

OMRON releases World's First Mass-Producible Polymeric Ultra-Wideband (UWB) Antenna

- Optimizing data transmission between PCs & other digital home appliances
- Combines compact size with high performance utilizing OMRON's proprietary dielectric polymer molding technology

TOKYO, Japan - OMRON Corporation (TSE: 6645, US: OMRNY), a global leader in electronic components, sensing and control technologies, announced that it will launch a new SMD Polymeric Antenna (type: WXA-N1SL) for short-range, wireless Ultra-Wideband (UWB) applications. Product launch is scheduled for 1 June, 2006.

Driven by consumer demand for simple wireless functionality, "point-and-shoot" usability and increasingly mobile lifestyles, the wireless communications market, led by Bluetooth™ and wireless LAN, has shown phenomenal growth over the past few years. UWBⁱ is now attracting particular attention as a solution for high-speed, high volume reliable data transmission over short distances.

UWB is a recently commercial-

ized short-range wireless technology, expected to be widely adopted in consumer goods. Applied in dongles, personal computers, printers, mobile telephones, digital televisions and DVD players, UWB functions as a low-power-consuming wireless USB (universal serial bus), allowing users to transfer large amounts of data rapidly between various devices in close range. For example, UWB makes it possible to transmit high definition video data wirelessly between a high definition digital TV and DVD player, thereby eliminating the need for expensive and unsightly wires.

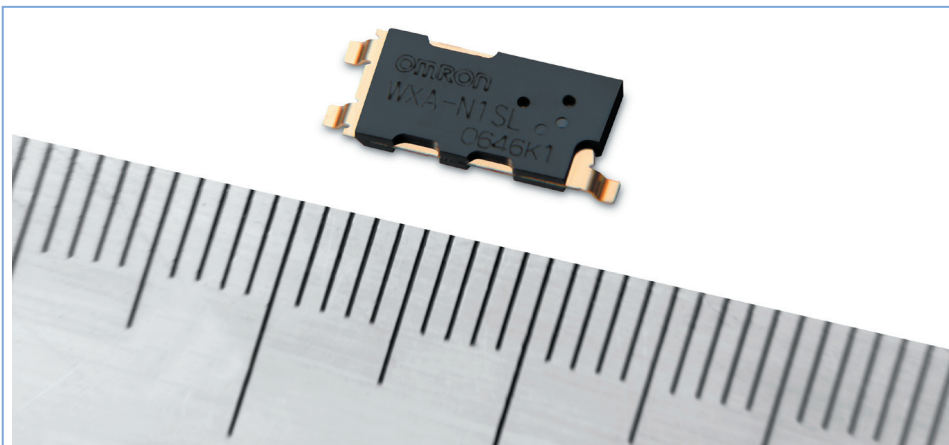
Due to the wide frequency range on which UWB operates, electronic devices need to be equipped with a special ultra-wideband antenna for UWB-compatibility. While various antennae are currently in the mar-

ket, OMRON'S new SMD Polymeric Antenna (type: WXA-N1SL) combines both compact size with high-performance, utilizing the computer's proprietary molding technology and dielectric polymer material. As a result, with OMRON'S antenna, ODMs and OEMs deploying UWB can benefit from flexibility of antenna shape design without compromising on size or performance. Capitalizing on its expertise in precision manufacturing OMRON has now succeeded in mass production of the antenna at its factory in Shiga prefecture, Japan.

SMD Polymeric Antenna: type WXA-N1SL is optimized for WiMedia™ Alliance's UWB common radio platform as well as for the Certified Wireless USB specifications from the USB Implementers Forum (USB-IF). OMRON will also

Wi-PlaDs

Wireless Polymeric Advanced Devices



Features

- Optimized for UWB, including WiMedia* UWB and Certified Wireless USB.
- World's First Mass-Producible Polymeric Ultra-Wideband (UWB) Antenna.
- Combines compact size with high performance utilizing OMRON's proprietary dielectric polymer molding technology.

*WiMedia is a trademark of the WiMedia Alliance

work to optimize all future versions of the antennae for the recently announced next-generation Bluetooth™-Over-UWB platform.

OMRON has been collaborating closely with many of the UWB chipset companies over the past 12 months, including San Diego, California-based Staccato Communicationsⁱⁱ, a UWB technology pioneer and Certified Wireless USB leader.

"Omron's production-ready N1 UWB antenna offer a small form-factor, high performance and low cost solution for our customers that complement our Ripcord single-chip, all-CMOS products based on Certified Wireless USB," said Jason Ellis, Director of Business

Development Staccato Communications. "Omron's antennae were accepted for inclusion and have been shipping with our Ripcord Development Kits."

OMRON aims to achieve sales of 3bn Japanese yen for the WXA-N1SL antenna in FY2008. By maximizing the mass production potential and flexibility of its proprietary dielectric polymer molding technology, the Japanese manufacturer plans to further enhance its WiPlaDsⁱⁱⁱ series of wireless polymeric high-frequency devices including antennae to cover a wider range of device applications.

Antenna Specifications

Model No.	WXA-N1SL
Size (L x W x H)	12 x 5 x 1.1 mm
Frequency Range	3.1 ~ 4.9 GHz
V.SWR	Max. 2.5
Gain	Max 0dBi

Productivity availability is scheduled for after 1 June, 2006.

- i UWB (Ultra-wideband) is a next generation wireless transmission technology. UWB standards that allow for data rates up to 480 Mbps at a range of 3 meters and below, or up to 110 Mbps at a range within 10 meters, are currently being developed.
- ii Staccato Communications is an Ultra-Wideband (UWB) technology pioneer with applications expertise in Certified Wireless USB, Bluetooth and Internet Protocol (IP) connectivity. For more information, please visit : www.staccatocommunications.com
- iii WiPlaDs is a registered trademark for OMRON'S wireless high-frequency devices. The name derives from *Wireless Polymeric Advanced Devices. "All other trademarks are the property of their respective owners."

» Applications



» Personal computers and peripheral equipments

- Wireless USB dongles and hubs
- Personal computers
- Printers
- PC cards
- Other peripheral equipment



» Mobile equipment

- Camcorders
- Digital cameras
- Personal digital assistants (PDA)
- Cellular phones etc.



» Digital home appliances

- Digital flat-panel TVs
- HDD recorders
- DVD recorders and players
- Set top boxes (STB) etc.

» Omron Electronic Components Asia Pacific

- › Singapore
- › India
- › Malaysia
- › Philippines
- › Thailand
- › Vietnam
- › Indonesia
- › Australia / New Zealand
- › Others

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