

# SiGe “enables wireless multimedia®” for consumer electronic giants with innovative RF front end solutions

*Consumer electronics manufacturers take advantage of SiGe Semiconductor’s RF power amplifiers and front end modules to enable today’s high-quality voice, video and data transport applications*

## Fast facts Corporate profile

SiGe Semiconductor is an eminent global supplier of RF front end solutions that are “enabling wireless multimedia®”. SiGe Semiconductor pioneers the fabless operations model, advancing wireless connectivity through excellence in performance and cost. From its ISO 9001 certified operating centers in Ottawa, Hong Kong, and Boston, SiGe remains committed to delighting the top brands in consumer, commercial and industrial electronics.

## Why Ottawa

SiGe’s location in Ottawa’s talent-rich telecom heartland has helped fuel the company’s rapid growth. The Ottawa region is highly regarded for its wealth of high-speed analog and RF circuit engineers as well as the quality of graduates produced by the region’s universities. SiGe plans to continue leveraging its access to this unique pool of talent as the company expands its leadership position in consumer and commercial communications.

## Business advantage

As a fabless semiconductor company, SiGe provides end-to-end capability for the design, manufacture, delivery, and technical support and service to enable customers to get to market in the shortest time period. Partnerships with industry-leading fabrication, package, and test suppliers give SiGe the ability to reduce cycle times and lead times. As a result, SiGe easily meets high-volume product demands at a competitive price.

With end customers that include the leading brands in consumer electronics, SiGe Semiconductor is an eminent global supplier of radio frequency (RF) front end solutions that are “enabling wireless multimedia®”. As the world’s most successful silicon-based RF front end supplier, SiGe Semiconductor pioneers the fabless operations model, advancing wireless connectivity through excellence in performance and cost. From its ISO 9001 certified operating centers in Ottawa, Hong Kong, and Boston, SiGe remains committed to delighting the top brands in consumer, commercial and industrial electronics.



## **Canada's Creative Economy Capital**

Spanning the full range of consumer electronics, SiGe’s diverse and comprehensive product portfolio provides the performance, range, and reliability required by 802.11b/g/a and n Wi-Fi™, Bluetooth™, WiMAX and GPS systems. The company’s innovative utilization of silicon-based semiconductor technologies simplifies the integration of RF signal processing into mobile phones, gaming and home entertainment systems, residential and enterprise networks and computers as well as cellular infrastructure and “smart” utility networks. SiGe’s RF front end solutions replace specialty semiconductors such as gallium arsenide (GaAs), while driving functional integration, performance and physical footprint.

SiGe Semiconductor, founded in 1996 as SiGe Microsystems, was a spin-off from the National Research Council of Canada. In 2001 the company name changed to SiGe Semiconductor to more accurately reflect the company’s core competencies — RF IC design and manufacturing primarily using silicon germanium BiCMOS and HBT technologies. To date, SiGe has shipped more than 500 million components worldwide and is the market leader in RF power amplifiers and front end solutions for the Wi-Fi industry. The company has repeatedly more.

*SiGe has shipped more than 500 million components worldwide since its inception. The company leads the industry in the use of silicon-based technologies for RF power amplifiers and pioneers the fabless operations model for RF front end products.*

been recognized by Deloitte as one of the fastest-growing semiconductor companies in North America.

SiGe's products are predominantly sold to ODMs and OEMs in the Asia Pacific region — the center of today's consumer electronics industry, and home to leaders in electronics design, packaging, testing, and manufacturing. SiGe Semiconductor has successfully built a strong reputation in this geography for quality products, supply and customer support.

The company's growing array of integrated circuit and front end modules products includes:

- Power amplifiers and front end modules (FEMs) for 802.11a/b/g/n Wi-Fi™ and Bluetooth™ designed to optimize performance for computing, networking, home entertainment and mobile devices
- WiMAX™ power amplifiers and FEMs that meet global standards for high-performance broadband wireless
- Satellite navigation radio (GPS receivers) ICs that provide leading integration and power efficiency to support cellular, handheld and automotive navigation

In addition, during 2010 SiGe Semiconductor is introducing RF front end products in support of "smart energy" utility metering and a set of RF signal chain products for cellular base station and microwave backhaul transceivers.



## Why Ottawa

SiGe's location in Ottawa's talent-rich telecom heartland has helped fuel the company's rapid growth. The Ottawa region is highly regarded for its wealth of high-speed analog and RF circuit engineers as well as the quality of graduates produced by the region's universities. SiGe plans to continue leveraging its access to this unique pool of talent as the company expands its leadership position in consumer and commercial communications.

## Business advantage

As a fabless semiconductor company, SiGe provides end-to-end capability for the design, manufacture, delivery, and technical support and service to enable customers to get to market in the shortest time period. Partnerships with industry-leading fabrication, package, and test suppliers give SiGe the ability to reduce cycle times and lead times. As a result, SiGe easily meets high-volume product demands at a competitive price.

In 2009, SiGe had the largest share of the Wi-Fi RF solutions market with about 30 per cent share of the amplifier/front end module (PA/FEM) segment. Its Wi-Fi products are found in laptop and desktop computers, network access points, flat-panel televisions, video media players and gaming devices. SiGe's GPS solutions can be found in several of the leading brands of personal navigation devices (PNDs). With proven technologies and an expanding customer base, SiGe is well positioned to continue leading wireless markets.

One of the fastest growing semiconductor companies in North America, SiGe has achieved over 40 per cent growth rate in five of its last six fiscal years. The company has been recognized for its rapid growth in the Deloitte Fast 500, Wireless Fast 50, and Technology Fast 50 (New England) ratings.

## Future growth plans

According to CEO Sohail Khan, SiGe is focused on building a profitable company by providing value to customers, shareholders, and employees. Further, he says SiGe will take advantage of any opportunities to expand its footprint and portfolio.

## Contact information

SiGe Semiconductor Inc.

+1-613-820-9244

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

Go to [www.CreativeEconomyCapital.com](http://www.CreativeEconomyCapital.com)  
for more Ottawa tech success stories