

## Zigbee Evaluation Board (Model: ZM-EVB)



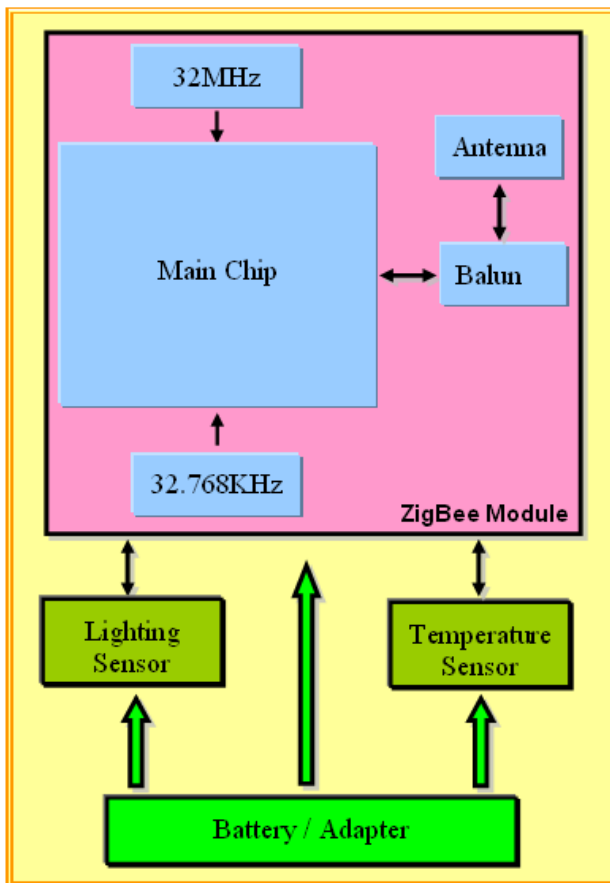
### Features :

- ✚ Suitable for home/building automation, industrial control and monitoring, low power wireless sensor networks, PC peripherals, set-top boxes and remote controls, consumer Electronic.
- ✚ High performance and low power consumption.
- ✚ Excellent receiver sensitivity and robustness to interferers.
- ✚ 2.4GHz IEEE 802.15.4 / ZigBee compliant.
- ✚ CSMA/CA hardware support.
- ✚ Digital RSSI/LQI support.
- ✚ AES security coprocessor.

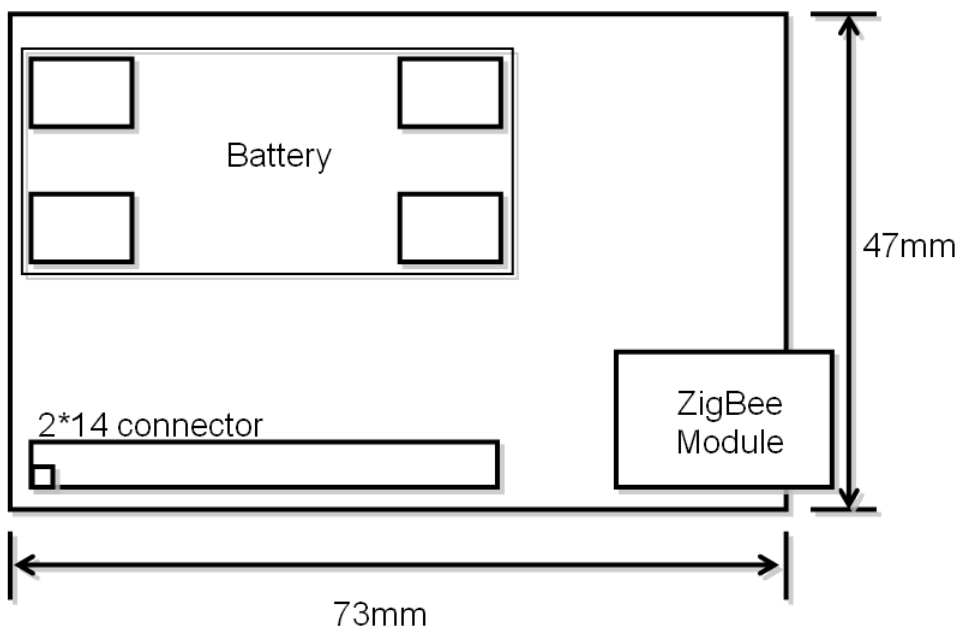
### Applications :

