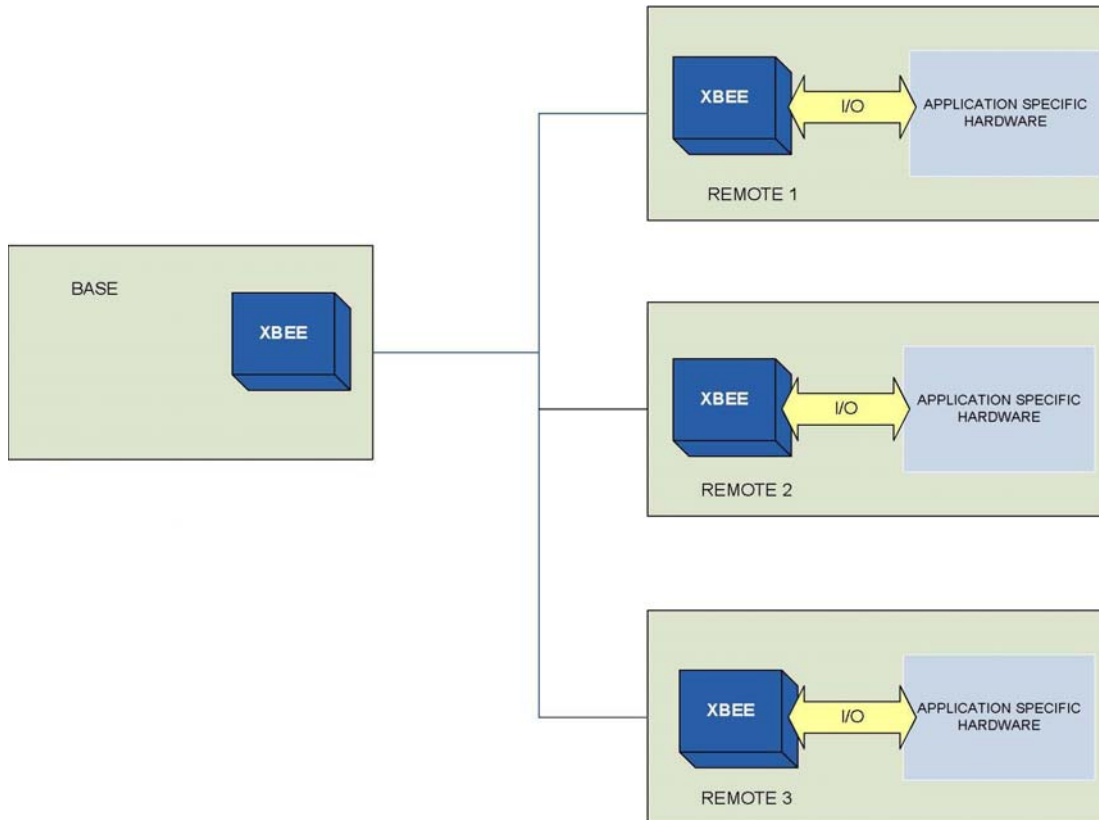


# Concept of Virtual-Wire

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## Virtual-Wire

Virtual-Wire utilizes the I/O capability of a remote radio Core Microprocessor to become a virtual I/O port extension of the BASE radio. Using this design concept eliminates the need for an additional Microprocessor on the remote radio. Design concept reduces software development, and simplifies the design.



Remote radios 1, 2, 3 are a virtual I/O port extensions of the BASE radio. Each remote radio can be configured for Digital I/O, A/D conversion, Digital PWM output, and serial communication. Serial expanders can be used to expand the I/O capability of the remote radio.

In normal operation, the BASE unit polls each unit for its acquired data, processes the data, and sets remote outputs accordingly. All processing of acquired data and remote control is accomplished by the BASE radio.

See the XBEE API Commands for a How-to.