CORPORATE BACKGROUNDER

OVERVIEW

GainSpan is a leading fabless semiconductor and solution company focused on connecting things wirelessly to the Internet. With GainSpan' easy-to-use, low power embedded Wi-Fi solutions nearly any device can leverage the very large installed base of Wi-Fi access points and gain Internet connectivity. The Company's solutions, which can be paired to any 8-32 bits microcontroller, simplify and accelerate the process of adding Wi-Fi to new and existing products. GainSpan embedded Wi-Fi is used in applications including healthcare and fitness, smart energy, industrial control, commercial/building automation and consumer markets.

A spin-off of Intel in September 2006, GainSpan was the first to optimize power consumption of Wi-Fi chips and apply advanced power management techniques to target long battery life applications. This innovation suddenly removed the major obstacles hindering the market growth of Wi-Fi networks and opened the floodgates of new possibilities for Wi-Fi enabled products and applications.

GainSpan's mission is to create a broad range of semiconductor solutions that continually improve usage capabilities for new embedded applications worldwide, while leveraging ubiquitous Wi-Fi.

MARKETS

Wi-Fi is becoming increasingly ubiquitous and has emerged as the primary means for devices to gain Internet connectivity. Today alone, there are over 2 billion Wi-Fi devices on the market. At the same time, the semiconductor industry has driven computing costs to the point where it's now possible to process, collect and store information on a massive scale. This year, over 9 billion embedded microcontrollers will be shipped to enable this functionality for consumers and businesses. This combination of ubiquitous access and billions of end-points is allowing new product opportunities to become a reality.

GainSpan's focus is on opportunities in five key markets.

1. **Healthcare and Fitness:** monitor patients remotely, track one's health and fitness performance and collect and monitor patent and healthcare assets.
2. **Smart Energy:** monitor and control thermostats, in-home displays, smart plugs, water heaters and appliances and reduce energy consumption.
3. **Industrial Control:** monitor, control, detect faults and minimize downtimes in every corner of the plant or factory.
4. **Commercial/Building Automation:** manage lighting, heating, cooling, air quality and security/access in commercial and office buildings.
5. **Consumer:** control lighting, safety and security as well as remotely control any number of in-home devices

- **Headquarters: San Jose, California, with R&D in Bangalore, India**
- **Capital Raised: $30+ million**
- **Investors: Intel Capital, New Venture Partners, Opus Capital, OVP Venture Partners, Sigma Partners, and Camp Ventures.**

EXECUTIVE TEAM

Greg Winner, *President & CEO*
Lewis Adams, *Chief Technology Officer*
Bernard Aboussouan, *VP, Marketing*
David Casey, *VP Worldwide Sales*
Thai Nguyen, *VP, Engineering*
Pankaj Vyas, *VP, Software & Systems*
Haike Dong, *VP, Operations*
Dennis Wittman, *Chief Financial Officer*

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PRODUCTS AND TECHNOLOGY

GainSpan provides a suite of easy to use, low power Wi-Fi products for the embedded systems designer. By focusing on the challenges faced by system designers, and the constraints of the host microcontrollers driving their systems, GainSpan offers distinct advantages over others in the market. With the use of a secondary "network" processor as part of the GainSpan architecture, a systems designer can marry any 8/16/32-bit microcontroller with the GainSpan solution. GainSpan's embedded Wi-Fi family allows customers to increase the value of their systems by simplifying the process and reducing the costs to add Wi-Fi.

Until recently Wi-Fi was not considered in many applications due to high power consumption that made it unsuitable for long lasting battery-operated devices. GainSpan has solved this problem. A high level of chip integration and power management techniques reduce power consumption without compromising Wi-Fi compatibility.

Low Power Wi-Fi offers significant advantages over other wireless technologies. The first of these is the obvious connectivity within existing WiFi networks in a given application space. In the current economic environment, Low Power Wi-Fis reuse of existing WiFi infrastructures offers a key cost savings over installation of other WSNs based on 802.15.4 or ZigBee.

Additionally, the built-in Internet Protocol connectivity enables much easier network deployment and management as well as the use of better known development and management tools.

GS 1011 SoC

At the heart of the GainSpan product family is the GS1011, a highly integrated ultra low power SoC (system-on-chip) that contains an 802.11b radio, media access controller (MAC), a baseband processor and an applications processor, on-chip flash memory and SRAM all in a single die and package. The solution also integrates the full IP network stack and 802.11i security for quick development and time to market applications. These features enable the GS1011 to be easily integrated into nearly any system.

GS 1011M Module

The GS1011 SoC is part of the GS1011M Wi-Fi module. The certified modules are fully contained solutions, incorporating both software and hardware, to simplify the design process. As a result, a simple serial interface from any 8-32bits host microcontroller is all that is needed to add Wi-Fi to nearly any product. The GS1011 module allows customers to focus on the design of the device. It enables designers to significantly reduce development time and bring products to market faster.

A wide variety of partner modules incorporating the GainSpan GS1011 are also available to accommodate a variety of needs.

Software

A key component of GainSpan's solution is its software suite. The suite includes both embedded software and serial to Wi-Fi software, which allows an external microcontroller to access a Wi-Fi network via a serial connection to the GS1011.

CERTIFICATION

GainSpan's 802.11b/g Sensor Reference design has received the Wi-Fi Alliance Wi-Fi CERTIFIED® seal of approval. The reference design is based on the GainSpan GS1011 SoC for wireless sensor networks. GainSpan is the first ultra low power Wi-Fi design to achieve certification for enterprise level security as well as personal security.

The 802.11b/g Sensor Reference design is also Wi-Fi CERTIFIED for Wi-Fi Protected Set-up (WPS). Wi-Fi Protected Set-up is the industry standard developed by the Wi-Fi Alliance that simplifies the process of setting up a secure Wi-Fi network. GainSpan firmware provides over the air firmware upgrades.

CUSTOMERS AND PARTNERS

GainSpan customers can leverage the global Wi-Fi infrastructure and devices and existing tools and knowledge investments to create a wide range of embedded applications. Several devices and module vendors offer solutions based on GainSpan's technology in each of the target markets. GainSpan is partnering with key industry participants and building a strong ecosystem. For more information, visit *www.GainSpan.com*.