

**Title:** ParkerVision Confirms D2D(TM) Technology Supports Digital Cellular Communications Based on Rigorous and Demanding CDMA Digital Standards.

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Completes CDMA Transmitter Demonstration Platform Using Standard

CMOS Semiconductor for Its Direct2Data(D2D) Technology

JACKSONVILLE, Fla., Dec. 9 /PRNewswire/ -- ParkerVision, Inc. (Nasdaq: PRKR), announced today the completion of a CDMA transmitter demonstration platform that proves the Company's Direct2Data(TM) (D2D) technology comfortably exceeds the requirements for IS-95 CDMA transmitter performance. The D2D transmitter is built from standard bulk CMOS, and creates a true Zero IF architecture, eliminating the need for the intermediate frequency amplifiers and filters currently required. The Company believes this achievement represents another significant step towards the commercialization of its unique wireless technology.

CDMA is the fastest growing digital cellular standard in many regions and is now widely accepted as the foundation for the competing third generation (3G) wireless standards. CDMA is considered to be the most demanding of the current digital cellular standards in terms of radio frequency performance requirements. The Company believes it is a significant accomplishment to address this specification using a standard CMOS semiconductor while simultaneously creating a true Zero Intermediate Frequency (IF) architecture.

Jim Baker, Vice President of Business Development, stated, "Our tests show D2D addresses the CDMA standard with a true Zero IF architecture which inherently reduces power, parts, size, and cost. This efficiency comes without a performance penalty, in fact, due to the inherent linearity of our D2D technology, several important performance parameters may actually be improved when compared with traditional transmitter techniques. Since the D2D technology can be implemented in standard CMOS, new system partitioning options are available that have not existed before. As an example, the entire transmitter implementation except for the final bandpass filter and power amplifier can now practically be integrated with the digital baseband processor. This is a significant step towards enabling complete wireless system-on-chip."

Mr. Baker continued, "We are confident that a D2D-based architecture is capable of creating very cost-effective transmitters and receivers supporting multiple communications standards. We believe that companies currently looking seriously at the technology are beginning to understand the breadth of applications that can be addressed. D2D enables both very cost effective single mode systems as well as the opportunity to address the growing desire for convergence of wireless products incorporating disparate standards."

ParkerVision is currently developing a prototype D2D-based CDMA receiver demonstrator. The Company's analysis shows that D2D can also meet or exceed CDMA IS-95 receiver specifications.

ParkerVision is working with a number of companies to develop a RF-to-baseband interface specification for D2D-based CDMA radios. The Company intends to develop integrated radio frequency transceiver ICs targeted at the IS-95 CDMA standard as well as other cellular standards based on its D2D technology. For example:

The current D2D CDMA transmitter demonstrator exceeds key performance requirements of the IS-95 CDMA standard by significant margins as shown below:

- The primary performance measure, Rho, achieved by the D2D prototype is typically 0.9967. The CDMA IS-95 specification requires 0.912 minimum.
- Adjacent Channel Power Ratio is met with a typical 3 dB to 5 dB margin.
- No additional baseband processing or DAC speed/resolution is required.

Doug Makishima, Director of Marketing and Business Development -- Cellular Industry, commented, "The D2D architecture achieves the highest linearity per milliwatt of power consumed of any radio technology of which we are aware, and does this in a very cost-effective manner. The local oscillator in a D2D-based implementation will typically operate at one third or less of the RF carrier frequency. Since D2D uses a subharmonic clock, implementations do not require synthesizers operating at or near the RF frequency as with traditional radio architectures. This provides lower power, higher performance solutions that effectively reduce noise and design issues that are inherent in traditional or other direct conversion designs which require the use of local oscillators operating at or near the RF frequency. This is one of the reasons that our technology lends itself to full integration in standard CMOS and allows D2D-based radio hardware to take full advantage of Moore's Law regarding semiconductors."

ParkerVision announced that an application note with complete technical details should be made available at <http://www.D2D.com> within two weeks.

ParkerVision, headquartered in Jacksonville, Florida, designs, develops and manufactures communications technology platforms and products for the wireless and video industries. Additional information about ParkerVision and its D2D technology is available at <http://www.parkervision.com> and <http://www.D2D.com>.

This press release contains forward-looking information. Readers are cautioned not to place undue reliance on any such forward-looking statements, each of which speak only as of the date made. Such statements are subject to certain risks and uncertainties which are disclosed in the Company's SEC reports, including the Form 10K for the year ended December 31, 1998 and Forms 10Q for the quarters ended March 31, 1999, June 30,

1999 and September 30, 1999. These risks and uncertainties could cause actual results to differ materially from those previously anticipated or projected.