



**Digital and Analog IO Interfacing All Purpose Board**

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## 1. About Digital and Analog IO Interfacing All Purpose Board

Ready to use Input & Outputs Circuits are always important to experiment with any microcontroller. The Digital and Analog IO Interfacing board is all purpose board suitable for quick experiments with any microcontroller.

This board has below listed interface circuits to work with:

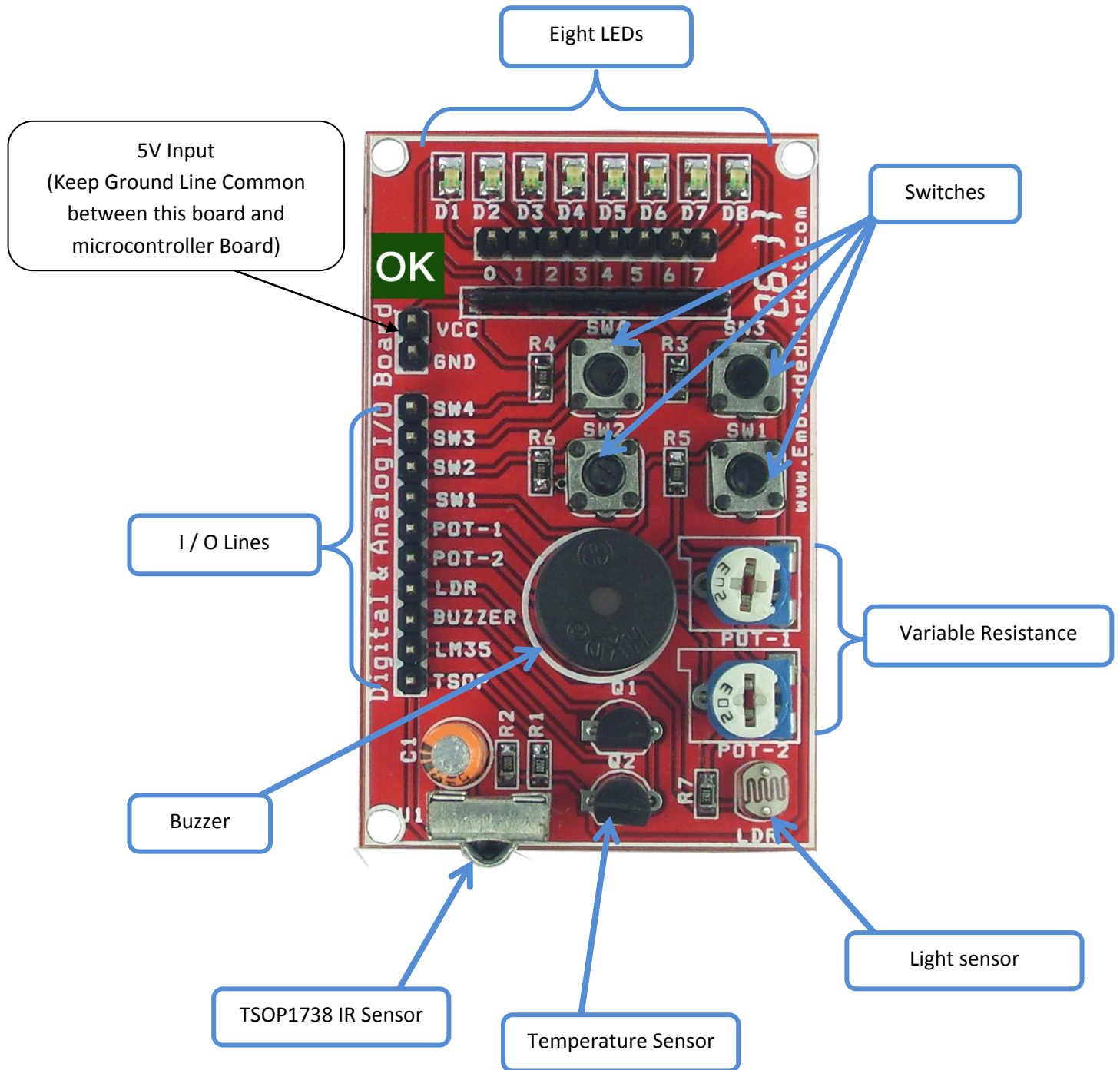
1. Eight LEDs
2. Four Switches
3. Two Variable Resistance (also called as POT / Preset)
4. One Light Sensor (LDR - Light Dependent Resistance)
5. One Temperature Sensor ( LM35)
6. One Infrared receiver (TSOP1738)
7. One Buzzer

