

## Frost & Sullivan Award for Industry Innovation & Advancement of the Year



### AWARD DESCRIPTION

Frost & Sullivan's Industry Innovation and Advancement of the Year Award is bestowed each year upon a company that has proven to be a leader in the industry and who, through its pioneering technology, sound business strategy, superior customer relations and ongoing educational efforts, has been consistently successful in moving the state-of-the-industry forward. The recipient company has demonstrated excellence in the field beyond its technical advancements. This Award recognizes the company for its broader, more comprehensive participation in the industry and for its contributions to the advancement of the market over time.

### RESEARCH METHODOLOGIES

To choose the recipient of this Award, the analyst team tracks emerging and existing markets and evaluates the contributions of industry participants. This is accomplished through interviews with major market participants and extensive secondary research. Industry contributions that are considered are elements such as the creation of new industry standards and the adoption of a product or process by leading manufacturers. Finally, competitors are compared and ranked for relative position. Frost & Sullivan then presents the Award to the company that has most altered the industry due to its creativeness and innovation.

### MEASUREMENT CRITERIA

In addition to the methodology described above, specific criteria are used to determine the final rankings of industry competitors. The recipient of the Award has excelled based on one or more of the following:

- Technology innovation contrasted against competitors
- New product/process introduction
- Adoption of the technology/process by the leading market participants
- Advancement of the industry through research
- Ability to conceptualize industry activities while successfully addressing customer needs



### AWARD RECIPIENT: PICOCHIP

The Frost & Sullivan Award for Industry Innovation and Advancement of the year 2006 in the wireless industry is presented to picoChip. Founded in 2000, with centers in Bath in the UK, San Jose and Boston in the US and Shenzhen in China, picoChip has differentiated itself from its competitors by its unique innovative wireless chip solutions and emerged as the most preferred solutions provider for its customers.

picoChip is the forerunner to implement the advanced features of Fixed WiMAX in its design solutions. picoChip's portfolio of WiMAX designs caters to both the base station and subscriber station industry. The significant features of picoChip's reference design are the incorporation of 'multi-user sub-channelisation' and Space Time Coding (STC) which are advantageous to the WiMAX industry as it boosts the coverage area by twenty times compared to other conventional WiMAX chipsets offered by its competitors. Another noteworthy benefit of using sub-channelisation is the increase in the effective power, which is more critical for power-hungry applications such as the indoor self-installed customer premise equipment (CPE).

Once again, picoChip is in the fore to come up with a novel

approach to a challenge - the transition from fixed WiMAX to the mobile WiMAX (802.16e and Korean WiBRO) - faced by the wireless broadband industry. While the rest of the industry was focussing on developing a whole new range of chipsets separately for the mobile version, picoChip set off on a unique path to offer software upgradeable chipsets. Using software upgradeability eliminates the need to change over hardware when migrating from fixed to mobile WiMAX and offers more flexibility and cost-effectiveness. Thus picoChip is the first and the only company to offer a complete range of product portfolio for the WiMAX industry ranging from fixed WiMAX to mobile WiMAX and the Korean WiBRO, with the advanced options incorporated covering the Basestation and Subscriber Station applications.

picoChip is the first to offer multi-user sub-channelisation for its WiMAX solutions, which is a very significant capability for systems requiring more power such as the in-door self-installed CPEs. Moreover, the multi-user capability provides no wastage of bandwidth.

Additionally, picoChip offers the more straightforward software upgradeable chip and reference design solution for the smooth migration from fixed to mobile WiMAX. Other competing products require a higher number of processors for mobile WiMAX and are hence significantly costlier.

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picoChip has partnered with ARM and has developed its next generation of picoArray single chip, software defined solution for advanced wireless systems such as the WiMAX and WCDMA. Partnering with ARM and producing products with ARM processor technology enables picoChip to offer cost-effective as well as flexible solutions. The ARM architecture is widely used and well respected across the semiconductor industry.

Through its new office in Shenzhen, China, picoChip is developing new business relationships in China to meet the demands of the dynamically growing Chinese wireless market which is one of the world's important wireless markets. picoChip technology has strategically partnered with a number of Chinese OEMs and key research institutes such as WTI-BUPT (Wireless Technology Innovation Institute, Beijing University of Posts and Telecommunications) and Institute of Computing Technology (ICT) of the Chinese Academy of Sciences (CAS), which are using picoChip for projects, including WiMAX, TD-SCDMA and advanced wireless applications.

picoChip has also strategically partnered with Airspan, a world leading provider of wireless communication infrastructure equipment, which uses picoChip chipsets for its worldwide deployment of point-to-multipoint WiMAX base stations. Airspan makes effective utilization of the power and flexibility offered by picoChip technology in its infrastructure equipment. Additionally, the technology enables exceptional flexibility for operators to adapt to the ever-evolving standards of the communications industry, such as the expected development of 802.16e.

picoChip is pushing the wireless communication industry to its next stage by having introduced the industry's first High Speed Downlink Packet Access (HSDPA) reference design in 2004. HSDPA is beckoned as the future of 3G and is also referred to as 3.5G. Thus picoChip's solution reduces the time-to-market of such new technologies and provides lower cost and high profitability for the OEMs.

picoChip's solutions offer its customers various advantages such as low time-to-market, low cost and high flexibility, which are accomplished through its

scalable and flexible open software approach enabling its customers to customise and differentiate. The company's PCI02 processor provides significant price-performance benefit. Moreover, the company also provides reference designs for the telecommunication industry such as UMTS and for the wireless broadband internet industry such as WiMAX/WiBRO. This processor can also be used to develop other advanced wireless protocols such as 802.20 and TD-SCDMA.

picoChip in October 2005 has announced that its fixed WiMAX reference design has been licensed by more than fifteen key strategic OEMs as well as Tier one manufacturers and the designs are in production or development. picoChip has emerged as the industry leader on the base station chipsets market with customers such as Intel, Airspan, Ericsson, Nortel, Fujitsu, and Marconi among others. It is being installed in publicly declared deployments in Japan (Yozan), UK (Pipex) and Italy (Marconi and Italian Ministries). Its chips also cater to the Korean WiBRO market. The fact that industry leaders such as Intel are supporting and using picoChip's products is a noteworthy aspect. Thus, picoChip is setting the industry standard for the wireless communication industry demonstrated by its acceptance in the marketplace.

picoChip has therefore introduced unique and innovative solutions for the wireless industry in contrast against its competitors. Its solution has been widely accepted and adopted in the market place and supported by leading industry participants. It has also formed strategic alliances with the world's leading companies consequently emerging as the leader in the wireless industry and advancing the industry to its next stage.

Frost & Sullivan recognizes picoChip's ability to conceptualise industry activities and its ability to successfully address customer's needs and confers the 2006 Frost & Sullivan Industry Innovation and Advancement Award.

For more information contact:

picoChip

[www.picoChip.com](http://www.picoChip.com)

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