enable easy and cost-effective implementation of any Internet services such as HTTP, FTP or SMTP to run on customer applications like data storage, e-mail services and on-line software updates.

Thanks to the optimized size of the TCP/IP stack, it can be implemented together with the application program, avoiding the use of expensive external modules.



### Product Features

- Internet Services
  - HTTP server enables direct Web browser access
  - FTP server to download files into on-chip MCU Flash memory
  - FTP client for uploading files from anywhere on the Internet
  - SMTP support for sending e-mail

### Communication Ports

- Direct connectivity through RS232
  - Baudrate up to 115 Kbits/sec (or 38400 bps at 11.059 MHz)
  - DB9 connector
  - Null or external modem connection type
- V.34bis Analog Modem – PSTN Line Connection
  - Cermetek Modem chip (Hayes)

### Application Microcontroller

- 32-Kbyte C51 on-chip Flash MCUs:
  - T89C51AC2: with on-chip A/D converter
  - T89C51CC01: with on-chip CAN bus and A/D

### @Web Evaluation Kit Software

- @Web TCP/IP Stack Library for Keil V 6.20C
- FLIP Software (FLexible In-system Programming)
- Quick Start Examples
- Demonstration Software Source Code
- User Guide and Application Notes

### Cables and Power Supply

- Null-modem Cable
- 9V Battery

### Ordering Information

Two versions of the kit are available:

- Internet Protocols
  - PPP, LCP, IPCP, PAP, SLIP, TCP/IP, UDP, ICMP protocols
  - Low Level Dial-up or direct connectivity interface drivers

- Speed up to 33.6-Kbit/sec
- Toll-free call back system
- Standard RJ-11C Jack
- CAN 2.0B Interface (with T89C51CC01 only)
  - On-board CAN transceiver
  - 1-Mbit/sec transfer rate
  - 3-pin connector

- 3V or 5V In-System Programming (ISP)
- 1-Mbit External Optional RAM
- 0°C - 70°C Temperature Sensor

- @Web Flash Configuration Monitor
  - Hayes commands and ISP dial string
  - ISP login and password
  - e-mail address
  - IP address for the SMTP server

- 9V - 12V Power Supply Connector (no supply unit included)

### Kits Part Numbers

ATWebEVK-01 (including T89C51AC2)  
ATWebEVK-02 (including T89C51CC01)