MICROCHIP Stack for the ZigBee® Protocol

Version v2.0-2.6.0a

NOTICES

Customers may use the Microchip ZigBee Stack as a building block to create their own custom applications. However the Microchip License Agreement prohibits changes to the code that is located in the sub-directory:

```
C:\Microchip Solutions\ZigBee2006Res\Microchip\..
```

Customers are free to modify the source code located in the other directories in order to create their own applications.

STACK UPDATE

Version v2.0-2.6.0a of the Microchip Stack for the ZigBee-2006 Protocol implements all the mandatory ZigBee Compliant Platform (ZCP) features for version *ZigBee-2006 r13* of the ZigBee specifications. This version of the Microchip ZigBee stack has passed ZCP certification, and thus is able to interoperate with other certified ZigBee devices.

Changes from version v1.0-3.8 to this version – v2.0-2.6.0a include the following:

- The Stack has been certified on the PIC24 platform as well as the PIC18. The Explorer 16 hardware was used for the certification process.
- The v2.0-2.6.0a of the Stack is not backwards compatible with earlier v1.0 versions. The packet framing is different, because of changes made to the ZigBee specifications.
- The KVP message passing format has been eliminated and thus is no longer supported; only the MSG format is, and will be supported for this, and future releases.
- The Multicasting/Group Addressing mechanism is supported in this version of the Stack. This includes support for the creation and management of the group table in each device.
- The Multicast group table data is now stored as part of Nonvolatile memory.
- Source Binding is supported in this release of the Stack. The Coordinator is no longer the primary repository of the binding table. Rather, each node now maintains its own binding table.
- The end device Rejoin mechanism is supported in this release of the Stack. Polling end devices that loose contact with their parent, will now automatically initiate a rejoining procedure, without involving the application level code. This mechanism can be used to dynamically reconfigure the topology of the stack.
- On the Explorer 16 hardware, an external EEPROM is used, while on the PIC18, a portion of the internal program flash is still used for the Nonvolatile storage.

It is highly recommended that you read the Application Note AN1232 “Microchip ZigBee-2006 Residential Stack Protocol” and study the accompanying demo projects before beginning application development. If you are upgrading from v1.0-3.8 or older version of the Microchip ZigBee Protocol stack, refer to the “Answers to Common Questions” sections of the application note for hints on how to convert your application to the new version.