Let's categories them in to Digital / Analog / Input / Outputs

1. Digital Inputs to any microcontroller
  - a. Four Switches
  - b. Infrared receiver TSOP 1738
2. Analog Inputs to Any Microcontroller
  - a. Two variable Resistance
  - b. One Light Sensor
  - c. One Temperature Sensor
3. Use as Digital and Analog Outputs for any Microcontroller
  - a. Eight LEDs
  - b. One Buzzer

2.

# Hardware Details



## Digital and Analog IO Interfacing All Purpose Board

### Instructions to use this board:

Below is the typical setup which demonstrates usage of this "Digital and Analog IO Interfacing All Purpose Board".

This is sample setup. You may use any microcontroller with this product.

A] 9V to 5V Voltage Regulator Board (Product Code – DR-BO-533)

This board is main Power Regulator Board with 9V DC Input and 5V DC Output

B] Single Pin connectors to connect different boards (Product Code – DR-Cable-1Pin)

These are single pin to single pin female to female connectors used

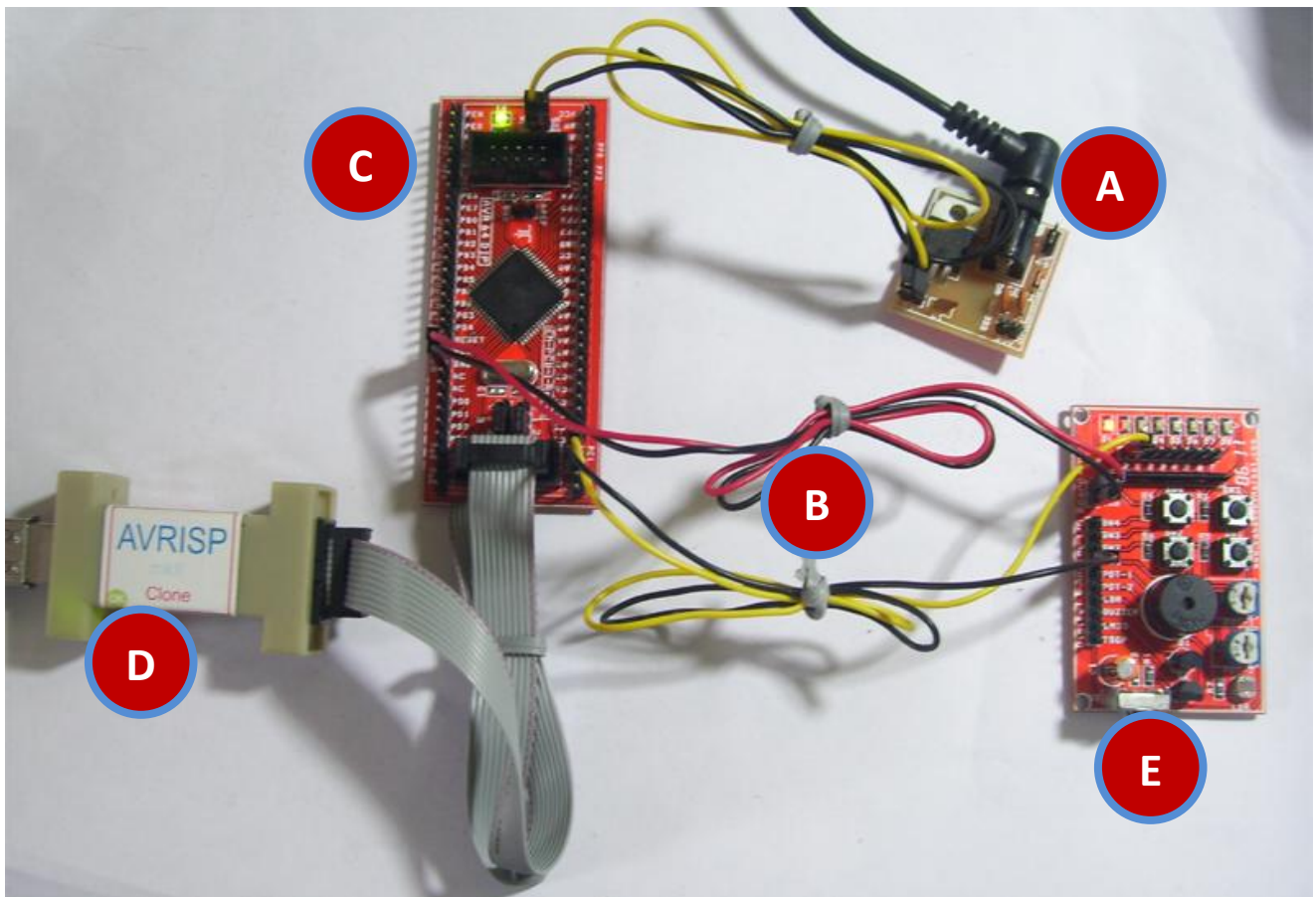
C] ATmega128 AVR Microcontroller Board (Product Code – EM-DIP-ATmega128)

