

THE WALL STREET TRANSCRIPT

Connecting Market Leaders with Investors

IXYS Corporation (IXYS)



UZI SASSON, President and CFO of IXYS Corporation, is responsible for the company's financial management and operational efficiencies. He has worked at IXYS since 2004, initially serving as the company's CFO and Vice President of Finance. During his nearly 20-year tenure in the financial industry, Mr. Sasson served in various managerial positions in companies ranging from professional financial organizations to publicly traded companies.

SECTOR — SEMICONDUCTORS

TWST: Please give us a brief overview of IXYS and the company's growth objectives.

Mr. Sasson: Consider the fact that electricity usage in the United States is projected to grow twice as fast as committed resources over the next 10 years. Peak demand for electricity is forecasted to increase by almost 18% (135,000 MW) — enough energy to power more than 100 million homes on an average day. Meanwhile, committed resources to meet demand, including demand-response programs, are projected to increase by only roughly 8.5% (77,000 MW), according to statistics from the North American Electric Reliability Council. Obviously, a power gap persists, unless the world's citizens follow environmental directives for energy conservation, and technology companies find ways to improve power conversion efficiency, with lower financial and environmental costs. It is upon this second assertion that IXYS Corporation has found success.

Founded in Silicon Valley in 1983, IXYS has been developing technology-driven products to improve power conversion efficiency, generate clean energy, improve automation and provide technologies to the transportation, medical and telecom industries. Today we are a worldwide pioneer in the development of power semiconductors and high-voltage, integrated circuits (HVICs) necessary for reducing the world's dependence on fossil fuels. Much of our work surrounds converting power to usable

form — basically taking high-voltage, raw electricity through the input, control, switching and output processes to end up with low-voltage, refined electricity used in the power grid, most electronics and so forth. The entire power conversion process can be achieved solely using our products.

With a customer base of over 2,500 companies, we specialize in high-power semiconductors, providing power management from 100 watts all the way to the megawatt range. We don't provide cookie-cutter products for personal computers or cell phones; we are one of the main suppliers of high-power semiconductors — an approximate \$20 billion power market — to telecom power stations, servers, industrial applications, motor drives and alternative energy.

TWST: Would you provide an in-depth overview of your product portfolio?

Mr. Sasson: Sure. Currently we have over 5,000 products in our portfolio, making us one of the few pure-play power semiconductor companies in an industry dominated by commodity chip-makers. With 10 operating divisions, we have a broad product portfolio covering approximately 90% of the power spectrum — predominantly focused on high power. Our main product lines include power semiconductors for a broad array of applications, including renewable energy markets. We design markets optically isolated solid-state relays (OptoMOS®), mixed-signal custom ASICs and ASSP integrated

circuits (ICs) for the telecommunications, industrial, consumer and emerging flat-panel display markets. Through an August 2009 acquisition, we acquired new LED driver families, which complement IXYS' current product portfolio, while introducing new products in small-, middle- and large-display backlighting. We also acquired LCD display driver ICs incorporated in the smartphone handsets of leading cell phone manufacturers. We also have a division exclusively focused on radio frequency (RF) and microwave discrete semiconductor products, GaA products, driver ICs, wireless amplifier products, MMIC amplifiers and hybrid modules. The products are found in industrial RF applications, medical applications, military/aerospace and telecommunications.

TWST: What is your revenue breakdown by product, geography and market?

Mr. Sasson: Power products, including renewable energy, make up about 68% of our revenue. Integrated circuits make up about 24% of our revenue, and RF (radio frequency) and systems are about 8%. In terms of geography, North America encompasses 28% of our revenue, Asia provides 36% of our revenue, Europe and the Middle East is about 33%, and the rest of the world makes up about 3%. We are a very well-diversified organization. In terms of revenue by market, the industrial sector, which also incorporates alternative energy, makes up about 49% of our revenue. Communication and infrastructure is about 14% of our revenue. Medical runs about 12%; transportation is about 4%. Consumer products add about 13% and miscellaneous markets comprise about 8%.

TWST: What is the company's fastest-growing market?

Mr. Sasson: I would say that both industrial and medical markets offer ripe opportunities for IXYS. Requirements for industrial electronics equipment, especially in process control, are on the rise due to the need to better compete with the increasing number of production applications and stronger regulatory standards. The control electronics/industrial automation market is estimated to reach \$275.4 billion by the year 2013. We do a tremendous amount of business in this arena, supplying chips that control the power of robotic arms, automation and factory conveyor belts. Higher power equals better payback; conserving 10% of a megawatt means a savings of 100 kilowatts every second in a factory that operates 24 hours a day.

