U.S. Telecommunications Association adopts Qualcomm's CDMA* as a cellular standard

Qualcomm introduces Brew, a platform enabling software developers to more easily create and monetize applications and providing users the opportunity to download applications to personalize wireless devices.

The first commercial CDMA smartphone is unveiled.

Qualcomm becomes a publicly traded company, issuing 4 million shares.

Qualcomm is founded, opening the company's first office in La Jolla, CA.

1985
1991
1993
1998
1998
2000
2001
2002
2007
2013
2015
2019

Qualcomm's patent portfolio includes more than 130,000 patents and patent applications worldwide.

Qualcomm's business-to-business activity generates more than $1.3 billion in sales each year.


Qualcomm technologies enable 3G to surpass 1 billion connections.

First multimedia CDMA chipset and system software are delivered, featuring GPS, internet, MP3, and Bluetooth.

Qualcomm unveils world's most advanced commercial multimode 5G modem to accelerate global 5G rollout.

Qualcomm invents breakthrough technologies that transform how the world connects and communicates. When Qualcomm connected the phone to the Internet, the mobile revolution was born. Today, the company's breakthroughs are at the foundation for the transformative 5G networks, connected cars, remote delivery of health care services, and the Internet of Things (IoT) that are the basis for billions of new devices and enabling new opportunities in connected cars, remote delivery of health care services, and the IoT.
Qualcomm is the San Diego region's largest publicly traded company and the region's largest contributor to net increase in resident population. The company's local presence strengthens the regional economy and promotes future economic growth, in part through a new regional smart city project that will leverage Qualcomm's expertise in 5G to artificial intelligence, the industrial internet of things (IIoT) to artificial, and augmented reality.

Qualcomm invented technologies at the heart of 3G and 4G wireless and the first smartphone, and Qualcomm continues to pioneer new technologies that range from 5G to artificial intelligence, the industrial internet of things (IIoT) to artificial, and augmented reality. From its inception, Qualcomm's local presence strengthens the regional economy and promotes future economic growth.

### QUALCOMM HAD AN ECONOMIC IMPACT OF $4 BILLION ON THE SAN DIEGO REGION'S ECONOMY IN 2018.

- **2.8X** Jobs are supported elsewhere in the economy
- **27,880** Induced Jobs
- **10,170** Additional jobs
- **8,000** New jobs

**Qualcomm’s Impact on Local Jobs**

<table>
<thead>
<tr>
<th>Occupation Supported by Qualcomm</th>
<th>Total Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Hardware Engineers</td>
<td>$55B+</td>
</tr>
<tr>
<td>Computer and Information Research Scientists</td>
<td>$103K</td>
</tr>
<tr>
<td>Electrical and Electronics Engineers</td>
<td>$123K</td>
</tr>
<tr>
<td>Legal Occupations</td>
<td>$114K</td>
</tr>
<tr>
<td>Software Developers and Programmers</td>
<td>$130K+</td>
</tr>
<tr>
<td>Total Jobs</td>
<td>2018</td>
</tr>
<tr>
<td>Induced Jobs</td>
<td>10,030</td>
</tr>
<tr>
<td>Additional Jobs</td>
<td>10,170</td>
</tr>
<tr>
<td>New Jobs</td>
<td>8,000</td>
</tr>
<tr>
<td>Total Jobs</td>
<td>28,240</td>
</tr>
</tbody>
</table>

**Jobs are estimated based on regional occupant employment and earnings data.**

**The Region's High Concentration of Advanced Technology Jobs Reflect Qualcomm's Innovation History, Further Highlighting the Depth and Breadth of Qualcomm's Impact**

**Shaping San Diego's Tech Scene**

While Qualcomm is a wireless company, its technology impacts nearly every high tech industry. Qualcomm’s alumni have gone on to start or sell inventions to major companies including Voice, Leap Motion, Pivotal, Beters, Electronics, Infineon, and more. The open innovation model in San Diego continues to incentivize a culture of innovation in the region, as well as an institute advocacy for intellectual property rights for all industries.

