

YOU DREAM WE TEST.

Keysight Technologies: Accelerating innovation to connect and secure the world.

A letter to our customers from Keysight President and CEO Ron Nersesian:

YOU ARE THE

World's Visionaries AND Innovators



You are the world's visionaries and innovators. You achieve breakthroughs that change lives, secure the world, and connect people across the globe. Whether covering the far reaches of the earth with wideband satellite communications, driving data rates higher in 5th generation (5G) and beyond, ensuring reliable Internet of Things (IoT) devices, realizing new levels of cloud computing, or enabling connected cars, it is your contributions that continue to improve the world.

At Keysight, we are proud to partner with you every step of the way. We are driven to deliver breakthrough solutions and trusted insights in electronic design, test, manufacturing, and optimization. We strive to help you overcome barriers to innovation and transform your development processes, so you can be first and best in your market.

How do we do it? From the earliest glimmers of new technology waves, we partner with you to understand your challenges, your needs, and your timeframe to be first to market. We then harness our ongoing leadership in standards bodies, our industry-focused technology research, and our deep measurement expertise to provide you with early-market solutions that evolve as you evolve.

We go well beyond the industry's highest precision test products to integrated software and services that anticipate your challenges and streamline your processes. Keysight's solutions optimize networks, integrate workflows, and validate tomorrow's technologies with unprecedented performance backed by our global network of experts.

Our entire company is tuned to enable your success. Our **Keysight Leadership Model**, KLM, is our philosophy and operating model that permeates every aspect of what we do. We relentlessly seek market insights and invest in research and development to ensure we deliver what you need when you need it. We drive rigorous operational discipline to meet the highest quality and efficiency standards. And we foster a company culture of uncompromising integrity, high performance, speed, and social responsibility. Around the world and 12,000-people strong, we're ready to help you change it.

Thank you for trusting us with your innovations. We look forward to a continued and fruitful collaboration.

