

AVR Board for Projects

is the Most Complete

Simple to use Development Board

For ATmega32

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# About AVR Board for Projects

The AVR Project Board is most complete and easy to use development board for ATmega32 and it's compatible controllers from ATMEL.

On board, below listed interface circuits are available:

- 1. 4x4 Keypad Matrix
- 2. I2C Real Time Clock DS1307
- 3. I2C EEPROM 24C256
- 4. LCD 16x2
- 5. Micro SD Card
- 6. Switches
- 7. RS232
- 8. Buzzer
- 9. LEDs
- 10. IR transmitter LED
- 11. IR receiver with comparator
- 12. TSOP1783 IR Receiver
- 13. Temperature Sensor

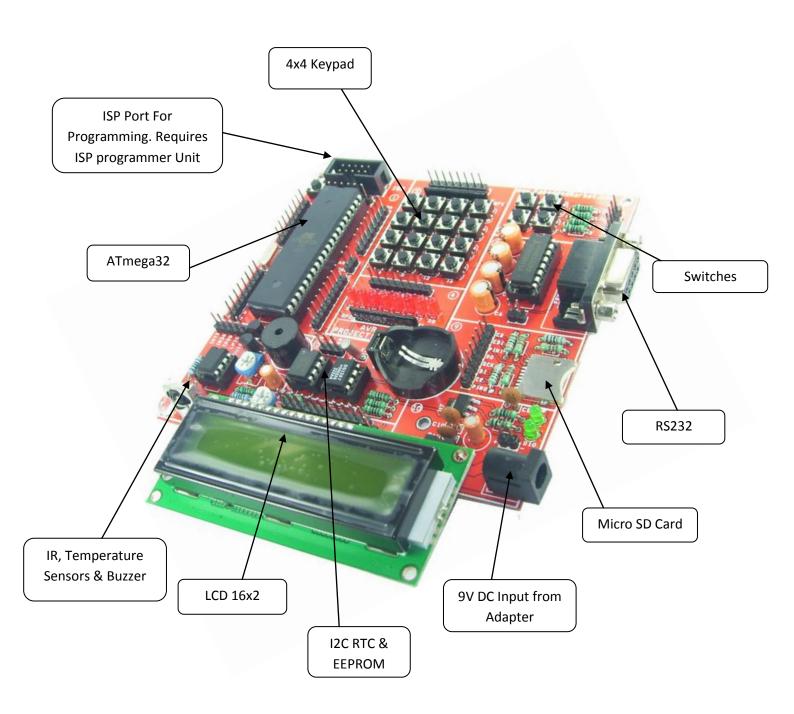
All these interfacing circuits are open for connections.

The Single pin F-F Connectors are included with the board for interfacing connections.

This board is best suitable for Learning & Experiments.

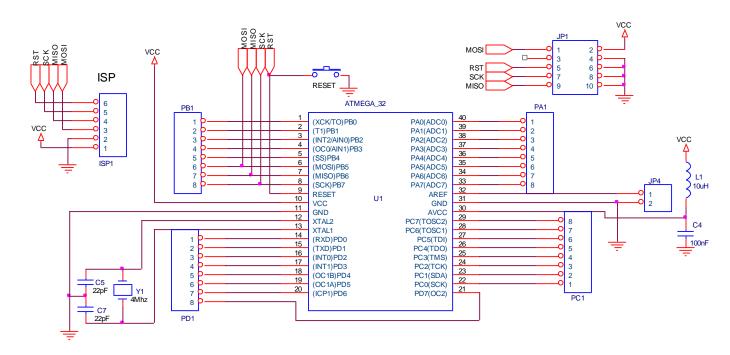
2.

