Product Name: Omega-Alpha-Bluetooth Module Brand Name: BlueChip

Model No: ONA_BT_01

User's Guide

Introduction

You can connect to other Bluetooth wireless devices by integrating the Model module to your device.

The module diagram is showed in Figure 1. It consists of 4 main portions, which are

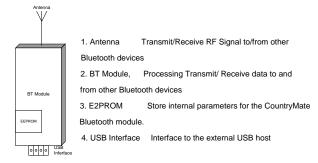


Figure 1. Diagram of ONA_BT_01

The BT Module is integrated to the printer by professional Installation, via the USB interface. It is a ten-pin header with two rows, as show in photo in Figure 2.



Figure 2. USB Interface 10 pin Header

The Pin assignment is listed in Table 1.

1	Not connected	2	Power, 3.3V
3	USB+	4	Power, 3.3V
5	USB-	6	BT_Wakeup
7	Ground	8	BT_Reset
9	Ground	10	Ground

Table 1.Header pin list

Specification

Product Name	Omega-Alpha-Bluetooth Module		
Model Number	ONA_BT_01		
Standard	V2.1+EDR		
Frequency Band	2.4GHz ~ 2.48GHz Unlicensed ISM band		
Modulation Method	FHSS (GFSK)		
Spread Spectrum	Frequency Hopping Spread Spectrum		
Transfer rates (Max)	3Mbits/s		
RF Output Power	1 dbm (Transmission Typical)		
Antenna terminal	NA		
DC power	3.3VDC,0.5A		
Dimension	41.3mm (L)X 23.5mm(W) X 5.6mm(H)		
Operating Temperature	0 ~ +40 degC		
Storage Temperature	-40 ~ +60 degC		
Humidity	15 ~ 85 %		
The Number of Channels &	79 channel, 1Mhz spacing		
Channel Spacing			

Regulatory Information

The Bluetooth radio is designed to be interoperable with any Bluetooth technology product that is based on frequency hopping spread spectrum (FHSS) radio technology and complies with the Bluetooth Specification Version 2.1.

The Bluetooth radio, like other radio devices, emits radio frequency electromagnetic energy. The level of energy emitted by this device, however, is less than the electromagnetic energy emitted by other wireless devices such as mobile phones. The Bluetooth radio device operates within the guidelines found in radio frequency safety standards and recommendations. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature. In some situations or environments, the use of a Bluetooth radio device may be restricted by the proprietor of the building or responsible representatives of the applicable organization. Examples of such situations include the following:

- Using the Bluetooth radio equipment onboard airplanes, or
- Using the Bluetooth radio equipment in any other environment where the risk of interference with other devices or services is perceived or identified as being harmful.

If uncertain of the policy that applies to the use of wireless devices in a specific organization or environment (an airport, for example), ask for authorization to use the Bluetooth radio device before turning it on.

The final end product must be labeled in a visible area that contains Transmitter Module NCC ID: CC XX xx YY yyy Z z W.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.