

Multi Band Frequency Synthesized RF-Source For IEEE 802.11a Wireless Access for 0.09 μ m CMOS Technology

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Abstract: *A Design of PLL based frequency synthesizer suitable for 5GHz IEEE 802.11a upper, middle and lower frequency bands has been designed and performance evaluated for fabrication using 0.09 μ m CMOS technology. A fast 6 μ sec settling time and superior -139.9dBc/Hz @ 1 MHz offset phase noise have been observed by simulation with very less operating voltage range 1.2v. A linear VCO transfer characteristics has been observed over the frequency range. VCO outputs are in phase Quadrature and 0.09 μ m CMOS technology makes the design energy efficient.*