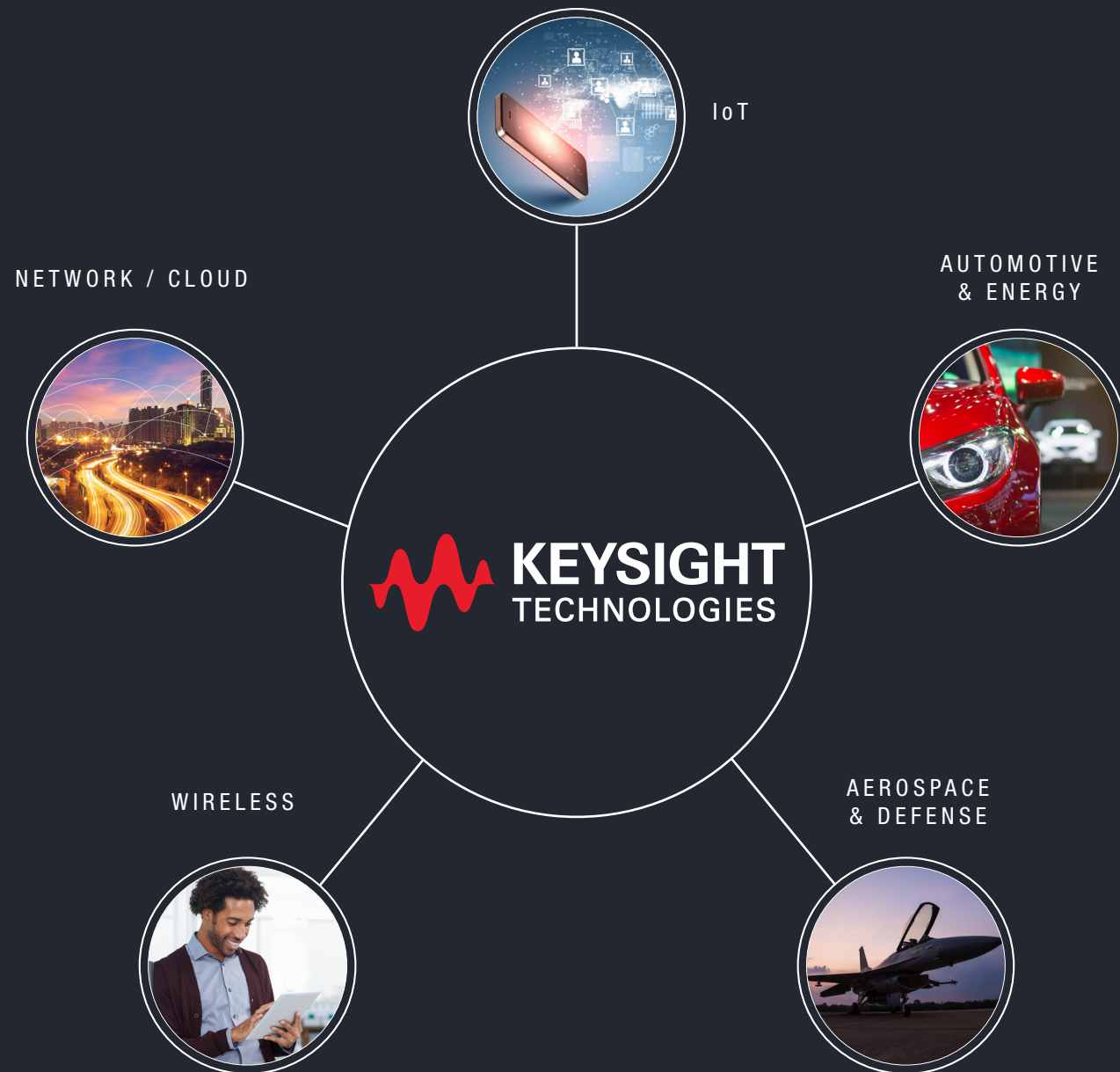
Best regards,

Ron Nersesian | President and Chief Executive Officer

Keysight at-a-Glance

Santa Rosa, CA Global Headquarters	100+ Countries Customer Locations	US, Europe, Asia Pacific Manufacturing and R&D Locations	1700+ US and Foreign Patents Issued or Pending
24 of the top 25 Technology Companies use Keysight	78 of the Fortune 100 are Keysight Customers	25 of the top 25 Telecom Operators / Service Providers use Keysight	

INNOVATE, TRANSFORM, AND Win with Keysight



INNOVATE



Push products to new heights of excellence with high-performance, high-integrity design, test, and optimization solutions backed by deep expertise in next-generation communications and electronics standards.

TRANSFORM



Reinvent your innovation processes with seamless workflows, deeper insights, expert consulting, and comprehensive services that help you save time and money, so you can focus on what you do best.

WIN



Get a competitive edge by partnering with the global leader who will work side-by-side with you and your team to help you innovate to win in your market and make a difference in the world.

Whether you seek to overcome barriers to innovation, transform your development processes, or simply be first and best in your market, Keysight's solutions optimize networks, integrate workflows, and validate tomorrow's technologies with unprecedented performance backed by decades of research and expertise.



5G Communications

5G opens doors to exciting new possibilities as networks need to deliver faster and more reliable communications. Superfast broadband wireless access, faster video viewing, autonomous driving, and billions of devices connected to the internet introduced by IoT, increase the complexity of 5G-ready product development.

Keysight is committed to your 5G readiness. **We provide end-to-end Layer 1-7 test and precision measurement solutions** to de-risk 5G development and enhance 5G network operations. As an active member of 3GPP and other wireless standards bodies, forums, and consortia, **we help you ensure the innovations you create meet the latest cellular standards.** We also design our instruments to be future-proof to help you keep up with changing technologies and stay on the leading edge.



