

## Schematics explanation

- **ATMEGA 324P:**
  - *PORT C:*
    - Connect PC1 to LM35
    - Connect PC0 to buzzer
    - Connect PC4 to SDA
    - Connect PC5 to SCL
    - Connect PC6 with system reset button
  - *PORT D:*
    - Connect PD4 to Snooze button
    - Connect PD4 to SNOOZE button
    - Connect PD5 to RESET button
    - Connect PD6 to 12/24hrs
    - Connect PD7 to Mode selection button
    - Connect PD2 to SOUT of the DS1307
- **LCD16X2:**
  - Connect RS to P0 of PCF 8574
  - Connect RW to P1 of PCF 8574
  - Connect EN to P2 of PCF 8574
  - Connect D4 to P4 of PCF 8574
  - Connect D5 to P5 of PCF 8574
  - Connect D6 to P6 of PCF 8574
  - Connect D7 to P7 of PCF 8574
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- **PCF 8574:**
  - Connect SCL to PC5
  - Connect SDA to PC4
- **DS1307:**
  - Connect SCL to PC5
  - Connect SDA to PC4
  - Connect SOUT to PD2
- **LM35:**
  - Connect to PC1
- **LM 7805:**
  - Connect to source of every component
- **BUTTON MODE:**
  - Connect to PD7
- **BUTTON SELECT (12/24):**
  - Connect to PD6
- **BUTTON RESET:**
  - Connect to PD5
- **BUTTON SNOOZE:**
  - Connect to PD4