## **English:**

3.2-inch TFT 320QVT

- 1.TFT Power: screen power supply for the 2.8-3.3V; remember not to use the 5V (With PCB of the module to have inherited the 3V regulator IC, you can enter 5V) Backlight Voltage (LED\_A feet) maximum 3.2V, the 3.3V power supply may be limiting series resistance of 20R-50R. 5V 150R or 200R under a series resistor.
- 2. Data port level: in theory I can not let the data level exceeds 3.3V, 5V MCU must use if the IO data bus connections, as tft internal voltage clamp, using a can, but it really is not regulated. Experiment to do sample tests, when the bulk product to do, to improve product stability, better use of low voltage single chip or add a level translator IC.

(AVR's IO output of high ability, TFT internal voltage clamp data bus capacity is limited, when using the AVR-driven Be sure to use the 3.3V power supply to the MCU. If we must use the 5V power supply of the AVR, please write data bus with level conversion IC)

## **Chinese**

3.2 寸 TFT 320QVT

- 1.TFT 电源: 屏幕电源为 2.8-3.3V;切记不能用 5V (带 PCB 的模块已经继承 3V 稳压 IC,可以输入 5V) 背光电压(LED\_A 脚) 最高 3.2V,在 3.3V 电源下可串联 20R-50R 限流电阻。5V 下可串联 150R 或者 200R 电阻。
- 2.数据口电平:理论上不能让数据口电平超过 3.3V,如果一定要用 5V 的单片机 IO 连接数据总线,由于 tft 内部有电压钳位,用是可以用,不过始终是不规范的。做实验做样品测试可以,批量做产品的时候,为提高

产品稳定性,最好还是使用低电压的单片机或者加一个电平转换 IC.

(AVR 的 IO 输出高电平能力强, TFT 数据总线内部 的电压钳位能力有限,使用 AVR 驱动的时候请务必使用 3.3V 给单片机供电.如果一定要使用 5V 供电的 AVR,请给数据总线加上电平转换 IC)