

A tunable electrically small PIFA-as-a-package antenna for miniature wireless device applications has been developed using conventional printed circuit board processing techniques and commercial-off-the-shelf surface mount switches. The design is scalable to any frequency and form factor, while enabling adaptive tuning of the characteristically narrow band resonance of electrically small antennas. Our UHF prototype measures less than 2" ( $.08\lambda$ ) on its longest side and provides approximately -9 dBi of gain from 419-472 MHz. Simulated and measured results will be discussed in the presentation