Summary Data Sheet

HelloDevice 1100 Ethernet and Digital I/O Communication Board

Last updated: 3 August, 2000

The small size of the 1100 board can be easily embedded in a parent device.

- ■ **Customizable Web server**
- ■ **10Base-T Ethernet interface**
- ■ **16 point Digital Input**
- ■ **16 point Digital Output**
- ■ **Built-in TCP/IP stack**
- ■ **5V DC Power (200mA nominal)**
- ■ **Utility software**
- ■ **Dimensions 86mm x 53mm**

Description

The 1100 "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 Digital I/O port interfaces can use the 1100 board to connect to the internet by mapping the digital I/O interface to the standard TCP/IP which then gives it all the built-in functionality such as the web server or client email.
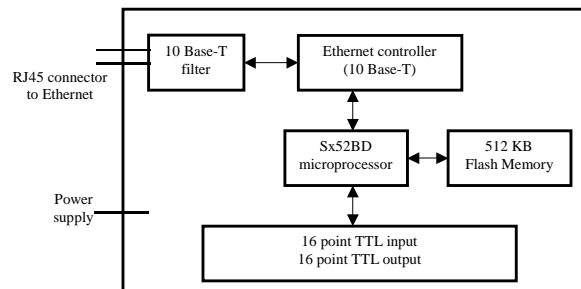
The board is preprogrammed to achieve a true plug and play Internet solution for new devices that are designed to be network-enabled.

The board is preloaded with the embedded web server and can be customized with HTML pages and Java™ 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 16 point digital inputs and 16 point digital outputs.

A simple block diagram of the 1100 board:

The 1100 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
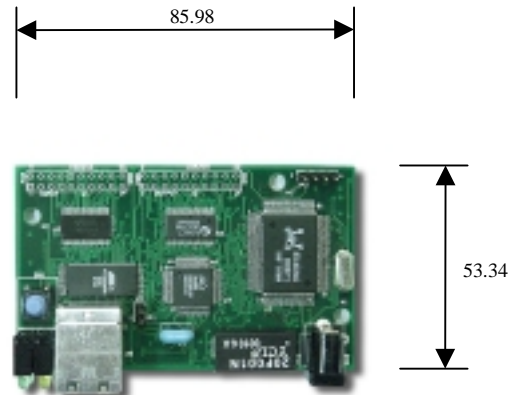
Key Specifications / Features

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

- ◆ Network Interface:
  - ○ 10 Base-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:
  - ○ Digital I/O interface is provided by 2 16 pin connectors
  - ○ 16 point digital input
  - ○ 16 point digital output

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

85.98

53.34

Top view of 1100 HelloDevice board:

512 KB
Flash memory

16 point digital input
(5V TTL)

16 point digital output
(5V TTL)

10 base T
Ethernet controller

Status LED

Power	collision
Rx	Tx

RJ45 connector to
Ethernet

Microprocessor

Power(5V DC)