

## VCO IP Lab Results of 0.18u VCO's

Athens, Greece and Palo Alto California, May 2007



Theta Microelectronics Inc, a leading provider of Intellectual Property circuit blocks and radio frequency integrated circuit design services for mobile and fixed wireless connectivity and video applications, announced today the availability of their Voltage Controlled Oscillator (VCO) designs as licensed IP circuit blocks. Theta's family of High Performance VCOs operates in specific bands from 3GHz to 13GHz and are designed in 0.18um BiCMOS SiGe Process.

Theta's VCOs feature phase noise better than -95dBc at 100KHz when operating at 12.0GHz, with a useful tuning range of 1 GHz. By incorporating an integrated LDO and programmable ALC, they allow for optimum performance and power consumption selection based on radio performance requirements. At 6GHz the phase noise is better than -105dBc at 100KHz while maintaining the tuning range.

"We are pleased to release these silicon- proven VCOs for use by our design services clients. High Frequency and high performance VCOs are found in the heart of all RFIC transceivers, and present one of the most challenging aspects of any transceiver design. This family of VCOs coupled with rest of our RFIC IP portfolio allows Theta to design RFICs based on any frequency plan that our customers prescribe for both access and client application, be that either WiMAX or 3G. This IP was designed to be used with our existing synthesizer IP, giving our customers significant time to market advantages and high level of confidence for the success of their transceiver design" said Theodore Varelas, V.P of Business Development of Theta.

The new IP blocks are immediately available in IBM BiCMOS 7WL process. Check IBM related web site for information,

[www-03.ibm.com/chips/asics/foundry/rfit/theta.html](http://www-03.ibm.com/chips/asics/foundry/rfit/theta.html)