# Summary Data Sheet

## HelloDevice 1300 Ethernet and Serial Communication Board

Last updated: 3 August, 2000



*The small size of the 1300 board can be easily embedded in a parent device.*

- **Customizable Web server**
- **10Base-T Ethernet interface**
- **RS-232/485 interfaces**
- **Built-in TCP/IP stack**
- **5V DC Power (200mA nominal)**
- **Utility software**
- **Dimensions 86mm x 53mm**

## Description

The 1300 "HelloDevice" board is a complete internet controller and web server solution for manufacturers and system integrators, who need a way to rapidly create internet-ready devices.

Existing devices that have a serial interface can use the 1300 board to connect to the internet by mapping the serial protocol to the standard TCP/IP which then gives it all the built-in functionality such as the web server or client email.

The board is preprogrammed to achieve a true plug and play Internet solution for new devices that are designed to be network-enabled.
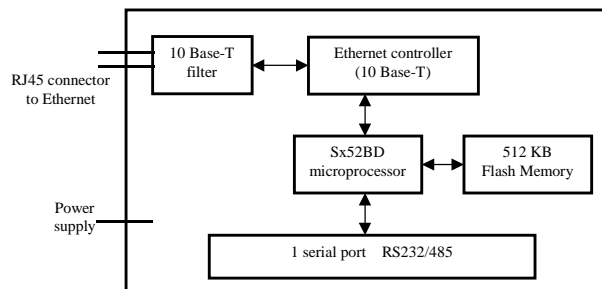
The board is preloaded with the embedded web server and can be customized with HTML pages and Java$^{TM}$ applets. Client communicates with this controller through the standard web browsers.

The mechanical dimensions of the board are approximately 86mm x 53mm.

Interface connector provides one serial port of RS-232 or RS-485.

A simple block diagram of the 1300 board:



The 1300 HelloDevice may be ordered from this Web site: http://www.sena.com.

Question may also be directed to:

Sena Technologies, Inc.
Tel: +82-2-529-7025
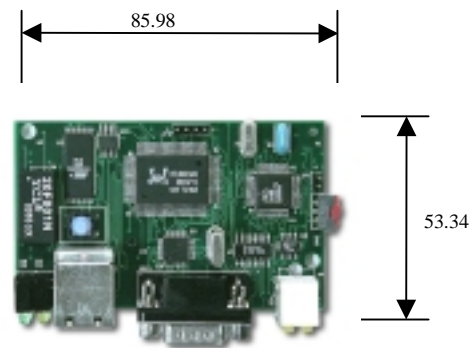Email: hellodevice@sena.com

# Key Specifications / Features

◆ Processor and Memory:
  ○ Scenix SX52BD
    8 bit microprocessor, 50 MIPS
  ○ 512KB Flash Memory is provided for Web resource files and control parameters.

◆ Network Interface:
  ○ 10Base-T Ethernet MAC and PHY interface with a built-in RJ45 Ethernet connector
  ○ TCP/IP stack and web server firmware included
  ○ An Ethernet MAC and default IP address comes pre-assigned with each board. The IP address can be modified from utility software provided.

◆ TCP/IP stack protocols
  ○ ARP
  ○ IP/ICMP
  ○ TCP/UDP
  ○ HTTP/BOOTP

◆ Device Interfaces:
  ○ One channel serial port (RS-232/485)
  ○ Variable to 38400 baud rate

◆ Power Requirements:
  ○ Supply voltage = 5 V DC ±10%
  ○ Supply current = 200 mA (nominal)

◆ Environmental:
  ○ Operating temperature: 0 to +70C
  ○ Humidity: 5 - 95%, non-condensing
  ○ Storage temperature: -40 to +125C

# Utility software:

◆ Platform
  Windows 95/98/NT/2000

◆ Function
  ○ BOOTP server with IP setup/change/clear functions
  ○ Web resource files build/upload
  ○ Low-level monitor commands

# Physical Properties:

◆ Size
  ○ 86mm L x 53mm W x 16mm H

# Top view of 1300 HelloDevice board:

512 KB
Flash Memory

UART

10BaseT Ethernet Chip

Reset Button

Status LEDS

| Power | Collision |
|-------|-----------|
| Rx | Tx |

microprocessor

RJ-45 Connector
To Ethernet

Serial Connector with
(RS-232/485)

Power Connection
( 5V DC )