**Summary**

Pixie provides a complete ZigBee solution for OEMs, integrating IEEE 802.15.4 2.4GHz PHY / MAC layers with Microchip Technology’s NWK / APL / ZDO layers. It provides a path for extremely rapid migration from Microchip’s PICDEM Z ZigBee development environment to market-ready product.

Pixie is capable of full function device (FFD) operation and is suitable for router and coordinator nodes. The lower cost Pixie Lite version is used for reduced function devices, e.g. endpoints, with 2 fewer I/O lines and being 3mm more compact.

- Free space range approx 120m
- FCC / CE / IC compliant
- MAC address allocation
- Signature G antenna, low “hand effect” design
- Output power 1mW / 0dBm
- Consumes less than 25mA when active, 2μA in sleep mode
- 15 general I/O lines, featuring 6-channel 10-bit A/D, serial UART, 4 interrupts, counter input
- Master SPI
- Surface mount and DIL through-hole versions
- Wide temperature range -40ºC to +85ºC
- 2.1V - 3.6V supply, ideal for Li rechargeables

**Firmware Features**

Pixie is electrically virtually identical to the PICDEM Z ZigBee development environment and is fully compatible with Microchip Technology’s free ZigBee stack, featuring:

- Compatibility with ZigBee 1.0 specification
- FlexiPanel Ltd profiles in development for switching, serial data communications, UI servers, displays and sensors
- Only configuration bits and I/O pin definitions are changed during migration from PICDEM Z

**Ordering Information**

<table>
<thead>
<tr>
<th>Part No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIXIE-SO-XXXX</td>
<td>Pixie 26-contact surface mount module</td>
</tr>
<tr>
<td>PIXIE-DIL-XXXX</td>
<td>Pixie 26-pin 0.1” Dual-in-Line module</td>
</tr>
<tr>
<td>PIXLITE-SO-XXXX</td>
<td>Pixie Lite 24-contact surface mount module</td>
</tr>
<tr>
<td>PIXLITE-DIL-XXXX</td>
<td>Pixie Lite 24-pin 0.1” Dual-in-Line module</td>
</tr>
</tbody>
</table>

XXXX refer to preloaded firmware options, refer to firmware data sheets

Refer to separate data sheets for all-weather enclosures