

KC11 Bluetooth Module OEM General User and Installation Guide

I. OEM Usage Instructions

Installation

The KC11 is a Class-1 Bluetooth Module supplied on a 32 pin surface mount, 6-layer PCB, 44.0mm x 15.2mm footprint. For non Pb-free applications, Sn63Pb37 solder is recommended. The final assembly recommended reflow profile is:

- Maximum peak temperature of 208° - 210°C (below 220°C).
- Maximum rise and fall slope after liquidous of < 2°C/second.
- Maximum rise and fall slope after liquidous of < 2°C/second.
- Maximum time at liquidous of 50 – 90 seconds.

Layout

The area around the KC11 module should be free of any ground planes, trace routings, or metal for at least 250 mil (6.4 mm) from the antenna in all directions. Traces should not be routed underneath the module.

Crystal Tuning and Power Calibration

These steps are performed by KC Wirefree, and must NOT be modified from the settings applied during manufacturing. Any changes to these settings may void the user's authority to operate this equipment.

Operating Conditions

The permitted operating and storage temperatures, power supply requirements, and I/O tolerances are specified in the *KC11 Datasheet*.

RF Exposure Warning

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This device's external antenna must be installed in accordance with provided instructions and it must be operated with a minimum of 20 cm spacing between antennas and all persons' bodies (excluding extremities of hands, wrists and feet) during wireless mode of operation. Further, this transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

II. Notice of FCC Regulatory Compliance

This module has been tested and found to comply with the FCC Part 15 Rules. These limits are designed to provide reasonable protection against harmful interference in approved installations. 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. 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.

Modifications or changes to this equipment not expressly approved by KC Wirefree may void the user's authority to operate this equipment.

III. Modular Approval

FCC ID: S22BTMODULE-CL1

In accordance with FCC Part 15, the KC11 is listed above as a Modular Transmitter device.

In support of the Modular Transmitter Approval, the following is stated:

1. The module does have its own RF shielding.
2. The module does have buffered modulation / data inputs.
3. The module does regulate its own power supply.
4. The module does have a permanently attached antenna.
5. The module can be tested as a stand-alone device.
6. The module is labeled with the proper FCC ID, and labeling instructions are provided to OEM end users for external product labels.
7. The module does have instruction for proper use.
8. The module does meet the FCC RF regulations.

IV. FCC Label Instructions

The outside of final products that contain a KC11 device must display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: S22BTMODULE-CL1" or "Contains FCC ID: S22BTMODULE-CL1." Any similar wording that expresses the same meaning may be used. An example of this label is figure 1 below:

Model: KC11	KC Wirefree
Input: 3.3VDC 190MA	
Made in China	
	
Contains Transmitter Module	
FCC ID: S22BTMODULE-CL1	
This product 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.	

Figure 1: External Device FCC Label Sample