

AVX

A Kyocera Group Company




CONTROLLING THE POWER OF TOMORROW

2011 Annual Report

THE POWER OF STRATEGIC FORESIGHT

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AVX
A KYOCERA GROUP COMPANY

More than 30 years ago, a major business publication applauded AVX for its strategic foresight in understanding the market, anticipating essential customer needs and delivering reliable, cost-effective products. The article proclaimed AVX the world's indisputable leading capacitor manufacturer. Back then, AVX's main product was a multilayer ceramic capacitor. Almost all sales were domestic, and the Asia sales office was barely six months old.

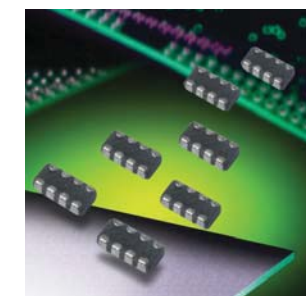


If you had asked people in our industry at that time what a "tomorrow" three decades later would bring, answers would have varied widely. Few would have been correct. This report looks at the many ways AVX is delivering what our customers need today, while looking beyond the horizon to imagine and create the products they'll need to control the power of tomorrow.

It will take the vision, skill and experience exemplified by AVX to develop a true passive and interconnect foundation for technologies that will enable tomorrow's designers to create products that exist only in today's imagination. Now 10 years into the 21st century, we are seeing exponential increases in complexity of the world in which we live and the electronics needed to power it.

Today, AVX offers the widest selection of **Multilayer Ceramic Capacitors (MLCC)** in the industry, with a total product catalog encompassing tens of thousands of unique products.

AVX MLCC arrays are improving system performance, while reducing circuit size and cost. The arrays shrink circuit footprints and improve reliability, while improving control of Electro-Magnetic



Interference (EMI) and overall manufacturing speed.

Capacitor Arrays have further evolved into integrated LC filters, which control both inductance and capacitance. A standard FeedThru Filter value range exists, allowing broadband filtering of EMI noise using 80% less board area. Common applications for Capacitor Arrays and FeedThru Filters include LCD displays, PDA/notebooks and hand-held electronics.

Ten years ago our customers – and we, in turn – were struggling with the goal of **miniaturization** – packaging as much power and control in the smallest possible space; shrinking cell phones, reducing the size of TV electronics and minimizing the size of medical devices for easier implantation. As AVX engineers worked tirelessly to create smaller packages to control the power of tomorrow's smaller devices, they had already started to think in a different direction: **integration**.

We're now seeing the results of bundling more power, increased capability and more functions into one package. Phones are now computers, TVs and game consoles. TVs are high definition flat screens with two or more HDMI connections; each HDMI cable carrying eight high speed data lines requiring control and filtering. In addition, the rush of tablet computers and handhelds into the market place – each bringing its own set of apps has led to a "data frenzy" demanding increasingly faster electronics and ever-increasing electronic storage.

