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## TriQuint Chipset Powering Delphi Automotive Radar System Now Available for New Motion-Sensing Applications

### TriQuint's 77 GHz GaAs Portfolio is Auto-Qualified, Cost-Competitive

**HILLSBORO, Ore. & DETROIT, Oct 19, 2010** (BUSINESS WIRE) -- TriQuint Semiconductor (NASDAQ:TQNT), a leading RF products manufacturer and foundry services provider, is offering its 77 GHz Gallium Arsenide (GaAs) chipset portfolio for motion detection and adaptive cruise control applications. TriQuint products are currently used by Delphi Automotive in its successful multimode electronically scanning radar (ESR) that enables adaptive cruise control in multiple vehicles. TriQuint 77 GHz chipset devices appeared first in 2010 model year automobiles.

The TriQuint 77 GHz portfolio includes eight products (TS-16949 factory certified) that can be utilized in a variety of design configurations for motion sensing automotive and non-vehicular applications. TriQuint representatives will be attending [SAE Convergence 2010](#) in Detroit, 19-20 October; contact TriQuint for more information or to [meet representatives](#) at the exhibition.

In developing its system for Delphi, TriQuint combined time-tested, rugged GaAs designs utilized in defense applications with cost-conscious systems scaled for high-reliability consumer products. TriQuint also developed processes to further enhance performance and reliability including the company's proprietary CuFlip™ 'flip-chip' technology that replaces wire-bonded devices with direct mounts to circuit boards. CuFlip enhances reliability and ruggedness while simplifying overall assembly.

"At Delphi, we were looking for a chipset supplier with a track record of developing high performance products that would help us succeed in the commercial marketplace. TriQuint's experience with GaAs modules and their ongoing support has helped us to provide our customers game changing driver assist technology," remarked Mark Lynn, Chief Engineer, Active Safety, Delphi Automotive.

A multimode ESR with proven solid-state technology is the heart of adaptive cruise control systems like the one developed by Delphi. Its class-leading performance, packaging and durability have helped enable a driver assistance application that not only enhances safety and convenience, but is affordable to more buyers, remarked TriQuint Vice President, Brian P. Balut.

"We're pleased to support a company like Delphi that has an industry-leading product line-up," remarked Balut. "The microwave devices that Delphi has used in its ESR modules are now available for other motion sensing applications that require market-tested, automotive-qualified performance. The products are also cost-competitive for many different motion-based applications and concepts such as security systems."

TriQuint RF, microwave and millimeter wave products are used by manufacturers including Delphi and OEM mobile handset, base station radio and optical network makers across Europe, Asia and North America. For more information about TriQuint's 77 GHz auto-qualified (TS-16949) radar / motion-detecting GaAs devices, contact [TriQuint Product Marketing](#) or visit us on the web at: [www.triquint.com](http://www.triquint.com). For information about future product releases and to subscribe to our newsletter, visit [www.triquint.com/rl](http://www.triquint.com/rl).

### Technical Details - TriQuint's 77 GHz Automotive-Qualified Chipset Solutions (TS-16949)

[TGA4705-FC](#) Flip-chip **low noise amplifier** with 23 dB small signal gain and a 5 dB noise figure at 77 GHz (typical) for Receive (Rx) chain architectures.

[TGA4706-FC](#) Flip-chip **medium power amplifier** with 14 dBm saturated output power with 15 dB small signal gain at 77 GHz (typical).

[TGS4305-FC](#) This 60-90 GHz **SP3T** switch offers a typical switching speed of < 5 nsec and when flipped provides a nominal 2.3 dB insertion loss, > 13 dB thru state return loss, and 20 dB isolation.

[TGS4306-FC](#) This 70-90 GHz **SP4T** switch offers a typical switching speed of < 5 nsec and when flipped provides a nominal 3 dB insertion loss, 8 dB return loss in the thru state and 20 dB isolation

[TGV2204-FC](#) A flip-chip **voltage controlled oscillator (VCO)** for frequency stability in Transmit (Tx) chains. It typically provides 7 dBm output power at 19 GHz with < -105 dBc/Hz phase noise at 1 MHz offset; its integrated divide-by-8 prescaler eases PLL design.

[TGC4702-FC](#) A down converting IQ **mixer** with 12 dB conversion loss from 75 - 82 GHz to an IF frequency band of DC - 100 MHz (typical).

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**TGC4703-FC** A flip-chip **frequency doubler** that combines an input / output buffer amplifier and a frequency doubler providing 14 dBm saturated output power with 8 dB conversion gain (typical).

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**TGC4704-FC** A flip-chip **combined medium power amplifier and frequency doubler** providing 14 dBm saturated output power with 5 dB conversion gain (typical).

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## FORWARD LOOKING STATEMENTS

This TriQuint Semiconductor, Inc. (NASDAQ: **TQNT**) press release contains forward-looking statements made pursuant to the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995. Readers are cautioned that forward-looking statements involve risks and uncertainties. The cautionary statements made in this press release should be read as being applicable to all related statements wherever they appear. Statements containing such words as 'leading', 'exceptional', 'high efficiency', 'key role', 'leading supplier', or similar terms are considered to contain uncertainty and are forward-looking statements. A number of factors affect TriQuint's operating results and could cause its actual future results to differ materially from any results indicated in this press release or in any other forward-looking statements made by, or on behalf of, TriQuint including, but not limited to: those associated with the unpredictability and volatility of customer acceptance of and demand for our products and technologies, the ability of our production facilities and those of our vendors to meet demand, the ability of our production facilities and those of our vendors to produce products with yields sufficient to maintain profitability, as well as the other "Risk Factors" set forth in TriQuint's most recent 10-Q report filed with the Securities and Exchange Commission. This and other reports can be found on the SEC web site, [www.sec.gov](http://www.sec.gov). A reader of this release should understand that these and other risks could cause actual results to differ materially from expectations expressed / implied in forward-looking statements.

## FACTS ABOUT TRIQUINT

TriQuint Semiconductor (NASDAQ: TQNT) celebrates its 25th anniversary in 2010 as a leading global provider of innovative RF solutions and foundry services for the world's leading communications, defense and aerospace companies. People and organizations around the world need real-time, all-the-time connections; TriQuint products help reduce the cost and increase the performance of connected mobile devices and the networks that deliver critical voice, data and video communications. With the industry's broadest technology portfolio, recognized R&D leadership, and expertise in high-volume manufacturing, TriQuint creates standard and custom products using gallium arsenide (GaAs), gallium nitride (GaN), surface acoustic wave (SAW) and bulk acoustic wave (BAW) technologies. The company has ISO9001-certified manufacturing facilities in the U.S., production in Costa Rica, and design centers in North America and Germany. For more information, visit [www.triquint.com](http://www.triquint.com).

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