Aerospace & Defense

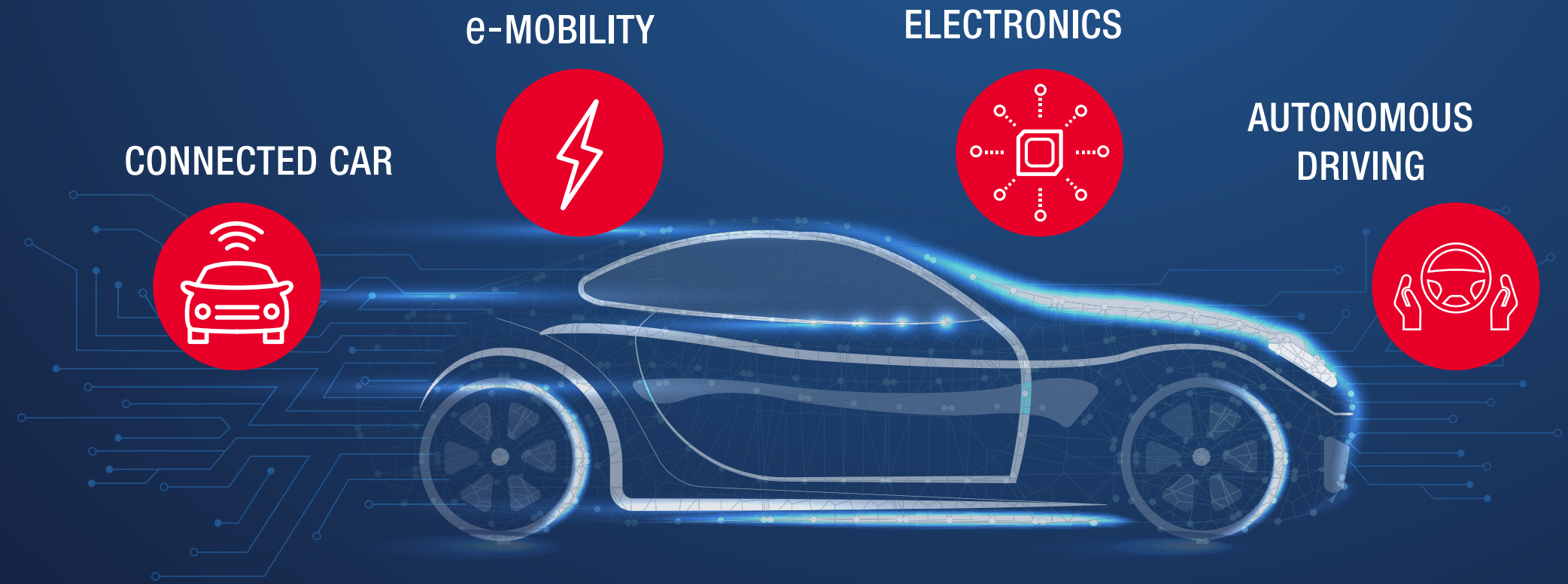
Aerospace and defense (A&D) is the backbone of modern commercial innovation, and vice versa. The Internet, wireless communications, satellites, space, navigation, and electrification all evolved from A&D. **Pushing the boundaries of technical limitations** requires a combination of in-depth knowledge and imagination to explore new possibilities.

We help **fuel leading-edge technology innovations** in A&D that enable commercial applications, which in turn open new areas of innovation in A&D. And our services such as Extended Support help ensure you have available parts for repair and calibration procedures for the duration of your program.

Automotive & Energy

The automotive industry is accelerating its electronic technology revolution and fusing with the clean energy ecosystem. By 2020, 90% of cars will be connected and by 2030, 30% will be electric. With the rapid advances in **e-mobility, autonomous driving, connected cars, and automotive electronics**, the capabilities we marvel at today may seem basic in just a few years. Successfully combining so many diverse and innovative breakthroughs is not for the faint of heart, but the automotive industry is up to the challenge.