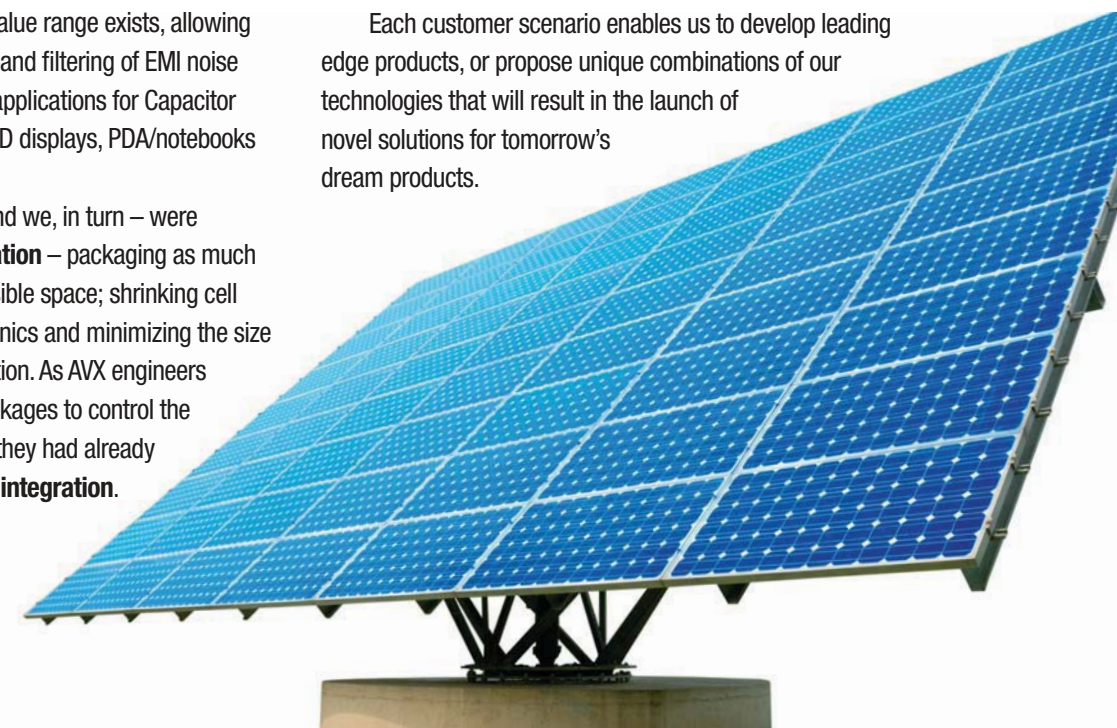
AVX Advanced Products address the drive to miniaturize and integrate by combining multiple functions into one component or in finding new ways to control the power driving our lives. Today, Advanced Products are among AVX's biggest sellers.

Many AVX products didn't even exist 30 years ago, because the products and technologies they help manage didn't exist. AVX built its position at the top of its industry by delivering what's essential for customers today, while listening carefully about what they envision for the future.

Our engineers engage in constant dialog with our customers to chart their future direction:

- What kinds of power will customers need to control?
- How will they try to harness power from the sun or wind?
- How will they want to transform it, store it, and transmit it?
- Will they need to protect their power sources or data streams from the proliferation of other power and RF signals?

Each customer scenario enables us to develop leading edge products, or propose unique combinations of our technologies that will result in the launch of novel solutions for tomorrow's dream products.



A LETTER FROM THE PRESIDENT



AVX Honored as Supplier of the Year

Continental Automotive, Europe's second largest automotive supplier, named AVX its **2009 Plastic-Mechatronics Supplier of the Year**. Continental supplies everything from driver assistance systems and sensors to instrumentation and infotainment solutions. Announcing the honor, Continental cited AVX's focus on quality, customer service and commercial competitiveness. AVX Vice President of Sales Pete Venuto said that while "AVX is well known as a leading supplier of passive electronic technology solutions, this award clearly demonstrates our equally compelling capability in interconnect and mechatronic product technologies."

area is also due to global expansion in renewable energy sources and energy harvesting.

We are optimistic about developments in the **Automotive** segment. AVX is adding capacity to serve this expanding market, particularly for Interconnect Products. New Hybrid or Electrical Drive vehicles need additional products associated with powering the vehicles, as well as controlling multiple levels of voltages and increasing power conversion efficiency. As the momentum grows, our focus on this market grows as well.

We see a pick up in **Commercial Avionics** electronics due to: 1) expanding electronic applications in each aircraft; and 2) increased production of aircraft.

In **Mobile Communications**, smartphones will continue to gain a share of all cell phones. Smartphones will consume more AVX components as they continue to increase functionality, such as acting as a WiFi hot spot and incorporating touch screens. The trend to 3G and 4G connectivity has spurred new applications to provide seamless coverage, switching between various frequency bands and improving high-speed data throughput.

Worldwide **Tablet** shipments are expected to triple to 60 million units in the calendar year 2011. These popular devices need more AVX components due to: 1) extended battery life; 2) enhanced screen capabilities; and 3) additional power filtering. Additionally, device sellers continue to introduce new products in this rapidly growing market.

