

iEND Reference Manual

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1. Summary

This document describes the role & functions of iEND.

iEnd is a network end device in the internet. iEND is positioned at the bottom of the network structure and has adapter functions to connect various devices with the network wirelessly.

iEND is a key component to change user's proprietary device into a very small, very low powered "wireless" network end device.

2. The role of iEND

The role of iEND is to change user's proprietary device into a wireless network end device. iEND is an adapter to realize wireless network end device. Regarding network end device, strictly speaking, iEND is a mother device component and user's proprietary device is a daughter device component. A wireless end device can be made by combining the mother device and the daughter device into one.

iEND supports the following three wireless transmission methods. (Fig.1.)

(1) ZigBee

(2) WiFi

(3) Bluetooth

The developed iEND device with user's proprietary device built in as a daughter device can be called "ZigBee user's proprietary device" or "WiFi user's proprietary device" or "Bluetooth user's proprietary device."

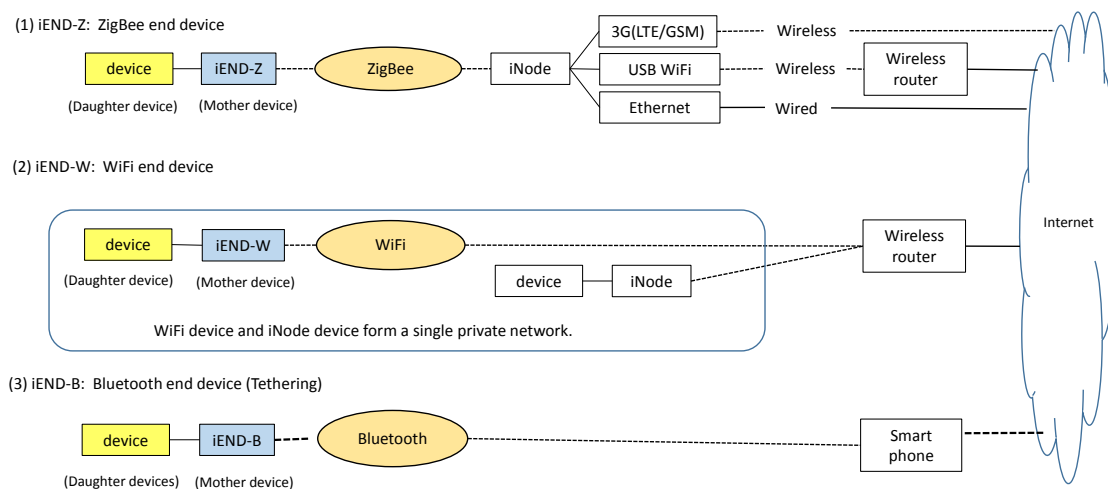


Fig. 1. The role of iEND

3. The functions of iEND

iEND wirelessly connects user's proprietary device with the network.

4. The upper network interface of iEND

The upper network to iEND is one of three different type networks. (Fig.1.)

(1) ZigBee

iEND device is recommended to connect with iNode. Thus user's proprietary device belongs to the same ZigBee network with other ZigBee devices. iNode is another product of VCJ and provides powerful gateway functions including Sanctuary application services. (See iNode reference Manual)

(2) WiFi

iEND device is connected with the upper network via the wireless router. When user's proprietary device is used together with ZigBee devices, this method is efficient because ZigBee devices can be connected with iNode which can be connected with the same wireless router that connects with iEND device. Thus one private network covers both user's proprietary device and other devices under iNode.

(3) Bluetooth

Connection with the network via smart phone tethering scheme is recommended. In this case, smart phone application and iEND application have to be developed. (VCJ Sanctuary service currently does not support Bluetooth.)

5. VCJ iEND Platform services

VCJ provides the following iEND Platform services.

- (1) Development of user's proprietary device interface for iEND: Upon order
- (2) Development of related software development: Upon order

6. Custom development of iEND casework

iEnd is installed in a very small casework. Standard method to accommodate user's proprietary device is to use interface cable between user's proprietary device and iEND with user's proprietary device interface circuit built in. When user's proprietary device interface circuit requires more space than standard iEND casework can accommodate, VCJ is ready to discuss custom iEND casework development. VCJ can develop such custom casework upon order.

End