

# Marvell Introduces Powerful Wi-Fi Featuring Beamforming Technology That Boosts Throughput Performance By Up To 20x Over Existing Technology For Video And Other High Throughput Applications

**Marvell's Avastar Wi-Fi solutions deliver consistent wireless performance across entire connectivity ecosystem**

SANTA CLARA, Calif., Jan. 3, 2011 /PRNewswire/ -- Marvell (Nasdaq: MRVL), a worldwide leader in integrated silicon solutions, today announced that the entire family of Marvell® Avastar™ 802.11n solutions will leverage an innovative transmitter beamforming technology to dramatically improve link robustness for clients ranging from new and existing 1x1- 4x4 MIMO products to legacy devices. Beamforming is a specialized method of radio-frequency (RF) transmission used in Wi-Fi access points (APs), substantially enhancing signal reception at the client and, as a result, extending Wi-Fi signal coverage by two to four times. It can also be used between two clients in conjunction with Wi-Fi Direct™.

(Logo: [https://investor.marvell.com/image/Marvell\\_logo.jpg](https://investor.marvell.com/image/Marvell_logo.jpg))

"Wi-Fi has become the critical common link to achieve seamless connectivity across all devices. I believe users now expect and demand robust, secure connectivity among all their wireless devices no matter where they go or what data applications they are running," said Weili Dai, Co-founder of Marvell. "Existing wireless solutions still presents different challenges when it comes to the long range and high throughput required for applications such as HD video streaming. Marvell raises technology bar with Wi-Fi solutions leveraging beamforming technology, increasing throughput at range and delivering consistent performance at all times, ultimately providing greater user experience with Wi-Fi than what has traditionally been possible. Marvell's leading Wi-Fi solutions will fundamentally change how the technology is used today and enable a plethora of new applications and innovative products."

Marvell's beamforming technology does not require special antennae or any other cost increase of the wireless subsystem and provides greater than 10dB of perceivable gain in over-the-air tests in home and enterprise environments. This gain translates to an increased throughput of 2x to 20x depending on the environment. Beamforming outperforms other digital signal processing techniques for range extension like LDPC by at least 6 times.

## About Avastar

The Avastar family enables an entire spectrum of always-on consumer products, including tablet computers, smartphones, eReaders, digital cameras, printers, gaming consoles, laptops, personal media players, AP routers, Blu-ray players, automobiles and High Definition (HD) television sets. With more Wi-Fi enabled consumer devices entering the market, the Avastar solutions provide essential underpinnings for this ecosystem by supporting advanced use cases, such as seamlessly moving content from a handset to a big-screen digital TV or any other connected devices with a display. Key features include low power consumption, superior Wi-Fi 802.11n performance, proven Bluetooth (BT) technology, and best-in-class radio-coexistence.

## About Marvell

Marvell (NASDAQ: MRVL) is a world leader in the development of storage, communications and consumer silicon solutions. Marvell's diverse product portfolio includes storage switching, transceiver, communications controller, wireless and storage solutions that power the entire communications infrastructure, including enterprise, metro, home and storage networking. As used in this release, the term "Marvell" refers to Marvell Technology Group Ltd. and its subsidiaries. For more information, visit [Marvell.com](http://Marvell.com).

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