Television screens are evolving from plasma and LCD to LED and 3D. User interface will become a main consumer priority going forward, replacing picture quality as the main television selling point. Interactive media, such as the Internet and gaming, will increase the need for more powerful AVX RF and Digital electronic devices with each new TV. Rising global demand, led by developing nations, is expected to increase overall unit volumes for AVX.

Inventories/Raw Material

Production utilization in our Tantalum component business remained high throughout the year, near maximum output. AVX gained market share in this valuable product line and will continue to gain market share due to new customers and the

investments we have made in material to support the product line as the availability of this material became a concern for the industry.

Taking a look at operations, our inventories - particularly our investment in Raw Materials - increased by \$139.4 million during the year. Our exceptional financial balance sheet strength has allowed us to make investments in critical resources to ensure adequate production material availability.

Summary

Our strategic vision is clear, our order books are strong and our financial position is solid with \$1 billion in Cash and Investment Securities, and no debt.

At AVX, we look forward to another year of successfully meeting our customers' current demands, while searching for better ways to control tomorrow's power -- no matter what form it takes. We will face challenges, such as a weaker dollar along with higher metal and other material costs, which will put some pressure on margins. However, our financial strength and proactive strategy will help us meet these challenges.

We look forward to our shareholders joining us for the annual meeting, scheduled for 10:00 a.m. EST, July 20, 2011, in Greenville, South Carolina.

John S. Gilbertson
Chief Executive Officer and President
AVX Corporation



Results Summary

AVX sales for the year increased to \$1.7 billion with net income of \$244 million or 15% of sales. From both a sales and earnings standpoint, our year was strong as the global economy continued to show steady growth that started half way through the prior year.

Our gross profit margins increased continually during the year, reflecting our focus on value-added products with higher margins and good operating leverage on increased sales. The cost reduction actions completed in the 2009 and 2010 fiscal years provided a lower cost basis that paid off well in 2011.

Late in this fiscal year, our stock hit a two-year high. Plus, our Board increased shareholder return by raising the quarterly dividend by 22%, to an annual rate of 22 cents per common share.

Anticipating Change Ahead of the Curve

If we are to secure the long-term success of AVX, we must look beyond the immediate horizon. We must continue to manufacture products for today's customers' needs in a timely, cost-effective manner, but also must look ahead to tomorrow. We must be ready for our customers' needs as electronics and components move at an expanding rate.

We as a company must focus on "Controlling the Power of Tomorrow." It is this forward-looking customer focus that has

repeatedly helped AVX weather economic downturns, while growing profitably.

AVX moved ahead of the curve when the economy started to slow several years ago and we set about adjusting overhead and reducing manufacturing costs, leaving AVX positioned to take advantage of opportunities as the economy recovered.

We kept our global manufacturing plants operating during the downturn, using the time to expand manufacturing capabilities of our facilities for additional products. Our manufacturing capabilities are now more flexible and more consolidated across the world. Our plants can now produce a wider range of products, adapting quickly to the needs of the market and our customers. We must continue with this effort and push the pace of AVX product innovation. AVX tripled its new product rollout this year compared to the previous year. Yet in the future, this will not be sufficient.

Market Overview/Trends

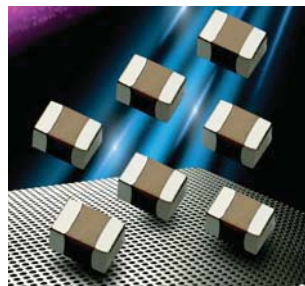
Simply stated: This year has been good across all markets for AVX.

During the downturn, many customers reduced inventory, then spent this year replenishing their stocks as the economy improved. We were quick to respond to the needs of our recovering customers. Advanced Products rebounded strongly, especially with regard to **Power** film products. Strength in this

There is no better example of AVX's growing role in controlling the power of tomorrow than the automobile.

As the motorized vehicle evolved from a largely mechanical entity to one where electronics comprise the majority of the content, AVX parts increased in importance to play a key role in today's cars, trucks and buses.