Century-old manufacturers are reinventing themselves as centers of high-technology integration, and new companies emerge on the scene every day. **We empower automotive industry designers and manufacturers with the latest innovations in design and test solutions to help create high-quality and high-performance products while mitigating safety risks across the entire automotive lifecycle.** Our broad range of services include a full EMC Test Lab, utilization and health monitoring of your test equipment, and consulting services to help you minimize risk in this rapidly changing industry.



Internet of Things (IoT)

The Internet of Things changes everything. Devices need to be more energy efficient. Access points must support many more devices. Wireless communication, via both cellular-IoT and wireless standards, must be secure and reliable in real-world deployments—even in remote and hard to reach locations. Networks must be able to handle the load of exponential traffic increases. The entire IoT system must be stress-tested and secured. With Keysight's IoT test solutions spanning the network stack: from physical-layer signal integrity to application-layer load testing and security, we can help you build an Internet of Things that can scale. When it comes to manufacturing your IoT devices, our Test Asset Optimization services can help you dramatically decrease CapEx and OpEx with real-time, actionable utilization and health information.



Healthcare IoT



Industrial IoT



Smart City



IoT Wearables



Smart Home

Data Center Infrastructure

Data center infrastructure constantly evolves. Emerging technologies such as 5G, AI, virtual reality (VR), IoT, and autonomous vehicles generate explosive amounts of data in the network and create new computing and performance demands in the data center.

We offer the widest array of data center test solutions across all network layers, from physical Layer 1 test to full network test of Layers 2–7 including software-defined networking (SDN)/ network functions virtualization (NFV) validation, and traffic loading. We accelerate data center infrastructure innovations so that you can focus on the fast deployment of new services.

“Keysight’s test solutions enabled us to be first-to-market with our 400GE transceivers using PAM4 for data center applications.”

—VP OF ENGINEERING, OPTICAL TRANSCEIVER MANUFACTURER



Design & Automation

Engineering leaders know that every step in the path to new electronic product development is crucial—from design and simulation to verification and manufacturing. Unfortunately, measurement results from one step don't seamlessly transition to the next. Test engineers spend hours correlating measurements from their design teams. Software engineers write workarounds because their hardware and software don't natively talk to each other. Most organizations use standalone products for design, test, measurement, and monitoring. **This siloed structure creates disconnected and inefficient workflows and is a major cause of frustration.**

Integrating **design and automation software** throughout a product development workflow increases efficiency by accelerating routine tasks. If that design and automation software is on a common platform, it eliminates the silos between design, test, and manufacturing, accelerating time to market. **PathWave from Keysight is a systems engineering platform that connects design and test, providing common data models and open standards, which accelerate product development lifecycles.**

PATHWAVE



Network

The directive for many IT departments is to be part of the business innovation process, but the average IT pro spends more than half their day trying to identify and resolve performance issues or security alerts. Your IT teams need better insight into what is happening on your networks. Give them faster access to the data they need, eliminate blind spots where problems can lurk undetected, and increase automation to help them do more with the resources they have. **Our network solutions let you test your network performance, validate network security, access traffic from across your entire network, filter packets at line-rate speed, and deliver relevant data to all your monitoring solutions.**



IN THE PAST, IT OFTEN TOOK TWO TO THREE DAYS TO IDENTIFY THE SOURCE OF A PERFORMANCE ISSUE AND APPLY A PATCH TO RESTORE SERVICE. USING KEYSIGHT'S NETWORK SOLUTIONS TO FILTER AND GROOM THE PACKET TRAFFIC PROCESSED BY OUR MONITORING TOOLS, WE'VE REDUCED THAT TO HOURS.

PENALTIES FROM VIOLATING OUR SERVICE LEVEL AGREEMENTS HAVE DROPPED SIGNIFICANTLY AND ALREADY PAID FOR THE COST OF OUR VISIBILITY PLATFORM.

—NETWORK MANAGER, REGIONAL SERVICE PROVIDER



PROTECT YOUR

Innovation Investment

Engineers create the unimaginable with the right resources. Your lab is their workshop, and their equipment should keep operating like the day it was purchased. Keysight offers a wide range of lifecycle services to help you accelerate and optimize your business. You can tailor these services to your needs to ensure you get the most out of your innovation investment.