Without a doubt, however, IXYS' chips have a market that far exceeds pure industrial uses. We are a leader in ruggedized, high-power MOSFETs for telecom power stations; it has the largest market share in IGBTs used in portable heart defibrillators. The company is gaining market share in energy-efficient industrial lighting, and we are proud to say that we were one of the original chip suppliers for the first derivation of electric cars.

To briefly touch on some of these other markets, we should first consider our role in medical electronics. The economic and political forces resulting from the globally aging

population will continue to drive improvements in health care, including the cost/performance of medical devices. Improvements in power semiconductors will be important for reaching these goals. We received FDA approval for its IGBT in external defibrillators, making it the leading provider of chips for defibrillators made in North America. Our market-leading position is bolstered by regulatory hurdles that essentially act as a barrier to entry. In other words, these life-saving devices and their component parts must be FDA approved. At the same time, federal and state legislators continue to pass laws encouraging the presence of automated external defibrillators in a host of public places, including federal buildings, airplanes, hospitals and schools. All 50 states have passed some type of defibrillator act, encouraging their use and placement in public places. In addition, our power semis are being designed into advanced diagnostic systems — MRIs, X-rays, ultrasound, surgical lasers. The chips control the immediate high-voltage power demands of this equipment.

Looking at other markets, we see opportunities in industrial and consumer lighting, an area usurping far too much power. Consider street lighting, automotive or commercial real estate lighting. Look at display signage in airports, stadiums, banks, restaurants; recognize that many computers, laptops, televisions have need for backlighting. All of these put a strain on the power grid. But utilizing LED technology, these consumption issues can be mitigated. New lighting options have become more prevalent, and LED is leading the charge, as it offers efficiency and environmental sensitivity.

Let's also address the fact that our telecommunications system is rapidly evolving with wireless technologies, WiMAX, Wi-Fi, voice over IP, Skype, etc., further promulgated by the latest iPhones, iPads, cell phones, etc. No matter the application, every communication device runs on power. Today we are a leader in the design of high-performance, mixed-signal analog specifically designed for these technologies.

TWST: You are also involved in alternative energy. How important is that to your company?

Mr. Sasson: Alternative and renewable energy technologies are a strong growth area for us. Although our green products have garnered little media attention, they are being quickly adopted by our customers and we are penetrating new markets in this arena. And this drive toward renewable energy really stems from necessity, gaining independence from the world's oil addiction.

The first oil crisis of 1973 issued a wake-up call to international markets; today's soaring fuel prices and environmental demands prove stimulus enough for renewable energy production. Over the past 15 or 16 years, IXYS has been actively involved in the renewable energy industry, as solar panels and windmills popped up worldwide. Our main work product has focused outside the U.S., as this country proved to be a late-stage adopter of renewable energy sources.

TWST: Explain IXYS' involvement in wind energy.

Mr. Sasson: In almost every position in the supply chain for wind-generated electricity, there is a need for power semiconductors to efficiently translate the raw energy into clean energy, able to be used by the consumer. We were one of the first suppliers of power semiconductor chips to control the high-voltage conversion from wind power to the electric grid.

In 1995 IXYS started working with an Indian small-wind turbine supplier that had a 3MW wind farm project. By the end of 2007, the Indian turbine company supplied over 7,500 MW worldwide. We supplied power semiconductors to the company's first turbine and have been the Indian company's leading supplier ever since. We also supply chips to companies in Holland, Spain and other European locales, as well as technology-leading countries, including Japan.

In a very simple explanation: Wind turbines generate electricity in variable-voltage or variable-frequency AC since the wind can't be easily regulated to control the speed of a windmill. However, the electric utility grid is fixed voltage — fixed-frequency AC energy — so power conversion technology must be employed in order for the technology to be effective. Inverters serve as the gateway between renewable energy resources and the AC electrical grid. We supply phase control devices to customers

As portable devices pack greater functionality/features without increasing battery power, power management requirements have increased. These products require multiple supply rails, battery charging and a variety of power management capabilities, all of which are implemented to maximize battery life. At the end of the day, however, portable products have to be plugged into an AC outlet to juice up the battery, which in turn puts a strain on the U.S. electric grid.

To give a basic overview of the product, we build photovoltaic cells — monocrystalline, high-efficiency solar cells — that incorporate an enhanced light-trapping surface that have the potential to generate voltage necessary to power batteries in all types of applications. Manufactured with silicon-on-insulator process technology, a single chip could hold multiple solar cells in a series so that a wide variety of voltages is possible. With 24 solar cells on a single chip, the semiconductor chip gives off 12 volts when exposed to natural light — enough to power rechargeable/non-rechargeable batteries and battery systems in portable products, from electric tools to laptops, to cell phones, to smoke detectors, to toys. We are truly a pioneer in this industry, as no other company has a similar product on the market.