Thirty years ago, air conditioning and cruise control were found only in upscale models. EMI in vehicles was not considered a big problem. Now, virtually every model comes equipped with A/C and cruise control, not to mention an array of other electronically controlled embellishments. Refinements



TransGuard protects against transient voltages, while filtering EMI from outside and inside the car.

and improvements continue in the "old" cruise control. Some higher-end models are now equipped with "adaptive" cruise control. Once a driver sets the speed, his car monitors traffic in front of him. If the leading car slows, the electronics sense it and slows the driver's car. When traffic speed picks up, the cruise control slowly resumes

the selected speed without any driver interaction.

Today, even some entry-level car models come equipped with GPS and hands-free systems. With the shift in global auto purchasing, where China's market is outgrowing the U.S. domestic market, AVX's worldwide reach becomes paramount. Many purchases in these new markets will be lower entry-level models, yet will require considerable electronic content in body control modules, communications and sensor circuits.

The need to control power, connect systems and shield from EMI will continue to grow due to increased demand for cars and proliferating electronic content. By 2015 every U.S. car will be required to have a backup-assist system. Another example: An internet-connected rearview mirror system for emergency communications is being expanded from one automaker and will



become available for any model car up to 10 years old. This development opens up a new market of 55 million cars. Increasingly, cars are talking to other electronic devices. A downloadable mobile "app" connects a smartphone to your car, enabling remote start and other in-car applications.

CONTROLLING THE POWER OF **AUTOMOBILES**



As the world becomes more energy conscious, entirely new systems for automotive propulsion are appearing.



(EVs) are appearing. Current EVs are primarily targeted for short haul journeys. The growing infrastructure of charging stations being planned throughout the country will quickly extend EV's range. Both power methods significantly cut emissions and reduce dependence on fossil fuel.

The Hybrid Electric Vehicle (HEV) is replacing the traditional internal combustion engine (ICE) with electric drive trains that can assist the engine. Totally Electric Vehicles

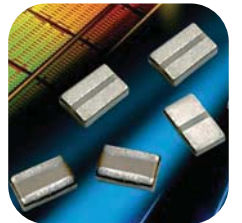
Our customers presented AVX with a world of different opportunities that required custom solutions to meet the challenge of controlling power in tomorrow's Electric Vehicles. For example, currently parts are designed to function up to 150°C for under-hood applications, but AVX is working on even higher temperature ratings for use in power inverter electronics for Hybrids and EV drivetrains.



AVX is currently collaborating with vehicle manufacturers on Hybrid and EV systems that will roll out to the marketplace as soon as 2013 and beyond. A tomorrow may come – sooner than you think – when not only family cars are EVs, but also school buses, package delivery trucks and some of the world's largest retailers delivery fleets will be totally electric.

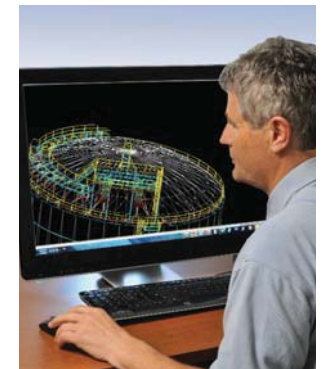


Even today, in many metropolitan areas, hybrid bus fleets are the norm. Transmission systems, whose reliability depends on AVX power capacitors, rack up many millions of fleet hours. In addition to major auto manufacturers, AVX is working with all leading suppliers of electrical systems – from in-car entertainment to EV charging infrastructure – to usher in a new age of electric propulsion.



Developing tomorrow's EV is reminiscent of the early "horseless carriage" era. A world of ideas is explored, each taking a unique approach. Vehicle design varies. Every new engine compartment is different.

Added to the spectrum of designs, auto engineers and their AVX counterparts also see the need for decreasing time-to-market. Engineers need to explore new design concepts in real time as systems constantly evolve. AVX speeds the engineering process with mechanical 3D CAD designs and electronic software simulation programs. Vehicle engineers can consider far more possibilities over a wider range of programs than ever before. They can "drop in" virtual parts to virtual engine blocks and test ideas before anything is turned into metal or plastic.



