Guangzhou Vensi Intelligent Technology Co., Ltd.
Professional Supplier

Guangzhou Vensi Intelligent Technology Co., Ltd.
Model: LMZ-E321BX-SN
FCC ID: 2AR6I-ZE321BX

Technical Specification for Standard ZigBee 3.0 Intelligent Equipment

version : LM-DEVELOPMENT-R1-20180515

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Usage Specification: Only internal technology management and external technology docking specifications. External publication needs to be audited to confirm whether it can be issued. If there is any objection to the content of the document, you can make amendments.

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1 Technical overview

1.1 Refered code

1.1.1 Home Automation Public Application Profile

- **Zigbee Profile: 0x0104**

- **Revision 29**

- **Version 1.2**

1.1.2 ZigBee Cluster Library Specification

- **Revision 6**

- **Draft Version 1.0**

1.2 Basic description

This technical specification is developed according to standard ZHA and maintains compatibility and interoperability with other ZIGBEE. The technical scheme described in this paper adopts EFR32 chip of Silicon labs. The chip supports internal PA and has abundant peripheral hardware resources.

2 Technology list

2.1 Hardware technical parameters

main parameter	describe	Function list	Other instructions
IC	EFR32MG1V132F256GM32	Zigbee module	signal intensity : 8db
PC11	GPIO input	Access button	

PB13	GPIO input	Switch 1 key	
PD15	GPIO output	Access Indicator	
PF3	GPIO output	Switch indicator	

2.2 Technical parameters of software

➢ DEVICE TYPE（DEVICE ID）： Alliance-supported device types

➢ Endpoint：0x10

3   Man-machine interaction description

3.1 NCP Interactive Mode Communication Sends NCP Control Command to Module by Mobile App Sending Network Command Channel Gateway Gateway Gateway

Access mode： Use mobile app to join the gateway first, allowing devices to be networked in the gateway

off-network mode： Select Gateway with Mobile App and Delete the Device

3.2 Switch control operation mode

Press panel switch button ,PB13 Keyboard input produces a drop edge ,PF3 The output indicator light is on, indicating that the corresponding control circuit switch

has been turned on. If the PF3 output indicator lights up and the indicator lights

out, the corresponding control circuit switch is off.

3.3 Status Indicator

Whether the gateway has voice prompt to enter the network successfully or

not

FCC Warnning:
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 or more 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.

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.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

 (OEM) Integrator has to assure compliance of the entire end-product incl. the integrated RF Module. Additional measurements (15C) and/or equipment authorizations (e.g either a complete new certification or a Class II Permissive Change) may need to be addressed depending on co-location or simultaneous transmission issues if applicable.

OEM/Integrator shall include instructions or statements in the host user's manual that are required by Part 15.19 and 15.21

Guidance will be provided to the Integrator for compliance with the Part 15B requirement.

Integrator is reminded to assure that these installation instructions will not be made available to the end-user of the final host device.

the Integrator will be responsible to satisfy SAR/ RF Exposure requirements, when the module integrated into any (mobile, fixed) host device.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled

environment. This equipment should be installed and operated with a minimum distance of 20cm

between the radiator & your body. This transmitter must not be co-located or operating in

conjunction with any other antenna or transmitter.

The final host device, into which this RF Module is integrated" has to be labelled with an auxilliary lable stating the FCC ID of the RF Module, such as "Contains FCC ID:2AR6I-ZE321BX". (e.g either a complete new certification or a Class II Permissive Change) may need to be addressed depending on co-location or simultaneous transmission issues if applicable.