

AT Command testing of

ADIY HLK-B50 TTL Bluetooth Module



Description:

ADIY HLK-B50 TTL is a BLE5.0 dual-mode Bluetooth-serial port transparent transmission module, which can support Bluetooth SPP and GATT transparent transmission at the same time. Various devices with serial ports can be easily and quickly transmitted through this module. Send and receive data wirelessly using Bluetooth.

AT Command testing of ADIY HLK-B50 TTL bluetooth module using ADIY Nodemcu ESP32 board

Connections:

ESP32	ADIY HLK-B50
5V OR 3.3V	VCC
GND	GND
TX	ТХ
RX	RX



Testing AT Commands:

Step 1: Open Arduino IDE Software, Go to tools -> Boards -> esp32 -> ESP32 Dev Module

Note: If you don't have this software in your system, then you have to install it. Link provided below

https://www.arduino.cc/en/software

🤤 sketch_	_sep26b A	rduino IDE 2.3.3					ESP32H2 Dev Module	1
File Edit	Sketch	Tools Help					ESP32C6 Dev Module	
		Auto Format	Ctrl+T				ESP32S3 Dev Module	
		Archive Sketch					ESP32C3 Dev Module	
Pn S	sketch_se	Manage Libraries	Ctrl+Shift+I				ESP32S2 Dev Module	
	1	Serial Monitor	Ctrl+Shift+M			~	ESP32 Dev Module	
_	2	Serial Plotter					ESP32-WROOM-DA Module	
1_)	3	Firmware Indater					ESP32 Wrover Module	
	4	Unload SSI Boot Certificates					ESP32 PICO-D4	
	5	opiou ost not certificates					ESP32S3 Dev Module Octal (WROOM2)	
	7	Board: "ESP32 Dev Module"	+	Boards Manager C	Ctrl+Shift+B		ESP32-S3-Box	
	8	Port: "COM34"	•	ADIY Arduino Boards	+		ESP32-S3-USB-OTG	
æ	9	Get Board Info		Arduino AVR Boards	+		ESP32S3 CAM LCD	
	10	CPU Frequency: "240MHz (WiFi/BT)"	•	Arduino Mbed OS Nano Boards	+		ESP32S2 Native USB	
Q		Core Debug Level: "None"	+	Arduino Mbed OS RP2040 Boards	+		ESP32 Wrover Kit (all versions)	
		Erase All Flash Before Sketch Upload: "Disabled"	+	Arduino UNO R4 Boards	+		Aventen S3 Sync	
		Events Run On: "Core 1"	+	• esp32	+		UM BLING	
		Flash Frequency: "80MHz"	+	ESP8266 Boards (2.7.4)	÷		UM FeatherS2	
		Flash Mode: "QIO"	+	Nulllab AVR Compatible Boards	+		UM FeatherS2 Neo	
		Flash Size: "4MB (32Mb)"	+	Raspberry Pi RP2040 Boards(2.6.4)	+		UM FeatherS3	
		JTAG Adapter: "Disabled"					UM FeatherS3 Neo	
		Arduino Runs On: "Core 1"	+				UM NanoS3	
		Partition Scheme: "Default 4MB with spiffs (1.2MB APP/1.5MB SPIFFS)"	+				UM OMGS3	
		PSRAM: "Disabled"	+				UM PROS3	
		Upload Speed: "921600"	+				UM TinyPICO	
		Zigbee Mode: "Disabled"	+				UM TinyC6	
		Programmer	•				UM TinyS2	
		Burn Bootloader					UM TinyS3	
							S.ODI Ultra v1	
							LilyGo T-Display	
							LilyGo T-Display-S3	
							LilyGo T-ETH-Lite	
							LilyGo T3-S3	
							LilyGo T-Watch-S3	
							LilyGo T-Watch-Ultra	
							microS2	
							MagicBit	
							Turta IoT Node	
							TTGO LoRa32-OLED	
							TTGO T1	
							TTGO T7 V1.3 Mini32	
							TTGO T7 V1.4 Mini32	
							TTGO T-OI PLUS RISC-V ESP32-C3	
							XinaBox CW02	
							SparkFun ESP32 Thing	
(8)							SparkFun ESP32 Thing Plus	
	_						· · · · ·	
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Step 2: Select port, Go to Tools -> Port -> COM34 (in my case its 34, it will be different in your system. You can check this in device manager)

Ed	it Sketch I	fools Help			
		Auto Format	Ctrl+T		
		Archive Sketch			
	sketch_se	Manage Libraries	Ctrl+Shift+I		
	1	Serial Monitor	Ctrl+Shift+M		
	2	Serial Plotter			
J	3 4	Firmware Updater			
	5	Upload SSL Root Certificates			
U	6	Board: "ESP32 Dev Module"		۲	
	7	Port: "COM34"		٠	Serial ports
>	9	Get Board Info			✓ COM34
	10	CPU Frequency: "240MHz (WiFi/BT)"		۲	
2		Core Debug Level: "None"		۲	
		Erase All Flash Before Sketch Upload: "Disabled"		۲	
		Events Run On: "Core 1"		۲	
		Flash Frequency: "80MHz"		۲	
		Flash Mode: "QIO"		۲	
		Flash Size: "4MB (32Mb)"		۲	
		JTAG Adapter: "Disabled"		۲	
		Arduino Runs On: "Core 1"		۲	
		Partition Scheme: "Default 4MB with spiffs (1.2MB APP/1.5MB SPIFFS)"		۲	
		PSRAM: "Disabled"		۲	
		Upload Speed: "921600"		۲	
		Zigbee Mode: "Disabled"		۲	
		Programmer		۲	
		Burn Bootloader			

Step 3: Open Serial monitor, by clicking on these icon ⁹ on top right corner

You will see new window on the bottom screen. Set baud rate as 115200 (as its default baud rate of the ADIY HLK-B50)



Press and hold "AT_EN" key on ADIY HLK-B50 for 3-4 seconds and release.





To check version of the module, AT+VERSION=? / AT+VER=?



In the same way you can check the remaining commands also.