

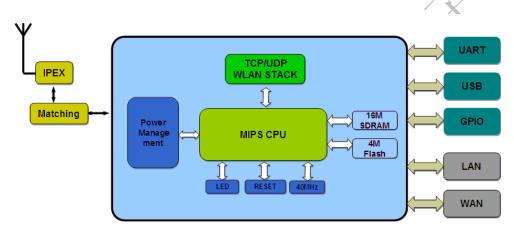
HLK-RM04 LED APPLICATION HLK-RM04-LED V1.2 02/20/2013

### **Overview:**

HLK-RM04 is a new low-cost embedded UART-ETH-WIFI module (serial port - Ethernet -Wireless network) developed by Shenzhen Hi-Link Electronic co., Ltd.

This product is an embedded module based on the universal serial interface network standard,built-in TCP / IP protocol stack, enabling the user serial port, Ethernet, wireless network (wifi) interface between the onversions.Through the HLK-RM04 module, the traditional serial devices do not need to change any configuration,data can be transmitted through the Internet network. Provide a quick solution for the user's serial devices to transfer data via Ethernet

### Module Block Diagram



#### Note: The software support of usb and GPIO will be release later

### **Benefits**

- WiFi Router module solutions
- Ready to use in products
- Minimises product development
   time
- No RF test required for systems
- Compliant with CE and FCC part 15 rules.
- •Serial to Wifi;Serial to Net;Both by one module

# **Applications**

- WiFi Led Control
- WiFi Power Switch
- Home and Commercial building
   automation
- OBDII WiFi Diagnose
- RFID Data Transfer
- Toys and gaming peripherals
- Industrial systems
- Telemetry
- Remote Control

### **Features:**

- 2.4GHz 802.11b/g/n, compatible
- Support IEEE 802.3、IEEE 802.3u
- WiFi Client/AP/Router Mode
- Support wps/wds
- The range of baudrate: 1200~500000bps
- Support transparent
  transmission mode
- Support multiple security authenti-cation mechanisms:

WEP64/WEP128/ TKIP/ AES

WEP/WPA-PSK/WPA2-PSK

- Support wireless roam
- Support multiple network protocols:

PPPOE/TCP/UDP/DDDNS /DHCP/DNS/HTTP/Firewre

- Support AT+ instruction set
- Support two config methods:Serial/WEB
- Device Dimensions
   29mm\*40mm\* 8.8mm

# Lead-free and RoHS compliant



1.HLK-RM04 LED ControlBoard:



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# 2.Interface:



From left to right the pin is: NC, Blue Single, Green Single, Red Single, GND, VCC

Note: VCC is DC from 12V~38V



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# **Connect to Led View:**



# **Test Step:**

1. Power on the testboard. Wait for about 30s. Then use your android phone to connect to the module

<b>™</b> ♦ 0	al al 🗋 15:	
🔯 WLAN	打开	
HI-LINK 已连接	¢.	
HI-LINK_CD73 通过 WPA/WPA2 进行保护 (可使用 WPS)	¢.	
TP-LINK_DBF1C2 通过 WPA2 进行保护(可使用 WPS)	÷.	
TOREAD 通过 WPA/WPA2 进行保护	-	
aidian 通过 WPA/WPA2 进行保护 (可使用 WPS)	() <b>F</b>	
ChinaNet-EkVT 通过 WPA 进行保护(可使用 WPS)	÷.	
ChinaNet-pyid 通过 WPA 进行保护	-	
ChinaNet-kvUS 通过 WPA 进行保护	Ŧ	
67	+	

Search the WIFI module

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🔅 WLAN	(17H)	
HI-LINK 已達該	() <sup>2</sup>	
HI-LINK_CD73		
信号强度 発 安全性 WPA/WPA2 PSK		
密码 12345678		
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取消	连报	
ChinaNet-EkVT	~	
69		

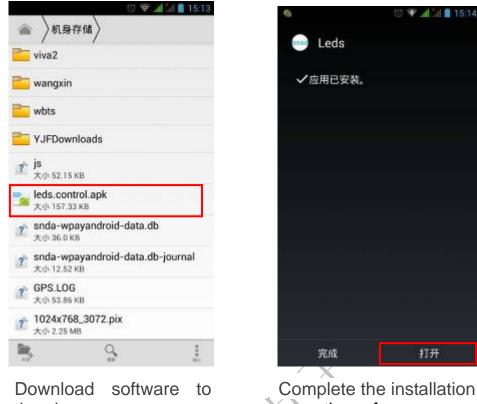
Enter the password, and then connect the WIFI

🗊 WLAN	招拼
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<b>TOREAD</b> 通过 WPA/WPA2 进行保护	<b>.</b>
TP-LINK_GW 通过 WEP 进行保护	<b>.</b>
TP-LINK_409 通过 WPA/WPA2 进行保护 (可使用	-
( <b>)</b>	+

Successfully connected to the WIFI



2. Install the APP:leds.control.apk. You can down from here: Down



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the phone

Complete the installation, open the software

打开

1 15:22

3. Open the APP.Connect to the module and change the color.

	() 文 세 에 🗎 15:22 Brisd	U 🤤 Brid
My Leds Test	My Leds Test	My Leds Test
IP addr: 192.168.16.254	IP addr: 192.168.16.254	
No Connect!	Connect Successful!	
Connect	DisConnect	
Change Color	Change Color	

Enter the IP, the default IP address is 192.168. 16.254, then click the Connect botton

If the connection is successful, then click the Change Color botton

Click on the colored circle to change color



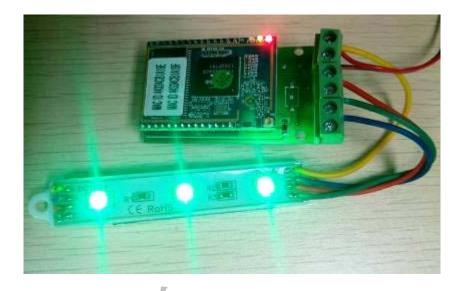


For example, select the green

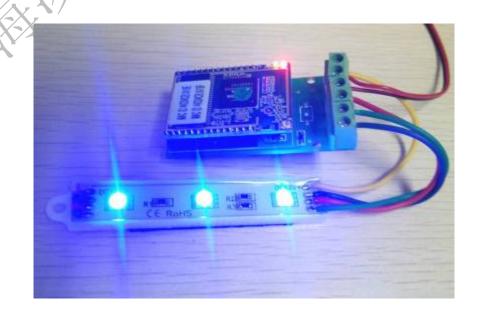


For example, select the blue

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The LED light shows green



The LED light shows blue