- ✚ Wireless sensor networks, particularly IEEE802.15.4/ ZigBee systems.
- ✚ Home and commercial building automation.
- ✚ PC peripheral thermal protection.
- ✚ Industrial control and monitoring system.
- ✚ Set-top boxes and remote controls.
- ✚ Consumer electronics.
- ✚ Environmental monitoring.
- ✚ Electromechanical device monitoring.

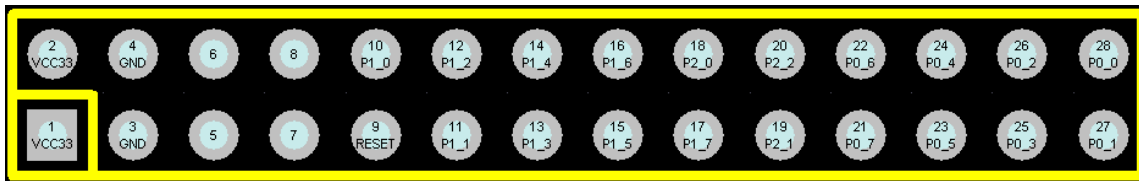
**Function Block:**



**Board dimension and layout:**



## Pin out Definition :



Pin No.	Name	Pin Type	Description
1	VCC33	Power	2.0V~3.6V
2	VCC33	Power	2.0V~3.6V
3	GND	GND	Ground
4	GND	GND	Ground
5	NC		No Connect
6	NC		No Connect
7	NC		No Connect
8	NC		No Connect
9	RESET	Digital Input	Reset, Active Low
10	P1_0	Digital I/O	Port 1.0
11	P1_1	Digital I/O	Port 1.1
12	P1_2	Digital I/O	Port 1.2
13	P1_3	Digital I/O	Port 1.3
14	P1_4	Digital I/O	Port 1.4
15	P1_5	Digital I/O	Port 1.5
16	P1_6	Digital I/O	Port 1.6
17	P1_7	Digital I/O	Port 1.7
18	P2_0	Digital I/O	Port 2.0
19	P2_1	Digital I/O	Port 2.1
20	P2_2	Digital I/O	Port 2.2
21	P0_7	Analog / Digital I/O	Port 0.7
22	P0_6	Analog / Digital I/O	Port 0.6
23	P0_5	Analog / Digital I/O	Port 0.5
24	P0_4	Analog / Digital I/O	Port 0.4
25	P0_3	Analog / Digital I/O	Port 0.3
26	P0_2	Analog / Digital I/O	Port 0.2
27	P0_1	Analog / Digital I/O	Port 0.1
28	P0_0	Analog / Digital I/O	Port 0.0

**General Specification :**

Interface	Description
Frequency	2.4GHz~2.5GHz
Modulation Type	O-QPSK
Transmit power	0dBm (Nominal)
Receiver sensitivity	-90dBm (Nominal)
Data Rate	250Kbps
Antenna Impedance	50 ohm
Size	47 * 73 * 15.0 (mm)
Supply Voltage	5.0V / 3.3V
Operate Ambient Temperature Range	-20°C ~ +75°C
Storage Temperature Range	-40°C ~ +125°C

**Interface :**

Interface	Description
Antenna	External Antenna 50Ω
UART Interface	TX, RX, RTS, CTS
SPI Interface	Synchronous Serial Interface
PIO Interface	19 terminals

**RF Characteristics :**

Parameter	Min.	Typ.	Max.	Unit
Receiver Sensitivity		-90		dBm
Frequency Error Tolerance	-50		+50	KHz
Output Power (Low Power)	-3	0		dBm
EVM		30		%

Remark: All contents are subject to change without notice.

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