Introducing a low noise, high capacitance MLCC designed specifically for audio frequency applications.

AVX expanded its already broad family of multilayer ceramic capacitors to unveil the new QM Series. It significantly reduces noise characteristics, while providing high capacitance with a low working voltage. These characteristics make it ideal for mobile phone, hard disk drive and LCD panel driver circuit applications. In addition, the QLLM Series is well suited for use as a low pass filter for audio amplifier output or as a coupling capacitor.



CONTROLLING THE POWER OF STAYING CONNECTED



Controlling the Power for Tomorrow's Smartphones

Today's smartphones are miniature computers containing ultra-fast 1GHz processors for multitasking and better video performance. They can shoot high definition video or participate in a videoconference. They take photos, send email, communicate through social

media, read a bar code, pay a bill electronically, keep a calendar synced with other devices and provide music or ebooks for pleasure. These phones can function on several different frequency bands, enabling the phones to work on different networks and in different parts of the world.

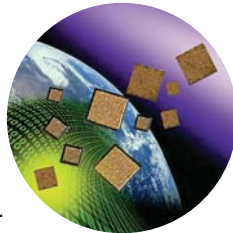
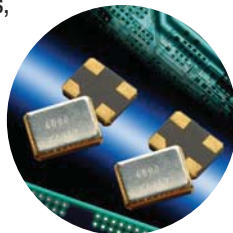
AVX is in the middle of all this with its **Accu-P®** thin-film capacitor technology. With Accu-P's enhanced RF handling capability, ultra-small sizes availability and

tight capacitance tolerances, smartphone makers can use capacitors to fine tune antennas or change the antenna bandwidth electronically. Phones can be both smaller and have better antennas.

Controlling Tomorrow's Power of Finding Your Way

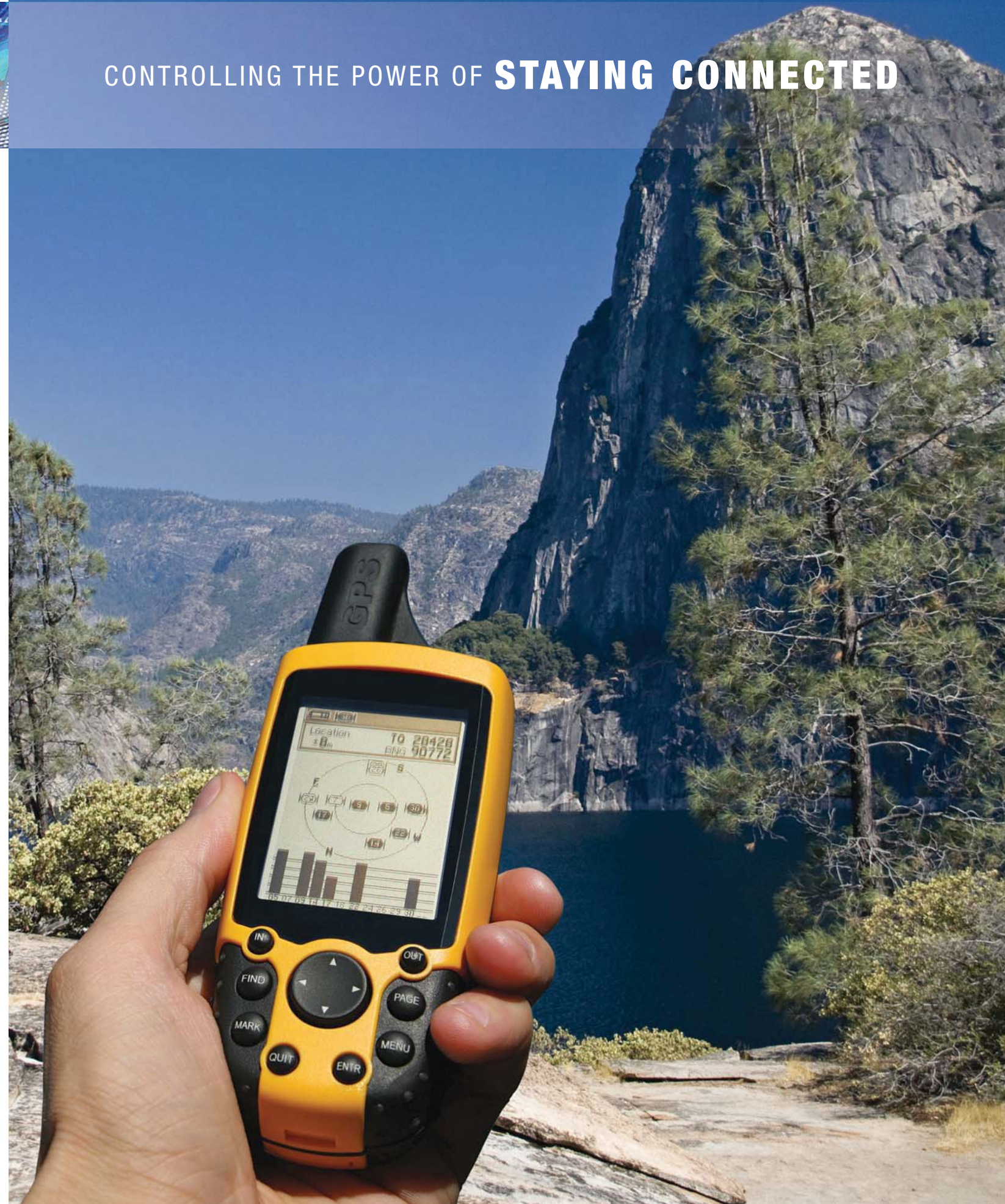
Smartphones are just one of many multi-function consumer devices. One technology consultant predicts that by the end of this year, 75% of these smartphones, cars, handheld devices and even watches will include GPS offering directions and landmark identification.

