LCINDD5

PCF8591 is a monolithic integrated power alone, low-power, 8-bit CMOS data acquisition devices. PCF8591 has four analog inputs, one analog output and a serial I2C bus interface. PCF8591 the three address pins A0, A1 and A2 can be used for programming the hardware address, allowing access to eight PCF8591 devices on the same I2C-bus without additional hardware. Input and output on the PCF8591 device address, control and data signals through two-line bidirectional I2C bus serially transmitted.

PCF8591 key performance indicators:

1 single power supply
2.Operating voltage range of 2.5V-6V 2.PCF8591
3 low standby current
4 through the I2C bus serial input / output
5.PCF8591 by 3 hardware address pins addressing
6.I2C bus speed 6.PCF8591 sampling rate decision
7.4 analog inputs programmable as single-ended or differential input
8.The automatic incremental channel selection
9.PCF8591 analog voltage range from VSS to VDD
10.PCF8591 built-track and hold circuit
11.8-bit successive approximation A / D converter
12. achieved through an analog output DAC gain

Baby Description :

1. module chip PCF8951
2 module supports four external voltage input capture (voltage input range 0-5v)
3 module integration photoresistor can collect ambient light intensity by AD precise numerical
4 module integrated thermistor temperature by exact numerical AD acquisition environment
5 module integrates a road 0-5V voltage input capture (via the blue potentiometer to adjust the input voltage)
6 module with power indicator (for the module power indicator will light)
7 module with DA output indicator, when the module DA output interface voltage reaches a certain value, the board DA output indicator lights, the greater the voltage, the light intensity is more obvious;
8 Module PCB Size: 3.6cm * 2.3cm
9 standard dual panel, thickness 1.6mm, nice layout, surrounded by a through-hole, pore size: 3mm, easily fixed

Module Interface Description:

This module left and right, respectively, two-way pin external expansion interfaces, respectively, as follows:

DA output interface chip on the left AOUT
AINO chip analog input interface 0
AIN1 chip analog input interface 1
AIN2 chip analog input interface 2
AIN3 chip analog input interface 3
The right of the SCL IIC clock interface connected microcontroller IO port
SDA IIC digital interface connected to the microcontroller IO port
GND module to an external ground
VCC Power Interface External 3.3v-5v

Modules red jumper Instructions for use:

Module A total of three red jumper, namely the role of the following:
P4 P4 jumper connected, select thermistor access circuit
P5 P5 jumper connected, select photoresistor access circuit
P6 P6 jumper connected, select 0-5V adjustable voltage access circuit