

STMicroelectronics' Dual Band Wireless LAN Baseband Processor Melds Advanced Features and Low Cost

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STLC8201 simplifies design and cuts the cost of 802.11a/b/g applications.

Geneva, June 8, 2004 - STMicroelectronics (NYSE:STM) today announced the availability of its next generation STLC8201 multi-mode wireless LAN baseband processor chip. The STLC8201, along with the previously announced STLC8100 dual band wireless LAN RF transceiver, form the latest STLC8000 series platform enabling an array of low cost IEEE802.11a/b/g systems including wireless ADSL gateways, broadband routers, access points, media servers, bridges, print servers as well as clients and other wireless modules.

The STLC8201 wireless baseband processor combines the functions of a media access controller (MAC) and physical layer processor. Using the technique of Band Interleaving, the STLC8201 delivers low-cost dual band operation for access point and infrastructure equipment. By dynamically sharing available bandwidth between 2.4 and 5GHz clients, without the need for duplicate baseband or RF circuits, STLC8201 systems seamlessly adapt to support the client mix. Band Interleaving enables adoption of 5GHz technology, which is key to avoiding looming channel overload at 2.4GHz and removing the barriers to media-based applications.

Key features of the STLC8201 baseband include support for Quality of

Service (QoS) based upon the draft IEEE 802.11e standard, with support for the Wi-Fi Alliances' Wireless Multimedia Extensions (WME). WME delivers interoperable QoS for emerging voice and media-based applications.

v In addition, the STLC8201 offers uncompromised security. Built-in hardware based encryption engines for WEP, Wi-Fi Protected Access (WPA), Advanced Encryption System (AES), as well the latest WPA2 ensure no loss of throughput.

Uncompromising speeds of up to 150 megabit per second (Mbit/s) data throughput for wireless networking products allow for voice, data and video transmission in any application. This accelerated throughput is accomplished through enhanced standards-based software capabilities and other enhancements, allowing the 8000 series platform users to easily shift into turbo mode. With the addition of Quality of Service (QoS) techniques, customers are assured the highest performing multi-mode solution on the market, enabling seamless mobility, connectivity and broad compatibility.

"We believe that low cost dual band a/b/g systems or modules are the next natural and logical evolution for today's b/g products," said Giacomo Piccini, Vice President of ST's Networking Division. "By selecting the 8000 series platform, ODM and OEM designers can quickly bring to market low cost, high performance dual band wireless products to market that fit the needs of next generation products."

The 8000 series platform is supplemented with a comprehensive software suite that includes station and access point firmware; Windows, and Linux drivers; engineering test functions; client GUI; and access point management entity. In addition, to further assist developers in quickly bringing to market products based on the platform to market quickly, ST offers manufacturing ready reference designs for dual and

single band applications, including clients and access points.

The STLC8201 dual band wireless LAN baseband processor comes in a 256-pin ball grid array package and sells for \$8.00 each in quantities of 10,000. Samples are available now, with production volumes scheduled for August.

The original press release can be found [here](#).

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