# The AVR Project Board Hardware Details

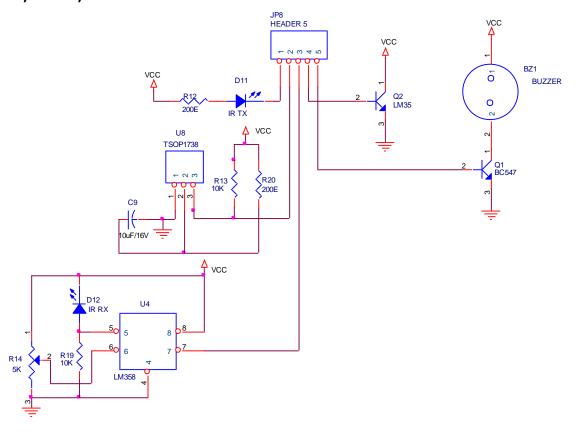


#### **Sectional Schematics:**

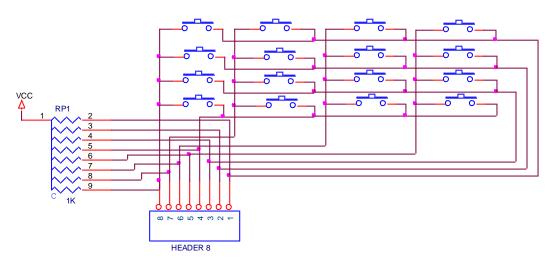
#### 1. ATmega32 - All Port Pins open, ISP Port & Crystal



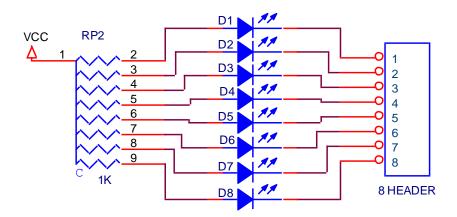
#### 2. IR, LM35, TSOP & Buzzer Section



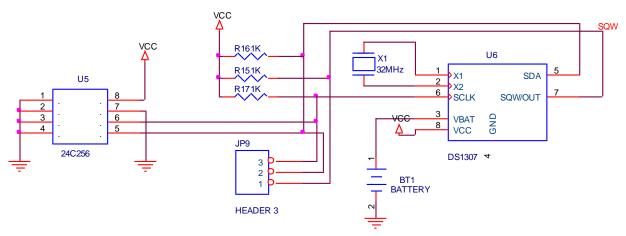
#### 3. 4x4 Keypad Matrix



#### 4. LEDs Section (Low Signal will make these LEDs ON)

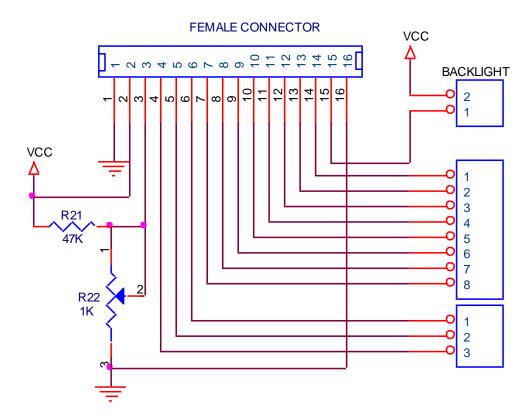


#### 5. I2C Real Time Clock DS1307 & I2C EEPROM 24C256 Section

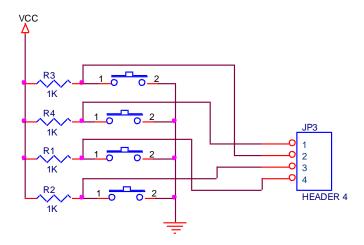


(Note the Mistake – The Text on PCB, SDA & SQW is altered. Circuit works ok when Pin marked as SQW is used instead of pin marked as SDA)

