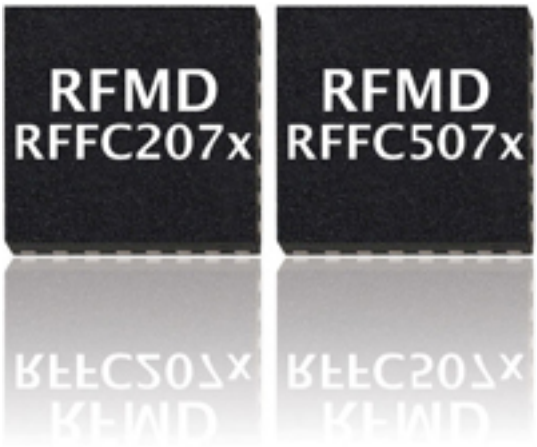
Innovative Components Deliver Industry-Leading Performance, Superior Functional Integration and Extended Range



GREENSBORO, N.C., (GlobeNewswire via COMTEX News Network) -- RF Micro Devices, Inc. has released a new family of integrated configurable components for multiple markets. The highly integrated components, comprised of the RFFC207x and RFFC507x product families, perform multiple common RF functions in a reduced footprint while delivering the flexibility necessary to develop radio systems that operate over a wide dynamic range and across a broad range of frequencies and channel bandwidths.

The RFFC207x and RFFC507x product families integrate RFMD's fractional-N PLL/VCO combination with RF mixers to provide radio designers an elegant radio partitioning option with very high performance, superior integration and no compromise in flexibility. The RFFC207x and RFFC507x represent the second generation of RFMD's innovative RF205x family of integrated configurable components, which enables radio designers across industries to shrink circuit board area, reduce risk and shorten product development time -- all of which lower the total cost of radio implementation.

The RFFC207x and RFFC507x expand upon the capabilities of the RF205x family by enhancing performance and extending frequency range to serve even more industries and applications. General purpose in nature, RFMD's newest family of integrated configurable components is applicable to fixed and mobile infrastructure, radio repeaters, super-heterodyne radios, diversity receivers, frequency band shifters, CATV, software-defined radios, point-to-point radios, satcom, VHF/UHF radios, military, industrial and other applications.

The product family's wide bandwidth enables use in multiple systems and applications. The RFFC207x series has a local oscillator (LO) range from 85 MHz to 2700 MHz, with a 30 MHz to 2700 MHz mixer on-chip. The RFFC507x series has an LO range of 85 MHz to 4500 MHz with mixer range extending up to 6000 MHz.

With industry-leading integrated phase noise of 0.18° rms at 1 GHz, the RFFC207x and RFFC507x improve system performance for radio designers. Additionally, the integrated fractional-N synthesizer features an advanced sigma-delta modulator to achieve ultra-fine step sizes and lower spurious products, while integrated mixers enable a smaller implementation (5mm x 5mm) than competing solutions.

Finally, by integrating the entire LO path on-chip, the RFFC207x and RFFC507x eliminate the need for designers to work with the highly sensitive interface from VCO to mixer, saving valuable design time and improving end product manufacturing yields.

The RFFC207x and RFFC507x series also deliver industry-low power consumption. The components' bandwidth and phase noise specifications are achieved using only 125 mA from a 3-volt supply (single-mixer, high linearity setting), and the current can be reduced to 100 mA by reducing the programmable mixer linearity setting. Importantly, the 4500 MHz components use only 10 mA more than the 2700 MHz components.

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