Work is already underway on tomorrow's GPS-III system – supported by a whole new generation of satellites. AVX will play a role in controlling the power for ground and space components of this high resolution positioning satellite system. To meet the processing speed required for this space system, AVX employed **BestCap®** supercapacitor with its unique proton polymer membrane.



Exceptional Sales Performance Award Goes to AVX

Digi-Key, one of the fastest growing electronic component distributors in the world, tapped AVX for its 2010 Exceptional Sales Performance Award thanks to increased sales and "exemplary" business interactions. AVX Vice President of Sales Pete Venuto noted that the honor "demonstrates AVX's dedication to our customers and, specifically, our distribution partner of more than eight years."



CONTROLLING THE POWER OF LIGHT AND DEFENSE



AVX expertise and innovations are a key in bringing more energy-efficient light and state-of-the-art defense capabilities to the world.

LED - The Power of Tomorrow's Light

AVX parts are working to connect and control the energy-efficient and increasingly popular Light Emitting Diodes (LEDs).



Small, yet powerful, LEDs are predicted to save 70% in cost over their life compared to existing lightbulb technology. LEDs have been around for years, but only recently have significant advances in light output made LEDs economical to

produce and operate. The latter part of 2011 will see the largest commercialization of new solid state lighting fixtures based on the new High-Bright (HB) LEDs.

Many of today's flat-screen TVs are using LEDs (rather than fluorescent CCFL) for so-called backlighting. Benefits include thinner panels, reduced energy consumption, better contrast and more brightness, greater color range, quicker response to changes in scene and more accurate image rendering. AVX parts are used to control the power for the highly complex output needed for these TVs, with sales of nearly 80 million worldwide last year.

Controlling Power for Tomorrow's Defense

There are few market sectors where cutting-edge performance, reliability, size and power consumption intersect in importance as in Defense Electronics.

For example, tomorrow's training simulators will use so-called "synthetic instruments." The concept involves using screens to emulate standard rack mount



instruments but in a programmable configuration. The modules are designed to be usable in different measurement scenarios, increasing the unit's flexibility and lifespan.

