Product Name : Sensors for Green House Applications	**Product Code :** NLAB-ELECTRONICSAB530002

Description :

Sensors for Green House Applications

Technical Specification :

Advanced RISC Architecture

Up to 16 MIPS Throughput at 16 MHz

256K Bytes of In-System Self-Programmable Flash

8K Bytes RAM

4K Byte Internal SRAM

86 Programmable I/O Lines arranged in nine 8 bit ports

In-System Programming by On-chip Boot Program

16-channel, 10-bit ADC

Two 8-bit Timer/Counters with Separate Prescalers and Compare Modes

Four 16-bit Timer/Counter with Separate Prescaler, Compare Mode, and Capture

Real Time Counter with Separate Oscillator

Twelve 16 bit and Four 8 bit PWM Channels,

Four Programmable Serial USART

Eight external interrupts

Master/Slave SPI Serial Interface

Byte-oriented Two-wire Serial Interface

Programmable Watchdog Timer with Separate On-chip Oscillator

Each platform should have Bread DC Power Supplies +12V, -12V, +5V & - 5V.

LCD Display: -

A 20x4 LCD display is very basic module and is very commonly used in various devices and circuits. These modules are preferred over seven segments and other multi segment LEDs. The reasons being: LCDs are economical; easily programmable; have no limitation of displaying special & even custom characters (unlike in seven segments), animations and so on.

A 20x4 LCD means it can display 20 characters per line and there are 4 such lines. In this LCD each character is displayed in 5x7 pixel matrix. This LCD has two registers, namely, Command and Data. This is standard HD44780 controller LCD.

There is no change code for interfacing standard 16x2 or 20x4 LCD.

20 Characters x 4 Lines

Built-in HD44780 Equivalent LCD Controller

Works directly with ATMEGA, ARDUINO, PIC ARM many other microcontroller/kits.

4 or 8-bit data I/O interface

Low power consumption