### QUALCOMM’S COMMUNITY INVOLVEMENT

Qualcomm has offices in nearly every continent yet has remained committed to keeping San Diego as its home and making contributions to the broader community. With millions of philanthropic dollars donated to local organizations and hometown initiatives devoted to education, workforce development, and underserved communities and communities of color, Qualcomm’s investment in the region continues to have long-term community-wide impacts.

### QUALCOMM’S THINKABIT LAB™

The Qualcomm® Thinkabit Lab™ is a regional industry-university collaboration that synthesizes the workforce of industry and regional academic institutions to produce a STEM workforce. Qualcomm students gain experience working on large-scale, interdisciplinary, and team-oriented projects that complement and enhance their coursework. Students work together, often across multiple disciplines, to understand the importance of cultivating the workforce of tomorrow by exploring the intersection of science, technology, and society, and then test these technologies in the field.

### QUALCOMM INSTITUTE

Qualcomm Institute is an academic and research institute of the University of California San Diego. Located at the California Institute for Telecommunications and Information Technology, Qualcomm Institute provides students and faculty with access to the expertise of more than 300 researchers and engineers. Qualcomm Institute students gain experience working on large-scale, interdisciplinary, and team-oriented projects that complement and enhance their coursework. Students work together, often across multiple disciplines, to understand the importance of cultivating the workforce of tomorrow by exploring the intersection of science, technology, and society, and then test these technologies in the field.

### QUALCOMM’S BUDGET FOR LOCAL COMMUNITY INNOVATION

- **$181.9K** Qualcomm’s local philanthropy supports more than 1,000 San Diego-based organizations, requesting more than 17,900 matches, and contributing more than $355 million combined donations since 2000.

**STRENGTHENING COMMUNITIES**

Qualcomm is dedicated to changing the world for the better. Since 2000, more than $355 million combined donations have been made by Qualcomm and the Qualcomm Foundation. In the last five years, Qualcomm employees have given more than 1,000 San Diego-based organizations, requesting more than 17,900 matches, and contributing more than $355 million combined donations.

**EDUCATING AND INSPIRING THE INNOVATORS OF TOMORROW**

Qualcomm believes that educating and inspiring the innovators of tomorrow is critical to shaping the future. The Qualcomm® Thinkabit Lab™ is a regional industry-university collaboration that synthesizes the workforce of industry and regional academic institutions to produce a STEM workforce. Qualcomm students gain experience working on large-scale, interdisciplinary, and team-oriented projects that complement and enhance their coursework. Students work together, often across multiple disciplines, to understand the importance of cultivating the workforce of tomorrow by exploring the intersection of science, technology, and society, and then test these technologies in the field.

**QUALCOMM’S THINKABIT LAB™**

- **$200** Technical & Professional Roles
- **$120** Faculty & Researchers
- **$350** Industry Partners

**QUALCOMM’S THINKABIT LAB™**

- **$130K+** Employees
- **$55B+** Since 1985

**QUALCOMM’S INSTITUTE**

- **$103K** Student Internships
- **$114K** Student Jobs

**QUALCOMM’S COMMUNITY INVOLVEMENT**

- **$26 million to local communities.
- **$200** Industry Partners
- **$120** Technical & Professional Roles
- **$350** Faculty & Researchers
QUALCOMM’S CONTRIBUTION TO SAN DIEGO’S ECONOMY

QUALCOMM HAD AN ECONOMIC IMPACT OF $4 BILLION ON THE SAN DIEGO REGION’S ECONOMY IN 2018.
IMPACTING SAN DIEGO’S INDUSTRIES