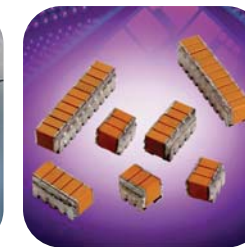
To succeed, these and other more complex systems must exhibit higher functionality, improved operational readiness across many scenarios with small size and, ideally, improved power consumption characteristics.

Modular sub-system design approaches are used to meet these goals,

using programmable, configurable and redundant circuitry. These design and system trends naturally lend themselves to AVX products that offer both power and signal solutions to satisfy complex design requirements.

Several examples of AVX products put to use by engineers and designers in this area:

• **CapGuard®** and integrated functionality components provide Transient Voltage suppression and broadband EMC filtering in a single, miniature package. CapGuards can save the designer



more than 50% of the board area, compared to the closest competing solution.

• **TurboCap®**. Switch Mode Power Supply Capacitors, allow power

conversion to occur more efficiently in smaller, lighter packages that are capable of producing a higher quality power outlet.

• **High-power, low-loss RF capacitors and couplers** allow Transceivers and RF control electronics to efficiently utilize power and transmit signals over a small portion of the RF spectrum, utilizing frequency bands more efficiently.

CONTROLLING THE POWER OF TOMORROW'S CONNECTIONS



The ability to see the future, powered AVX to industry leadership 30 years ago, a role that we continue to hold today – and will tomorrow.

A New Connection for Tomorrow's Power

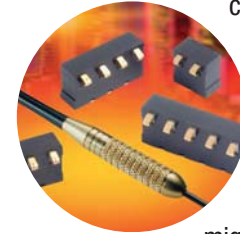
Sometimes the simplest things take the longest to change. Take the act of permanently connecting a wire to a board. Crimping, soldering, or using a screw are the traditional options used since experiments with electricity began in the 1700s.

AVX is changing all that with the **Poke Home Wire-to-Board Connector 9276 Series**. Some 70%-80% of today's products have discrete wires that need to be connected. Using the Poke Home Wire-to-Board Connector, all an installer needs is a wire stripper. Just strip the coating and insert the exposed wire into the connector. The connector is highly versatile, accepting solid and stranded wires ranging from 10 to 24 gauge, a high force, beryllium-copper spring holds the wire securely in place. The connection is fast and strong.

This AVX connector breakthrough serves industrial and consumer markets – from electronic/computer component assembly to industrial controls and Solid State Lighting (SSL). Eventually, the AVX **Wire-Board Poke Home Connector** will be widely available from wholesale suppliers and consumer hardware stores.

Soon to reach the market is the AVX **Wire-to-Wire Poke Home Connector**. Using the same simple approach as the Wire-to-Board Connector, Wire-to-Wire enables fast, strong connection between wires. Push button activation makes inserting the wire easy, while the high force beryllium-copper spring offers connection reliability and strain relief.

The Wire-to-Wire Poke Home will be available for the traditional 1:1 wire connection, as well as branching or shorting versions to connect one lead to several wires.



Engineering Breakthroughs for Tomorrow

From complex multi-functional solutions that help link GPS satellites with smartphones to a better method of wire connection, AVX serves today's needs while preparing for controlling tomorrow's power.

If you want a realistic picture of what our future might look like, don't talk to one of the so-called futurists. It's better to listen to our sales engineers, because they are talking with customers about their vision of the future. Meet our design engineers, because they are seeking solutions and refinements that may not appear in products for half a decade or more. It is in our conversations with customers and in our labs that the plans for controlling tomorrow's power are born. The ability to see the future, powered AVX to industry leadership 30 years ago, a role that we continue to hold today – and will tomorrow.