ATmega128 Microcontroller Board. You may use any microcontroller board.

D] AVR ISP Programmer (Product Code – EM-P-mkIIICL)

Programmer for ATmega128. Yours may be different

E] Digital and Analog IO Interfacing All Purpose Board



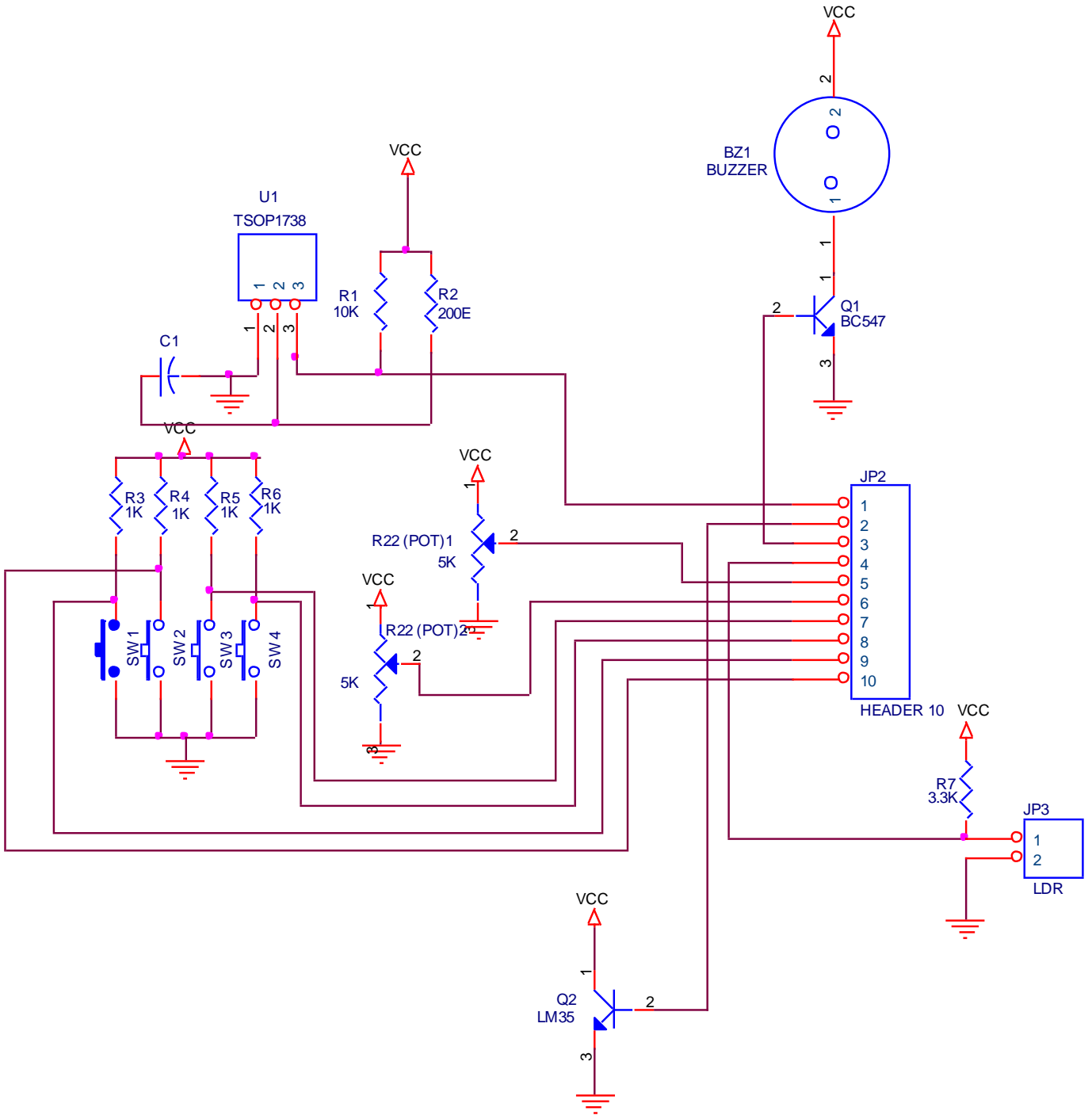
Above picture shows as how IO Board is connected to the microcontroller & Power Board

