

Product Name: Omega-Alpha-BT
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

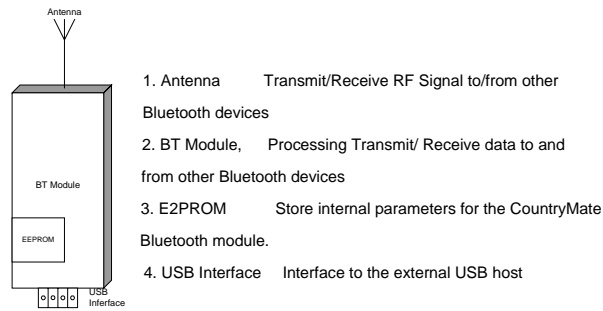


Figure 1. Diagram of ONA_BT_01

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-BT
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 & Channel Spacing	79 channel, 1Mhz 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.

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

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.

Modular OEM Integrator Notice (FCC)

IMPORTANT NOTE:

This module is intended for OEM integrator. The OEM integrator is still responsible for the FCC compliance requirement of the end product, which integrates this module.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

USERS MANUAL OF THE END PRODUCT:

The end user has to also be informed that any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment. If the size of the end product is smaller than 8x10cm, then additional FCC part 15.19 statement is required to be available in the users manual: This device complies with Part 15 of 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.

LABEL OF THE END PRODUCT:

The final end product must be labeled in a visible area with the following " Contains TX FCC ID: [XSP-ONA-BT-02](#) ". If the

size of the end product is larger than 8x10cm, then the following FCC part 15.19 statement has to also be available on the label: This device complies with Part 15 of 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.

Modular OEM Integrator Notice (IC)

OEM integrator is still responsible for testing their end product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the IC authorization is no longer considered valid and the IC No. can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate IC authorization.

End Product Labeling

The final end product must be labeled in a visible area with the following: "Contains TX IC: [8649A-ONABT01](#)".