



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 -40°C to +85°C
- 2.1V - 3.6V supply, ideal for Li rechargeables

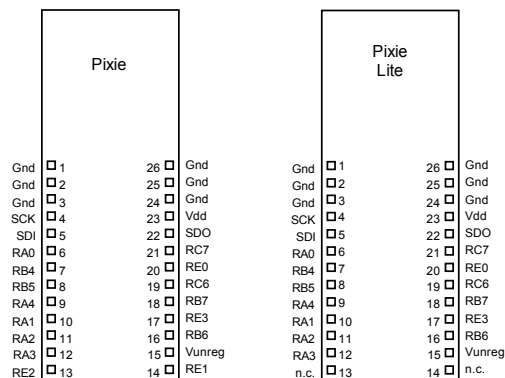


Fig 1. Pixie and Pixie Lite (viewed from above)

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

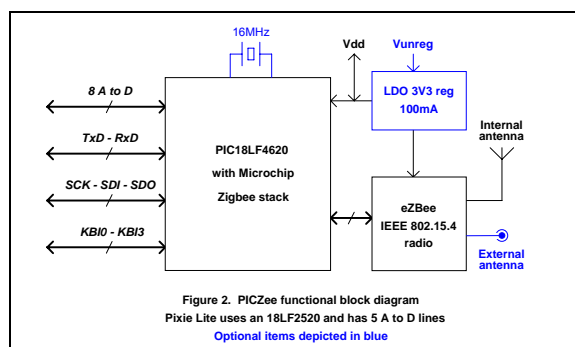


Figure 2. PICZee functional block diagram
Pixie Lite uses an 18LF2520 and has 5 A to D lines
Optional items depicted in blue

Ordering Information

Table 1. Ordering information	
Part No	Description
PIXIE-SO-XXXX	Pixie 26-contact surface mount module
PIXIE-DIL-XXXX	Pixie 26-pin 0.1" Dual-in-Line module
PIXLITE-SO-XXXX	Pixie Lite 24-contact surface mount module
PIXLITE-DIL-XXXX	Pixie Lite 24-pin 0.1" Dual-in-Line module
XXXX refer to preloaded firmware options, refer to firmware data sheets	
Refer to separate data sheets for all-weather enclosures	

Manufactured to ISO9001:2000

