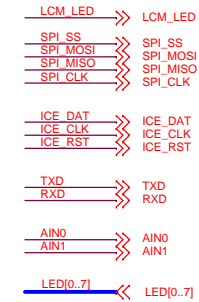
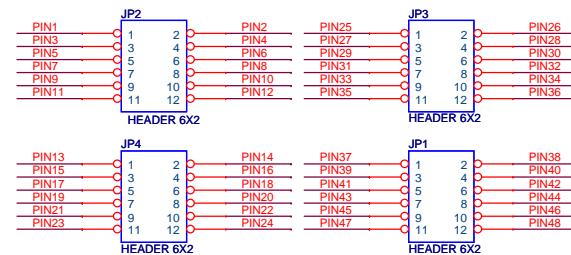
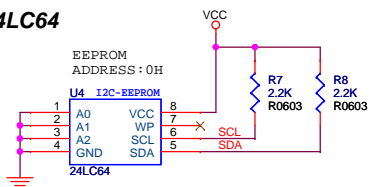


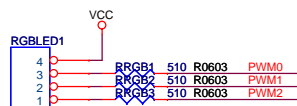
Pin interface



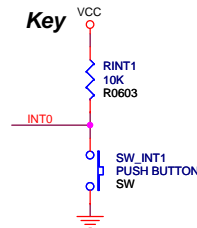
24LC64



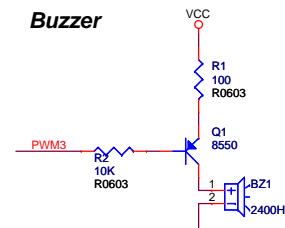
3 Color LED



Key



Buzzer



nuvoTon

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64*128 Dot Matrix LCM

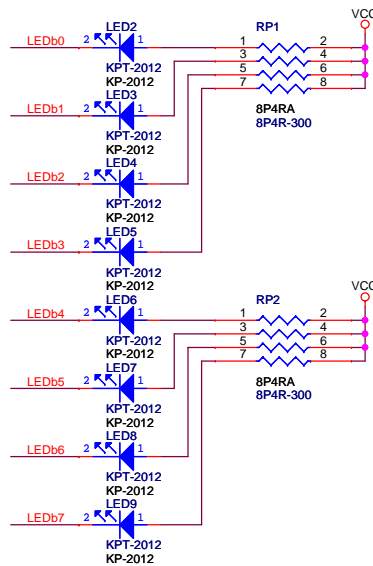
The diagram illustrates the electrical connection between a 64x128 Dot Matrix LCM module and a microcontroller. The LCM module is shown on the left, with pins 1 through 30 and 33. The microcontroller is shown on the right, with pins 1 through 30. The circuit includes the following components and connections:

- LCM Module:**
 - Pin 33:** LCM_LED (Red LED)
 - Pin 1:** Gate
 - Pin 2:** Source
 - Pin 3:** Drain
 - Pin 4:** VCC
- Microcontroller:**
 - Pin 1:** VCC
 - Pin 2:** GND
 - Pin 18:** SPI_MOSI
 - Pin 20:** SPI_CLK
 - Pin 25:** LCM_RST
 - Pin 27:** SPI_SS
- Components:**
 - Resistors:** R11 (10M, R0603), R12 (10K, R0603)
 - Capacitors:** C1 (0.1uF, C0603), C2 (1uF, C0603), C3 (0.1uF, C0603), C4 (0.1uF, C0603), C5 (0.1uF, C0603), C6 (0.01uF, C0603), C7 (0.01uF, C0603), C8 (1uF, C0603), C9 (1uF, C0603), C10 (4.7uF, C0603)
 - MOSFET:** Si2301ADS (P-FET) QL1
- Connections:**
 - The LCM module's VCC pin (4) is connected to the microcontroller's VCC pin (1).
 - The LCM module's Source pin (2) is connected to the microcontroller's GND pin (2).
 - The LCM module's Drain pin (3) is connected to the microcontroller's SPI_MOSI pin (18).
 - The LCM module's Gate pin (1) is connected to the microcontroller's SPI_CLK pin (20).
 - The LCM module's LCM_RST pin (25) is connected to the microcontroller's LCM_RST pin (25).
 - The LCM module's SPI_SS pin (27) is connected to the microcontroller's SPI_SS pin (27).
 - The LCM module's LCM_LED pin (33) is connected to the microcontroller's VCC pin (1) through a resistor (RL1).

J2

Pin	Label
1	LED0
2	LEDb0
3	LED1
4	LEDb1
5	LED2
6	LEDb2
7	LED3
8	LEDb3
9	LED4
10	LEDb4
11	LED5
12	LEDb5
13	LED6
14	LEDb6
15	LED7
16	LEDb7

HEADER 8X2

[illegible]

The schematic diagram illustrates the electrical connections for the Thermistor module. The module's internal components include a thermistor (NTC1 100K), a pull-up resistor (R13 100K), and a capacitor (C16 0.1uF). The module is connected to a VCC supply, a ground, and an AIN1 input. The LCM (Liquid Crystal Module) interface includes LCM_LED, LCM_RST, and SPI signals (SS, MOSI, MISO, CLK). The Raspberry Pi interface includes ICE signals (DAT, CLK, RST), TXD, RXD, and AIN0/AIN1.



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