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RoHS

PART NO. : GBD-I2C2PIO_V1

FOR MESSRS. : _____

ACCEPTED BY: _____ PROPOSED BY: _____

1. Record of Revision

DATE	PAGE	SUMMARY
2016-9-2	---	NEW ISSUE

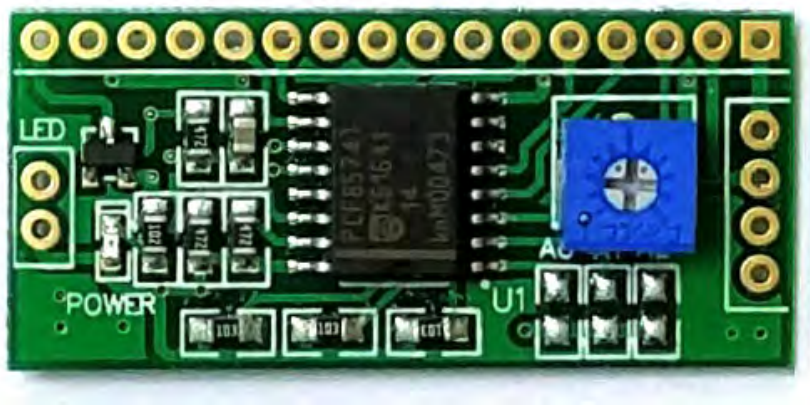
2. Disclaimer

Because of the difference of the working environment and other factors, we try to make the document description is accurate, but it is still difficult to rule out the individual is not accurate or not detailed description. Therefore, this document is only for the purposes of the user's reference, We do not do any legal commitments and guarantees, if there is any objection, please contact us .

3. General specifications

The GBD-I2C2PIO Module input voltage +5V, I2C interface conversion module. LCM1602 Normally used. Usually as Arduino adapter board for LCM1602. There are only 20 I/O port in the Arduino control board, and some sensors, SD card, and other modules will demand a lot of I/O port, so, the I/O port is not enough for LCM1602.

The GBD-I2C2PIO With backlight, the jumper caps are set with backlight, plug jumper cap for backlight, and cancel jumper cap close the backlight. The contrast can be adjusted by blue potentiometer. User can modify resistor A0/A1/A2 in order to modify the device address, and the default address is the 0x27.