“As a company focused on energy efficiency and power conservation, IXYS can finally capitalize on evolving industry and societal trends. Worldwide focus on the environment, clean fuels and clean power collide with the burgeoning power demands of the latest electronics, ranging from portable electronics to medical devices.”

who use thyristor AC regulators to connect the output of the wind generator to the grid, and provide frequency synchronization between the generator (wind) and the fixed-grid frequency.

Some of our other products can be utilized in the wind turbine application, either as the masthead converter/inverter or the ground-based synchronization element. Our IGBT is basically a switch used to control electrical current and voltage. For the higher reliability of wind turbine systems, which are expensive to maintain, especially when located remotely or offshore, our high-reliability press pack technology is a natural solution to a green initiative.

TWST: What products does your company have in the solar market?

Mr. Sasson: There are so many solar capture products on the market now, but few focus on solar products that can replace or extend the lifetime of batteries — the highest cost of electricity. We introduced the first solar cell for charging portable batteries back in 2003, but it has been only in the past year that the technology and applications have gained momentum.

TWST: Does your company's involvement in the transportation market also qualify as green?

Mr. Sasson: Yes, we have been supplying chips to the hybrid transportation market for years, mainly focused on locomotives. Today electrified trains are gaining significant adoption — U.K., Italy, South Africa, Germany, even in Dubai. We have chips in all of these mass transit systems. Electrified trains run on 100-mile tracks, requiring substations/subsystems to control power along the way. Our chips are implemented in these substations.

Eventually we expect to see a strong rebound in electric cars. We have multiple products in the hybrid car market, ranging from ISOPlus™ Direct Copper Bond (DCB) isolated discrete and module packages to GigaMOS™ Trench Power MOSFETs. IXYS' history in electric automobiles dates back to the early 1990s, when General Motors launched the first electric car, EV1. The EV1 roadster was loaded with IXYS chips, making the electric vehicle a marvel of engineering. Despite meaningful pent-up marketplace interest in the car, GM never offered the EV1 for public sale because of its expense.

TWST: How important is R&D and new product development to the company?

Mr. Sasson: R&D and product development are the lifeblood of our organization, as customers seek us out for our innovative technologies. To remain on the cutting edge of technology, we continue to invest in R&D. As of Dec. 31, 2009, IXYS held over 150 issued patents, of which about 75% were issued in the U.S. and the rest were issued in international jurisdictions. The company's patents focus on four main product lines: power semiconductors, integrated circuits, RF power and systems, and renewable energy.

Importantly, we build technologies that have a life expectancy of anywhere between 15 to 20 years, a necessity for some of our customers involved in medical devices, automotive, assembly lines and other products that have a similarly long life expectancy. Consider the implications for a light-rail train system. To avoid problems, technological glitches and long traffic/service delays, the train manufacturer will implement high-durability, high-reliability, high-performance parts that stand the test of time. That is where we excel.

TWST: How do you see IXYS changing and evolving over the next several years?

Mr. Sasson: As a company focused on energy efficiency and power conservation, IXYS can finally capitalize on evolving industry and societal trends. Worldwide focus on the environment, clean fuels and clean power collide with the burgeoning power demands of the latest electronics, ranging from portable electronics to medical devices.

Likely to benefit from positive green trends, we are also well diversified within a niche industry — power. Such diversification in products, applications, geography and people allowed us to survive the recession and gain market share in select industries, while many of our competitors retrenched and faltered. Today we are pleased to have over 2,500 select customers, with some of the

top names in medical, power, telecom and transportation stalwarts, to which we supply product.

I believe customers come to us for quality and technological advantage. Certainly, we do not control the power industry, as much bigger general semiconductor companies battle for market dominance. However, we have solidified a reputation for quality, design and innovation in power. For over 26 years, we have been dedicated to the singular focus of power conversion efficiency, with a team of engineers worldwide designing the latest technologies to meet the ever-evolving needs of our customers.

Throughout the entire organization, we continue to invest in new technologies, ranging from new solar cells to new HVICs (high-voltage ICs). It is a great strategic position, offering energy conservation products that simultaneously boost IXYS' leadership position in the power semi industry. Expect the company to consider further acquisitions and continue internal R&D aimed at complementing our strengths in power, as well as expanding its market opportunity into emerging high-growth markets, including energy management and power quality, and of course renewable energy.

TWST: Thank you. (LMR)

UZI SASSON
 President & CFO
 IXYS Corporation
 1590 Buckeye Drive
 Milpitas, CA 95035
 (408) 457-9000
 (408) 416-0222 — FAX
 www.ixys.com