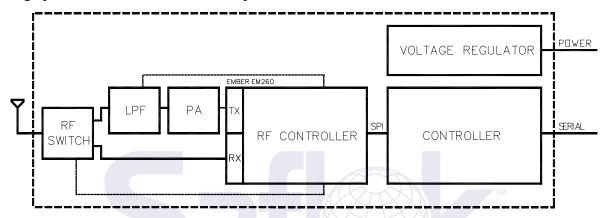


The A28780 Series single modular transmitter [15.212(a)(1)]

(FCC ID: SAPMESSENGER2GHZ, IC: 7078A-A28780) is a completely self-contained radiofrequency device that is incorporated into electronic door locks for establishing communication for building access control purposes. The transmitters employ an Ember 260 ZigBee transceiver chip and a separate controller that buffers [15.212(a)(1)(ii)] the messages coming to the module over a serial connection. The unit is powered by an external battery power source made up of four AA Alkaline cells that provide a voltage range of 6.2 to 3.2 volts over the range of the battery life. A regulator [15.212(a)(1)(iii)]on the transceiver module regulates the voltage provided to all the module components at 3.3 volts.



The transceiver circuit has it's own shielding [15.212(a)(1)(i)] that enables it to pass the requirements of FCC Part 15 without the requirement of any enclosure.

The A28780 Series ZigBee transceivers are made available in two hardware versions. One has an output tuned to be in compliance with European standards at 10mw and one is intended for the American market, and are respectively labeled A28780-EA and A28780-XM. Both have fixed outputs that cannot be changed by the user and are not modifiable through any commands delivered at the serial I/O.

The antenna is permanently attached; [15.212(a)(1)(iv)] the tuned wire form is soldered directly to the PCB and is never modified or exchanged for an alternate antenna.

A label is attached to every transceiver and a separate label is attached to the enclosures that the transceiver is installed within. [15.212(a)(1)(vi)]

The module was tested in a standalone configuration. [15.212(a)(1)(v)]

No special instructions are needed in order for the module to meet all of the requirements applicable to a complete 15.247 device. [15.212(a)(1)(vii)]

The module in its final configuration will meet RF Exposure requirements. [15.212(a)(1)(viii)]

This module shall be limited to installations within end devices produced by Kaba – Saflok ONLY. This device will not be sold to other OEMs. Accordingly, this approval shall be considered a LIMITED MODULAR APPROVAL. All products in which this device will be **SAFLOK**



installed shall contain instructions as to the legitimate use and labeling requirements pertaining to this module. See the following points to be communicated:

This transmitter module is authorized to be used in other devices only under the following conditions:

- 1. The antenna(s) must be installed such that a minimum separation distance of 20cm is maintained between the radiator (antenna) & user's/nearby people's body at all times.
- 2. The transmitter module must not be co-located with any other antenna or transmitter.

The user manual for the end product must include the following information in a prominent location;

"To comply with FCC's RF radiation exposure requirements, the antenna(s) used for this transmitter must be installed such that a minimum separation distance of 20cm is maintained between the radiator (antenna) & user's/nearby people's body at all times and must not be co-located or operating in conjunction with any other antenna or transmitter."

The final end product must be labeled in a visible area with at least an equivalent of the following:

"Contains TX FCC ID: SAPMESSENGER2GHZ"

or

"Contains FCC ID: SAPMESSENGER2GHZ".

The above points will addressed in the installation instructions for any and all installations of this module.