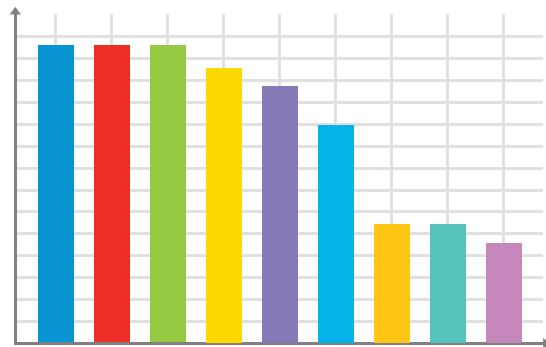
WORLDWIDE MANUFACTURING LOCATIONS

- 01 Sun Valley, California
- 02 Colorado Springs, Colorado
- 03 Juarez, Mexico
- 04 San Salvador, El Salvador
- 05 Olean, New York
- 06 Huntington Station, New York
- 07 Biddeford, Maine
- 08 Conway, South Carolina
- 09 Myrtle Beach, South Carolina
- 10 Jacksonville, Florida
- 11 Coleraine, Northern Ireland
- 12 Saint Apollinaire, France
- 13 Betzdorf, Germany
- 14 Lanskroun, Czech Republic
- 15 Uherske Hradiste, Czech Republic
- 16 Jerusalem, Israel
- 17 Penang, Malaysia
- 18 Tianjin, China

AVX Sales Channels (OEM 49%, Distribution 40%, EMS 11%)

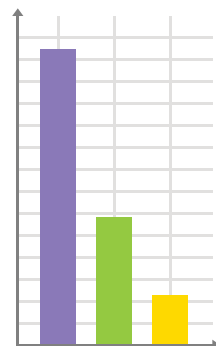
Customer Segments

- Telecom 15%
- Industrial 15%
- Automotive 15%
- Wireless 14%
- Computers 13%
- Consumer 11%
- Medical 6%
- Networking 6%
- Defense 5%



Product Categories

- Passive Components 63%
 - Advanced Products 25%
 - Tantalum 25%
 - Ceramics 13%
- Kyocera Resale 27%
- AVX and KEC Resale Connectors 10%



Board of Directors

- John S. Gilbertson⁴
Chairman of the Board, AVX Corporation
- Kazuo Inamori⁴
Chairman Emeritus of the Board
Kyocera Corporation
- Donald B. Christiansen^{1,5}
Retired
- David DeCenzo^{1,3,5}
President, Coastal Carolina University
- Kensuke Itoh^{2,3,4}
Kyocera Corporation
- Makoto Kawamura^{2,3,4}
Kyocera Corporation
- Tetsuo Kuba^{2,3,4}
Kyocera Corporation
- Rodney Lanthorne⁴
Kyocera Corporation
- Tatsumi Maeda
Kyocera Corporation
- Joseph Stach^{1,2,3,5}
Retired

Corporate Officers

- John S. Gilbertson
Chief Executive Officer and President
- C. Marshall Jackson
Executive Vice President of Sales
and Marketing
- Peter Venuto
Vice President of Sales
- Carl Eggerding
Vice President, Chief Technology Officer
- Kurt Cummings
Vice President, Chief Financial Officer,
Treasurer and Secretary
- Keith Thomas
Vice President, President of Kyocera
Electronic Devices
- Peter Collis
Vice President of Tantalum Products
- John Sarvis
Vice President of Ceramic Products
- John Lawing
Vice President of Advanced Products
- Kathleen Kelly
Vice President of Human Resources

Stock Exchange

AVX's common stock is traded on the New York Stock Exchange (symbol: AVX).

Stock Transfer Agent and Registrar

The American Stock Transfer and Trust Company
1-800-937-5449 (Shareholders Services)
www.amstock.com

Written shareholder correspondence and requests for transfers should be sent to:

The American Stock Transfer and Trust Company
59 Maiden Lane, Plaza Level
New York, New York 10038

Investor Questions

Investment questions from security analysts, portfolio managers and shareholders about AVX, and requests for a copy of AVX's Annual Report on Form 10-K for the fiscal year ended March 31, 2011, filed with the Securities and Exchange Commission, should be directed to:

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1 Audit Committee
2 Compensation Committee
3 Equity Compensation Committee
4 Executive Committee
5 Special Advisory Committee



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