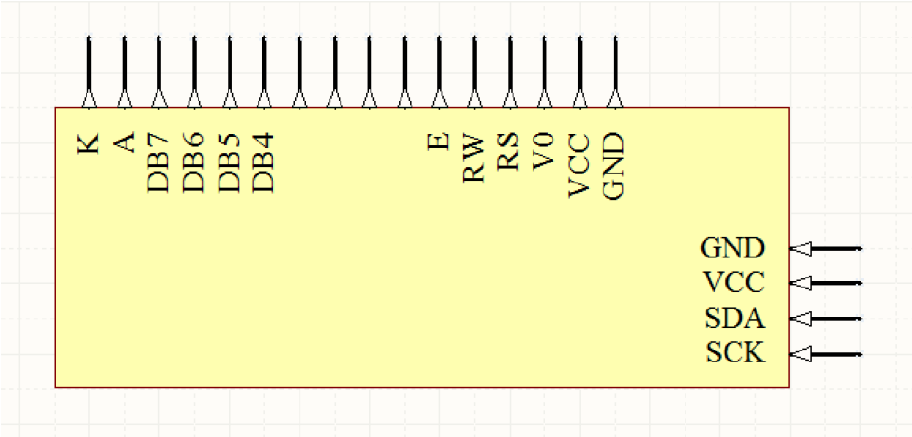
4. Key Features

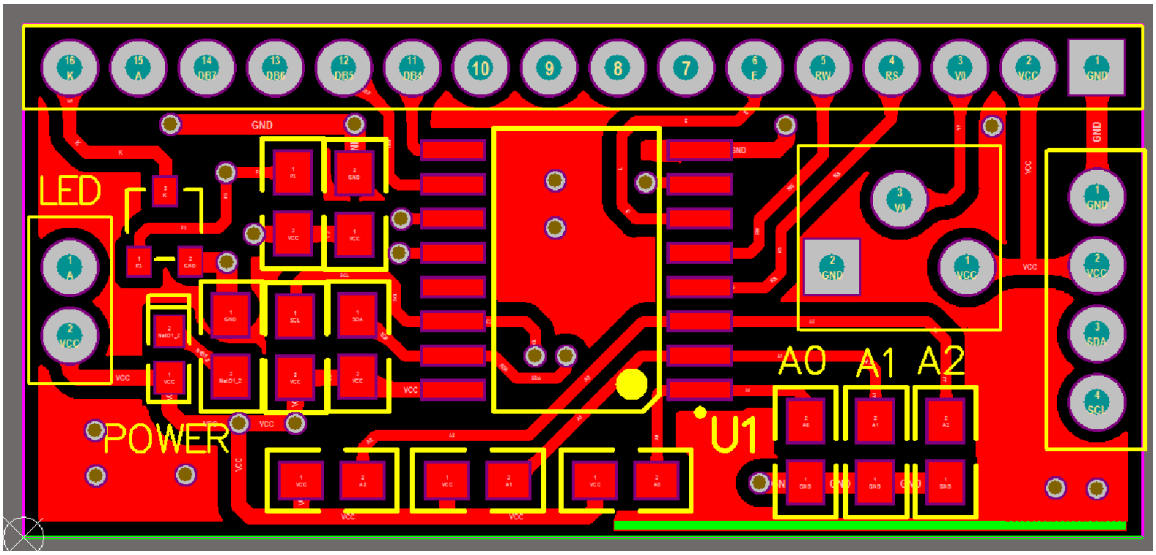
Input voltage +5V.
the chip is PCF8574T.
I2C interface conversion module,LCM1602 commonly used.
With backlight, and contrast adjustment potentiometer.
The 4 line output is more simple.

5. Typical Applications

Usually as Arduino adapter board for LCM1602. Other LCD module need IIC to parallel port can also be used.

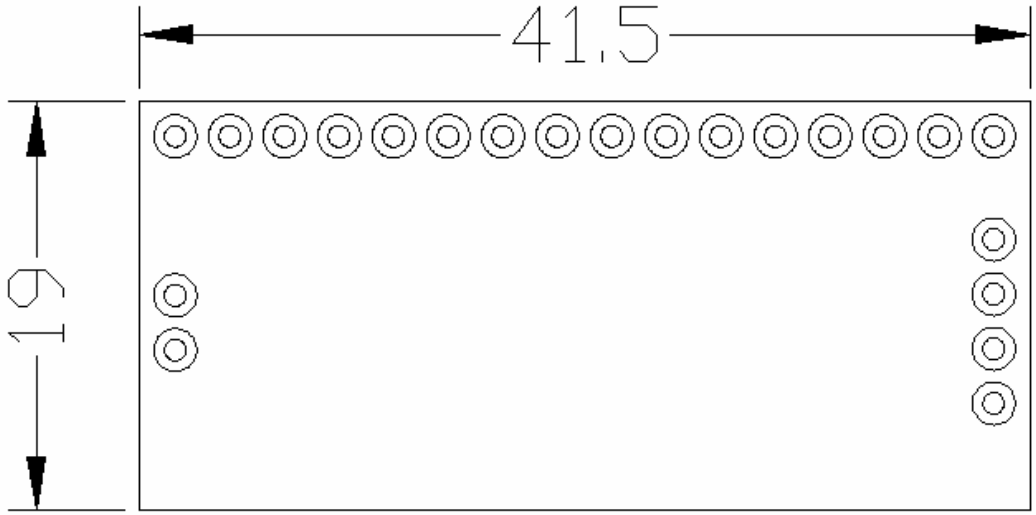
6. Pinout and terminal description





Definition	Type	Function
GND	input	GND
+5V	input	Power input
SDA	input	IIC data line
SCL	input	IIC clock line
GND	Output	GND
+5v	Output	GND
V0	Output	Contrast adjustment
RS	Output	Data/command select
RW	Output	Read/Write select
E	Output	Enable
DB4-DB7	Output	Data
A	Output	Backlight +
K	Output	Backlight -

7. Outline dimension



8. Absolute Maximum Ratings (non-operating)

Symbol	Parameter	Min	Max	Units
Vdd	Positive supply voltage		+5	V
Tj	JunctionTemperature		125	℃

9. Recommended Operating Range

Symbol	Parameter	Min	Max	Units
Vdd	Positive supply voltage		5	V
T	Storage temperature range	-20	+80	℃
Top	Operating temperature range	0	+60	℃

10. Device address description

Address Reference			
input			IIC bus slave address
A2	A1	A0	
L	L	L	0X20
L	L	H	0X21
L	H	L	0X22
L	H	H	0X23
H	L	L	0X24
H	L	H	0X25
H	H	L	0X26
H	H	H	0X27

Address modification:

If not connect resistor of the A2,A1,A0, the device address is 0X27.
Connect resistor of the A0 only, the device address is 0x26.
Connect resistor of the A1 only, the device address is 0x25.
Connect resistor of the A2 only, the device address is 0x23.
…
If connect all the resistor of the A2,A1,A0, the device address is 0X20.