With Keysight's lifecycle services, you can:

- Maximize your budget when acquiring new equipment
- Drive operational excellence significantly reduce lifecycle costs and risk exposure with ongoing, certified repair and calibration as well as equipment utilization and health analysis
- Ensure your most valued assets, your people, have the knowledge and skills required to develop your next innovation
- Accelerate time-to-market by leveraging our capabilities and complete solutions through Keysight's Test-as-a-Service and EMC offerings
- Extend the life of your equipment and reduce total lifecycle costs with customized support planning
- Optimize your lab's capabilities and accelerate your execution with technology refresh options

Let us focus on your test equipment, so you can focus on your next industry innovation.



One-stop Calibration

Calibrate your test equipment—ours and other brands, every 6, 12, 24, or 36 months for peak performance.



Repair

We will repair your equipment on-site. You can also send it to us.



Used Equipment from Keysight

Get the same Keysight quality instruments, fully calibrated, at lower prices.



Technology Refresh Services

Extend, upgrade, or migrate to newer test equipment that meets your timeline and budget.



Consulting Services

Accelerate your test workflows and time to market with Keysight expert consultants.



Financial Services

Finance, rent-to-own, or lease the best equipment today.



Training Services

Build new skills with eLearning and classroom training.



Infoline Support Portal

Access Keysight product information including warranty dates, calibration certificates, service status, and more.



LIKE YOU, WE STRIVE TO

Make the World a Better Place

Our corporate social responsibility (CSR) vision is to build a better planet, and we do this via a two-pronged approach. One approach is by accelerating innovation to connect and secure the world: through our **hardware, software, and services solutions**. The other approach is by employing a global business framework of operations that is ethical, environmentally sustainable, and socially responsible through our comprehensive **CSR and governance program**.

MEASURING WHAT MATTERS

The foundation of our CSR program is structured across six pillars, to which all CSR efforts are aligned and measured for company and global community benefit:



Ethical Governance

Keysight is committed to conducting business in an ethically responsible manner; with strategic and operational policies, procedures, and values that support transparency, sustainability, and legal compliance.



The Environment

Keysight prioritizes natural resource conservation, emission reduction, waste minimization, and pollution prevention. We partner with our suppliers and contractors to better achieve these goals. Our product trade-in and take-back programs enable customers to refresh their technologies and prevent the improper disposal of end-of-life products.



Responsible Resourcing

Keysight has strong partnerships with strategic suppliers to ensure mutual success and commitment to leadership in sustainable practices, technology, and business operations. We continue to monitor our supply chain to identify any human rights, environmental, or privacy concerns.



Our People

Keysight values a diverse, inclusive, and respectful work environment. We prioritize fair employment practices and comply with laws pertaining to non-discrimination and equal opportunity. These values and practices have allowed us to maintain a best-in-class work environment.



Communities

Keysight contributes to the communities where the company operates, participating in local and global volunteer efforts, and supporting numerous charitable and educational organizations. This includes the Keysight After School program, donations and discounts to higher education institutions, and a monthly 4-hour paid time policy for employees' volunteerism.



Our Solutions

Keysight's highly reliable and long-lasting electronic measurement solutions are designed to be safe and compliant with applicable regulation, and to maximize the value of our limited environmental resources.



AROUND THE WORLD,
**We Are Ready to Help
 You Change It.**

- ~13,000 employees*
- 150 locations in more than 100 countries
- R&D centers in 13 countries around the world
- >1,000 patents
- >4,000 products
- 40 service hubs
- ASIC design center and proprietary fabrication facility
- Technology centers for MMICs, optical components, and microelectronic packaging

*As of October 2018



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BELIEVE YOU CAN
CHANGE THE WORLD.

—BILL HEWLETT, CO-FOUNDER OF WHAT IS NOW KEYSIGHT TECHNOLOGIES