**Note- Products marked as A, B, C, D are not part of this product. They are shown for demo purpose.**

**Product Datasheet**

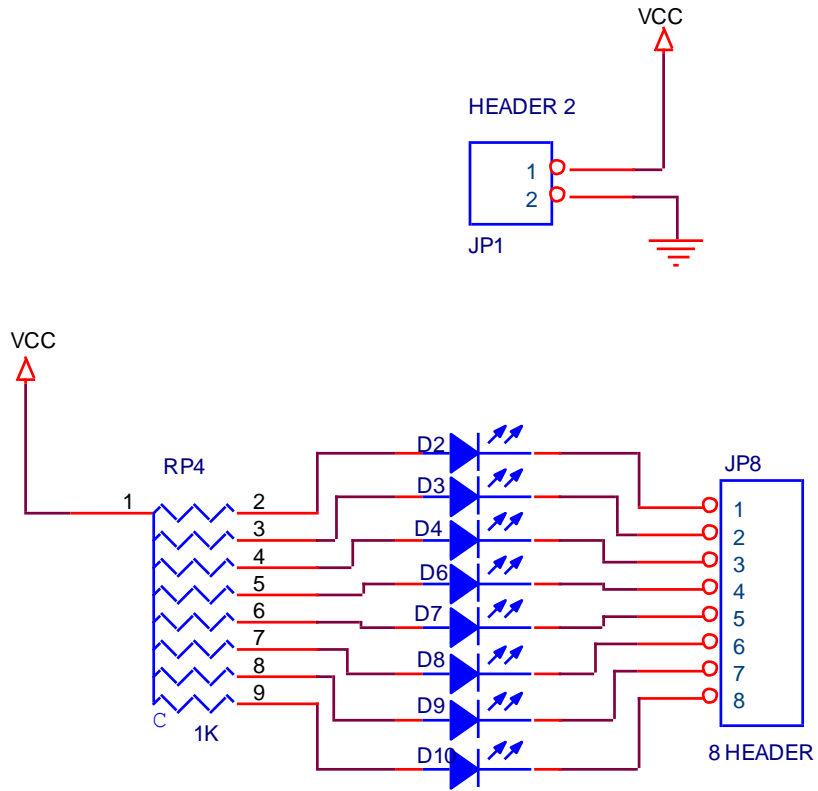
# Digital and Analog IO Interfacing All Purpose Board

## Hardware Schematics:



# Digital and Analog IO Interfacing All Purpose Board

## Hardware Schematics:



### 3. Important information

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1. The “Digital And Analog IO Interfacing All Purpose Board” product is designed for experiments and is not suitable to be used in life support and mission critical products.
2. “Digital And Analog IO Interfacing All Purpose Board” requires 5V DC regulated power.
3. Manufactured by:

Embedded Market  
205 Decision Tower  
Next To CityPride  
Satara Road  
Pune 411037 India  
Ph:+91 20 24228818  
Email for Support- [support@embeddedmarket.com](mailto:support@embeddedmarket.com)  
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4. For Product Customization & Bulk orders, contact [sales@embeddedmarket.com](mailto:sales@embeddedmarket.com)