

User Manual

PRODUCT NAME : ZigBee Module

MODEL NAME : WZB1NP6(TWZM-V302D)

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1. Features

TWZM-V302D is the small size and low power module for ZigBee.

TWZM-V302D is based on Silicon Labs EM3588.

- 2.4GHz IEEE802.15.4 compliant RF Transceiver
- Excellent Receiver Sensitivity and Robustness to interference
- Size : 34mm x 27mm x 3.7 mm
- High performance and Low power 32-bit RISC CPU
- 512-KB Flash Memory and 64_KB SRAM Memory
- USB 2.0 Full speed Support
- Support Standard Protocol
- Application : Gateway, STB

2. Module Photo

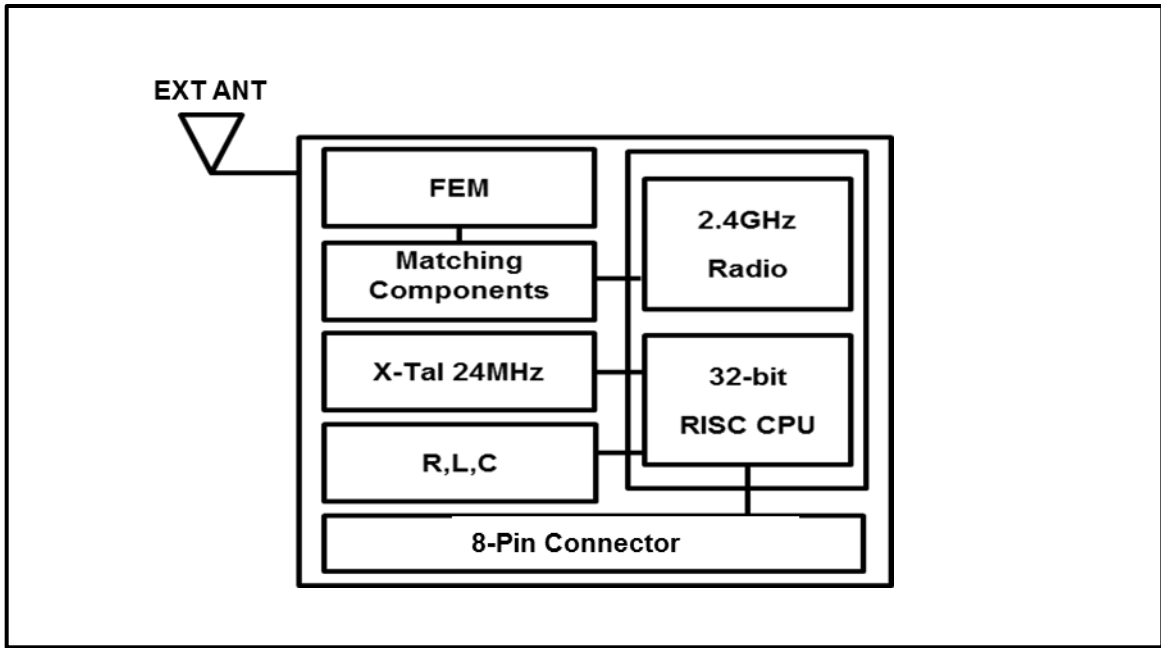


< TOP View >



< Bottom View >

3. Block Diagram



4. Storage Conditions

Parameter	Min	Max	Unit
Storage Temperature	-10	+80	°C
Storage Humidity (@ 40°C)	-	90	%

Caution : The specifications above the Table define levels at which permanent damage to the device can occur. Function operation is not guaranteed under these conditions. Operating at absolute maximum conditions for extend periods can adversely affect the long-term reliability of the device.

- Other conditions
 - 1) Do not use or store modules in the corrosive atmosphere, especially where chloride gas, sulfide gas, acid, alkali, salt or the like are contained.
Also, avoid exposure to moisture.
 - 2) Store the modules where the temperature and relative humidity do not exceed 5 to 40°C and 20 to 60%.

