

netIO™

connecting the world
of embedded devices...

Specifications:

Ethernet Support:
10 Base-T, CDMA-CD, RTL-8019AS (NE2000 comp.)

Supported Protocol:
ARP,UDP,IP,TCP,HTTP,
ICMP, DHCP.

Micro - controller:
PIC16F877 20MHz

Interfaces:
Analog Input:
4ch (0-5V 10 bit A/D)
1 temperature sensor.

Digital:
Output 4 ch
Input 4 ch.
(Software configurable)

RS-232C Speed:
9600bps to 115200 bps

Power:
8V to12 V (Built-in bridge
diode)

What is netIO?

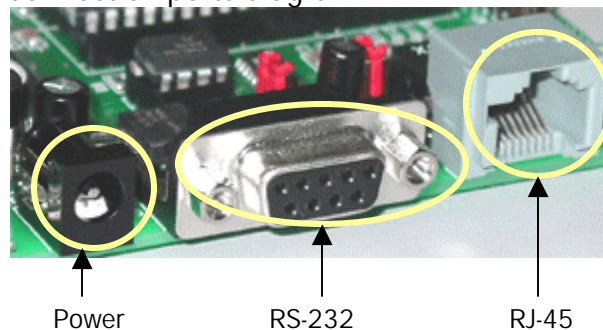
netIO, is a remote I/O board to connect to Ethernet.
Ver.2 is small-sized, 10cm × 7cm.

Connecting to LAN in the same way as PC, you can control by programming, switching on and off I/O through PC Web browser. The types of computers or OS are not required with a simple ON and OFF device.

No programming knowledge required and multiple users can control this board at the same time.

For advanced user, application programming interfaces are provided to develop application capable of controlling on-board I/Os through Ethernet. Monitoring of I/Os could be carried out as well.

Connection ports diagram:



I/O Ports

Port	Value
RA0 In	0
RA1 In	0
RA2 In	0
RA3 In	1
RA5 In	25 Celsius
RB0 In	<input type="checkbox"/> H <input type="checkbox"/> Low <input type="checkbox"/> L
RB1 In	<input type="checkbox"/> H <input type="checkbox"/> Low <input type="checkbox"/> L
RB2 In	<input type="checkbox"/> H <input type="checkbox"/> Low <input type="checkbox"/> L
RB3 In	<input type="checkbox"/> H <input type="checkbox"/> Low <input type="checkbox"/> L
RB4 Out	<input type="checkbox"/> H <input type="checkbox"/> Low <input type="checkbox"/> L
RB5 Out	<input type="checkbox"/> H <input type="checkbox"/> Low <input type="checkbox"/> L
RB6 Out	<input type="checkbox"/> H <input type="checkbox"/> Low <input type="checkbox"/> L
RB7 Out	<input type="checkbox"/> H <input type="checkbox"/> Low <input type="checkbox"/> L
<input type="button" value="Reload"/>	

About interfaces on netIO

Picture on the left indicates available I/O ports. Controlling and monitoring of the I/O status could be carried out from a web browser.

Current status of I/O ports is indicated. The state of each pin is set at the time read by a browser. The value is not updated until pressing Refresh in the browser or Reload on the screen.

RA0-5 and RB0-7 correspond to I/O pin number on the board. The port indicating "In" is defined as current input port and "Out" as output port.

Value is in the state of current I/O port. RA0-3 is a port with analog input and the result of A/D conversion is indicated by 10 log (0-1023). RA5 reads a temperature sensor on the board and shows the temperature by Centigrade. It may varies than the actual temperature by a few degrees.

RB0-7 is defined as digital I/O pins.

Applications:

- Remote monitoring and control of I/O devices for SCADA systems.
- NetIO can be used to start a machine, control lighting, monitoring of equipment and many more.
- NetIO is also used in facility management where status of air-conditioning equipment, temperature of a location and various indications of building status are monitored.

Development Tools:

- PC with Ethernet support.
- Operating systems: Windows 98/NT/2000/XP and Linux.
- Ethernet Cross Cable for direct connection between PC and netIO.
- Development environment: Visual Basic, Visual C++, gcc.
- Sample applications can be downloaded from our website.

If you have any enquiries on this product, please feel free to contact us at:

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