JOBS SUPPORTED BY QUALCOMM, TOP 10 INDUSTRIES

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>INDIRECT SALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAL ESTATE</td>
<td>$253.9M</td>
</tr>
<tr>
<td>LEGAL SERVICES</td>
<td>$116.7M</td>
</tr>
<tr>
<td>SCIENTIFIC R&amp;D SERVICES</td>
<td>$106.2M</td>
</tr>
<tr>
<td>MANAGEMENT CONSULTING SERVICES</td>
<td>$95.7M</td>
</tr>
<tr>
<td>MARKETING RESEARCH &amp; ALL OTHER PST SERVICES</td>
<td>$66.7M</td>
</tr>
<tr>
<td>ARCHITECTURAL, ENGINEERING, &amp; RELATED SERVICES</td>
<td>$55.1M</td>
</tr>
<tr>
<td>EMPLOYMENT SERVICES</td>
<td>$49.3M</td>
</tr>
<tr>
<td>MANAGEMENT OF COMPANIES &amp; ENTERPRISES</td>
<td>$35.0M</td>
</tr>
<tr>
<td>MONETARY AUTHORITIES &amp; DEPOSITORY CREDIT INTERMEDIATION</td>
<td>$33.8M</td>
</tr>
<tr>
<td>ADVERTISING, PUBLIC RELATIONS, &amp; RELATED SERVICES</td>
<td>$33.4M</td>
</tr>
</tbody>
</table>

SALES SUPPORTED BY QUALCOMM, TOP 10 INDUSTRIES

QUALCOMM’S BUSINESS-TO-BUSINESS ACTIVITY GENERATES MORE THAN $1.3B IN SALES EACH YEAR.
Qualcomm is the San Diego region’s largest publicly traded company and the county’s largest telecommunications employer. A world leader in wireless technologies, Qualcomm is also a driver of local and global innovation. Qualcomm invented technologies at the heart of 3G and 4G wireless and the first smartphone, and Qualcomm continues to pioneer new technologies that range from 5G to artificial intelligence, the industrial internet of things (IoT) to artificial, and augmented reality.

Qualcomm’s local presence strengthens the regional economy and promotes future economic growth, in San Diego and around the world. From its inception, Qualcomm has been a principal driver of the region’s technology cluster, spurring numerous startup companies and attracting other major industry players.

Qualcomm had an economic impact of $4 billion on the San Diego region’s economy in 2018. The equivalent of 41 Breeders’ Cup World Championships, 27 San Diego Comic-Con.s, and 3.6 San Diego Convention Centers. For every job at Qualcomm, an additional 1.8 jobs are supported elsewhere in the economy.

1 Induced Jobs - the results of local spending of wages (labor income) from both the directly and indirectly affected industry employees and any net increase in resident population.

2 Indirect Jobs - the effects of local, inter-industry – or business to business – spending through the existing economic structure.
DRIVING SAN DIEGO’S INNOVATION ECOSYSTEM

LIFE CHANGING TALENT

Engineers make up two-thirds of Qualcomm’s employees in San Diego, while the company’s workforce includes a host of other technological, legal, business and administrative workers, many of whom earn higher-than-average wages. The telecommunications giant’s worldwide success and abundant job opportunities are among the top reasons the region has higher-than-average concentrations of tech talent. Roughly 12 percent of the region’s total tech talent is employed by Qualcomm.

OCCUPATIONS SUPPORTED BY QUALCOMM

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Average Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPUTER HARDWARE ENGINEERS</td>
<td>$123K</td>
</tr>
<tr>
<td>COMPUTER AND INFORMATION RESEARCH SCIENTISTS</td>
<td>$116K</td>
</tr>
<tr>
<td>ELECTRICAL AND ELECTRONICS ENGINEERS</td>
<td>$114K</td>
</tr>
<tr>
<td>LEGAL OCCUPATIONS</td>
<td>$103K</td>
</tr>
<tr>
<td>SOFTWARE DEVELOPERS AND PROGRAMMERS</td>
<td>$100K</td>
</tr>
</tbody>
</table>

*Reported wages reflect regional occupational averages

THE REGION’S HIGH CONCENTRATION OF ADVANCE TECHNOLOGY JOBS REFLECT QUALCOMM’S INVENTION MISSION, FURTHER HIGHLIGHTING THE DEPTH AND BREADTH OF QUALCOMM’S IMPACT.