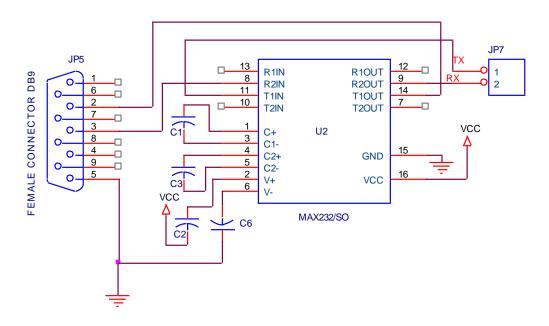
#### 6. LCD 16x2



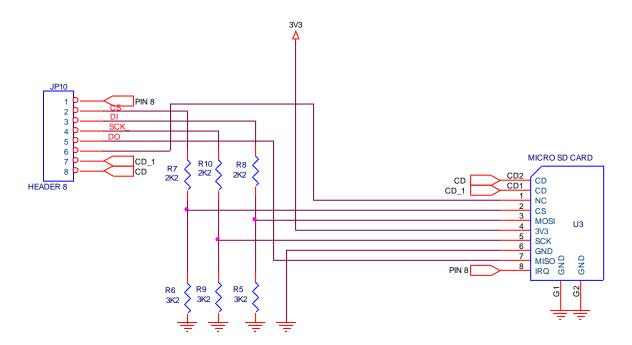
#### 7. Switches



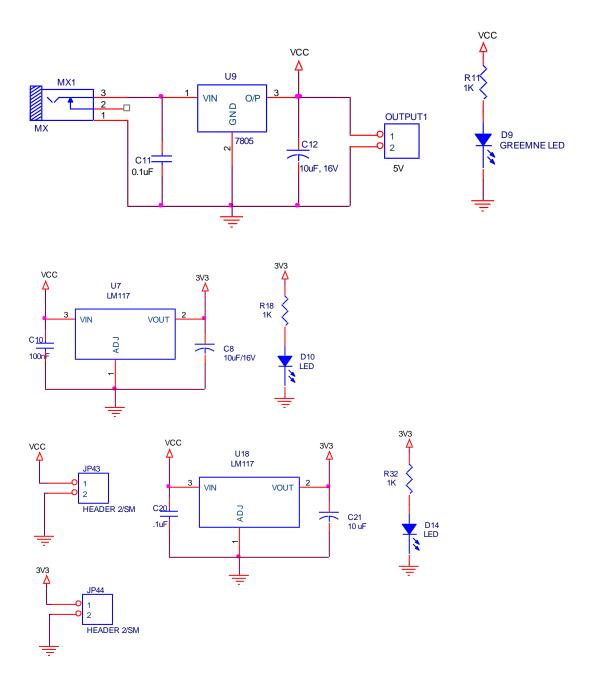
#### 8. RS232 to TTL



#### 9. Micro SD Card Section



#### 10. Power Supply Section

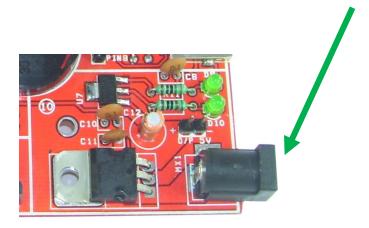


3.

# Using AVR Project Board

#### 1. Power:

Power to the board via 9V DC Main Adapter

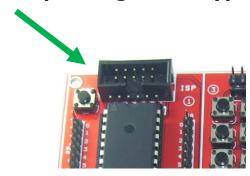


#### 2. Connections:

Use single pin connectors to connect the port pins to the interface lines.

### 3. Programming

Use any suitable AVR Programmer Device. Programmer is not included with the product. ISP Ports are available in 2 types, 5x2 box & 6 pin Single Line type.



# 4. Important information

- 1. The "AVR Project Board" product is designed for experiments and is not suitable to be used in life support and mission critical products.
- 2. "AVR Project Board" requires 9VDC at 500mA or higher current source .
- 3. Always request support via account login as it allows the technical team to answer it in more detail which is not possible over phone.
- 4. Manufactured by:

Embedded Market
205 Decision Tower
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Satara Road
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Ph:+91 20 24228818
Email for Sales – sales@embeddedmarket.com
Website – www.EmbeddedMarket.com
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