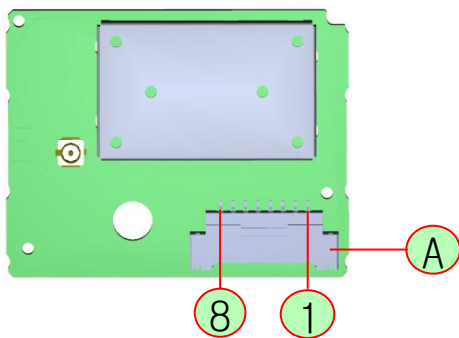
5. Operating Conditions

Parameter	Min	Typ	Max	Unit
Ambient Temperature	0	-	+60	°C
Operating Humidity (40°C)	-	-	85	%
Supply Voltage	3.15	3.3	3.45	Vdc

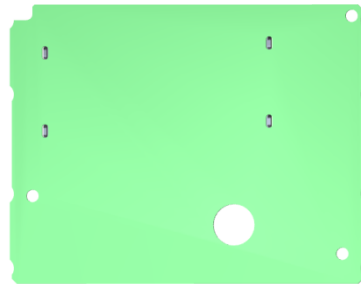
6. Pin Description

Pin No.	Pin Name	I/O	Pin Description
1	GND	GND	GROUND
2	UPDATE	I/O	Digital I/O, F/W UPDATE
3	GND	GND	GROUND
4	RESET	I	Active Low chip reset
5	GND	GND	GROUND
6	USB_DP	I/O	USB Positive
7	USB_DN	I/O	USB Negative
8	VCC(+3.3V)	I	Power supply(+3.3V)

< TOP View >



< Bottom View >



Note.

- 1) Recommend a Module install sequence for prevent UART device failure
 - Supply 3.3V power
 - Connect to data signal (USB_DP, USB_DN)
- 2) Connector : 8Pin SMD Connec (A)

8. Packing Information

PACKING SPECIFICATION

Module

Tray(Antistatic, Clear, ROHS)

- o 1 Tray Packing Q'ty : 120EA
- o Size : W X D X H : 503 * 355 * (t)
- o 1 Tray Packing Weight : 0.59kg±10% (1 Module Weight : 3.68g±10%)

BARCODE LABEL SPECIFICATION

Cap Corrugated Paper

Empty tray on top

6Trays (Zigzag stack)

- o Inner Box Packing Q'ty : 600EA
- o Size : A X B X C : 512 * 378 * 121.5
- o 1 Inner Box Packing Weight : 3.6kg±10%

PP Band

Barcode Label (White)

RoHS Marking

Barcode Label

o Including VCI Film

- o Carton Box Packing Q'ty : 1,200EA
- o Size : W X D X H : 514 * 394 * 248
- o 1 Carton Box Packing Weight : 7.84kg±10%

Shipping paper

Barcode Label

Shipping Mark

Pallet

1100

1200

1250 (5 Layer)

(CARTON BOX : 30EA)

- o Box Material : Corrugated Paper
- o Total Packing Q'TY : 36,000EA
- o Total Packing Weight : 243kg±10%

PART NO.		NAME		MATERIAL			SPEC.		FINISH		A4 SIZE
○		/		⊕	—	UNIT	SCALE	TWZM-V301D			
○		/		APPD.	MDFY.	DSGD.	DRAW.	TITLE			
○		/			'15.06.18 Yu K. J.	'13.05.30 Lee Sae Hyun		EXP. Packing Specification			
○		/		ZONE	SYMB	DATE OR NO.	APPD	CHKD	DSGD	DOCUMENT NO. 1/1	

FCC Information

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.

Note: This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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:

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

WARNING

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

IC Information

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme avec Industrie Canada RSS standard exempts de licence(s), Son utilisation est soumise à Les deux conditions suivantes: (1) cet appareil ne peut pas provoquer d'interférences et (2) cet appareil doit accepter Toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement du dispositif.

Information for OEM Integrator

This device is intended only for OEM integrators under the following conditions:

- 1) The antenna must be installed such that 20 cm is maintained between the antenna and users, and
- 2) The transmitter module may not be co-located with any other transmitter or antenna.

End product labelling

The label for end product must include "Contains FCC ID: BEJ-WZB1NP6, IC: 2703K-WZB1NP6".

"CAUTION : Exposure to Radio Frequency Radiation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment must be installed and operated with minimum distance of 20cm between the radiator and your body. This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users."

"The module should not be marketed and sold in a way that have to be end-user accessible/replaceable. A host product is required to comply with all other applicable FCC equipment authorizations regulations, requirements and equipment functions that are not associated with the transmitter module portion. To ensure compliance with all non-transmitter functions the host manufacturer is responsible for ensuring compliance with the module(s) installed and fully operational."

"The regulatory information should be included in the host user manual."