SHAPING SAN DIEGO’S TECH SCENE

While Qualcomm is a wireless company, its technology impacts nearly every high tech industry. Qualcomm’s alumni have gone on to start or sell inventions to major companies including Viasat, Leap Wireless, Kyocera, Motorola, Ericsson, and more, many of which maintain operations in San Diego. Today, San Diego stands as the second most patent-intense region in the U.S., supported by the intellectual property Qualcomm has developed and the innovation it has catalyzed throughout the region, as well as its relentless advocacy for intellectual property rights for all industries.
QUALCOMM’S COMMUNITY INVOLVEMENT

Qualcomm has offices on nearly every continent yet has remained committed to keeping San Diego as its home and making contributions to the broader community. With millions of philanthropic dollars donated to local organizations and numerous initiatives devoted to educating underserved and underrepresented communities and universities, Qualcomm’s investment in the region continues to help foster tomorrow’s workforce.

STRENGTHENING COMMUNITIES

Qualcomm is devoted to changing the world for the better. Since 2000, more than $355 million combined donations have been made by Qualcomm and the Qualcomm Foundation. In the last five years, Qualcomm employees have given to more than 1,000 San Diego-based organizations, requesting more than 17,900 matches, and contributing more than $26 million to local communities.

EDUCATING AND INSPIRING THE INNOVATORS OF TOMORROW

QUALCOMM® THINKABIT LAB™

As a company of inventors, Qualcomm understands the importance of cultivating the workforce of tomorrow by developing the region’s science, technology, engineering, mathematics (STEM) talent. The Thinkabit Lab program engages students from various cultural and socioeconomic backgrounds in unique STEM experiences, inspiring them to become the next generation of inventors. Students explore tech related careers and engage in engineering activities that inspires their creativity in a fun environment. Students work in collaborative teams to solve a real-world problem using Internet of Things concepts.

- HOSTED STUDENTS FROM 107 SCHOOLS ACROSS SAN DIEGO COUNTY
- INSPIRED CLOSE TO 22,000 LOCAL SAN DIEGO STUDENTS
- SAN DIEGO STUDENTS CREATED OVER 5,000 INVENTIONS
- COLLABORATED WITH 20 SCHOOL DISTRICTS/ORGANIZATIONS TO EXPAND THE THINKABIT LAB PROGRAM

QUALCOMM INSTITUTE

The Qualcomm Institute is the UC San Diego division of the California Institute for Telecommunications and Information Technology. Through the Qualcomm Institute, students gain experience working on large-scale, interdisciplinary, and team-oriented projects that complement and enhance their coursework. Students work directly with faculty and staff to conduct research, prototype technologies, and test these technologies in the field.

- 350 » FACULTY MEMBERS
- 120 » TECHNICAL & PROFESSIONAL STAFF
- 200 » INDUSTRY PARTNERS
QUALCOMM MAKES HISTORY

1985 Qualcomm is founded, opening the company’s first office in La Jolla, CA

1991 Qualcomm becomes a publicly traded company, issuing 4 million shares

2000 First multimedia CDMA chipset and system software are delivered, featuring GPS, internet, MP3, and Bluetooth

2001 Qualcomm introduces Brew, a platform enabling software developers to more easily create and monetize applications and providing users the opportunity to download applications to personalize wireless devices

2002 The first commercial CDMA smartphone is unveiled

2007 Qualcomm signs its 100th licensee, proving the value of its intellectual property

2008 First multimedia CDMA chipset and system software are delivered, featuring GPS, internet, MP3, and Bluetooth

2009 Snapdragon processors power the world’s first LTE advanced smartphone

2010 Qualcomm technologies enable 3G to surpass 1 billion connections

2011 Qualcomm launches an Internet of Things (IoT) technology platform

2012 Qualcomm unveils world’s most advanced commercial multimode 5G modem to accelerate global 5G rollout

2013 Qualcomm technologies enable 4G to surpass 1 billion connections

2014 Qualcomm’s patent portfolio includes more than 130,000 patents and patent applications worldwide

2015 Qualcomm invents breakthrough technologies that transform how the world connects and communicates. When Qualcomm connected the phone to the Internet, the mobile revolution was born. Today, the company’s inventions are a foundation for life-changing products, experiences, and industries. As Qualcomm leads the world to 5G, it envisions this next big change in cellular technology spurring a new era of intelligent, connected devices and enabling new opportunities in connected cars, remote delivery of health care services, and the IoT. qualcomm.com

ABOUT QUALCOMM

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*CDMA – code-division multiple access