A Timeline Overview of Motorola History

1928—2008

A timeline overview of Motorola heritage from its founding as Galvin Manufacturing Corporation in 1928 to its position today as a global leader in communications and electronics. Events may be Motorola, industry or world firsts.

1920s

1928 Founding of Company

On September 25, 1928, Paul V. Galvin and his brother, Joseph, incorporated Motorola's founding company—the Galvin Manufacturing Corporation—in Chicago, Illinois, USA.

1928 Battery Eliminator

Galvin Manufacturing Corporation's first product was a 1928 battery eliminator. This home electronics device allowed battery-powered radios to run on standard household electric current. The company's first customer was Sears, Roebuck and Co., which sold battery eliminators to consumers.

1930s

1930 First Motorola Brand Car Radio

In 1930 Galvin Manufacturing Corporation introduced the Motorola radio, one of the first commercially successful car radios. Company founder Paul V. Galvin created the brand Motorola for the car radio—linking "motor" (for motorcar) with "ola" (which implied sound). Thus the Motorola brand meant sound in motion.

1930 First Motorola Public Safety Radio Sales

Galvin Manufacturing Corporation began selling Motorola car radios to police departments and municipalities in 1930.

1936 Police Cruiser Radio Receiver

In 1936 Galvin Manufacturing Corporation introduced the Motorola Police Cruiser radio receiver, a one-way car radio designed to receive police broadcasts. The heavy-duty radio was tuned to a single frequency specified by the customer.

1937 Home Entertainment Radios

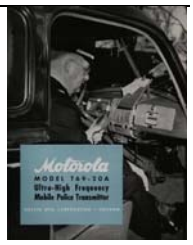
Galvin Manufacturing Corporation entered the home entertainment business with a 1937 line of Motorola phonographs and home radios.

1938 National Advertising

The first Motorola national advertising campaign was underway by 1938. The campaign included print media, road signs and billboards.

1939 First Motorola Two-Way Radio

In 1939 Galvin Manufacturing Corporation introduced its first Motorola two-way radio. Public safety officers used the radio to transmit and receive voice communications from their cars.



1940s

1940 Handie-Talkie SCR536 Radio

In 1940 Galvin Manufacturing Corporation (later Motorola) engineers developed the Handie-Talkie SCR536 AM portable two-way radio. This handheld radio became an icon on World War II battlefronts.

1940 Research and Development Program

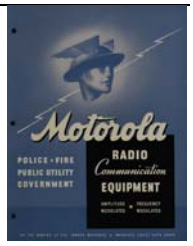
In 1940 Galvin Manufacturing Corporation (later Motorola) built its research and development program when Daniel E. Noble, a pioneer in FM radio and semiconductor technologies, joined the company as director of research.

1940 Sporter Radio

The 1940 Motorola Sporter personal sports radio let people hear commercial radio broadcasts on the go. The radio had an antenna in the shoulder strap.

1941 First Motorola Commercial FM Two-Way Radio System

Galvin Manufacturing Corporation introduced its first commercial line of Motorola FM vehicular two-way radio systems and equipment in 1941. The first Motorola FM system was installed in Philadelphia, Pennsylvania, USA.



1943 World's First FM Portable Two-Way Radio

In 1943 Galvin Manufacturing Corporation (later Motorola) designed the world's first FM portable two-way radio, the SCR300 backpack model, for the U.S. Army Signal Corps. Weighing 35 pounds (15.9 kilograms), the "walkie-talkie" radio had a range of 10 to 20 miles (16-32 kilometers).

1944 First Motorola Business FM Two-Way Radio

In 1944 Galvin Manufacturing Corporation installed Motorola radios in Yellow Cab Co. taxis in Cleveland, Ohio, the first commercial FM two-way taxi communications system in the United States.

1946 Car Radiotelephone

On October 2, 1946, Motorola communications equipment carried the first calls on Illinois Bell Telephone Company's new car radiotelephone service in Chicago, Illinois, USA.

1947 Company Name Change

In 1947 Galvin Manufacturing Corporation became Motorola, Inc.

1947 Dispatcher Two-Way Radios

The 1947 Motorola Dispatcher brand of vehicular two-way radios used new radio channels for industrial customers in the United States. Marketing and quality earned Motorola a leading role in the growing enterprise market.

1947 Motorola's First TV

Motorola's first television, the 1947 Golden View model, was affordable and popular. More than 100,000 units sold in one year.

1949 Solid-State R&D

In 1949 Motorola started a research and development laboratory in Phoenix, Arizona, USA, to research new solid-state technology.

1950s

1952 Toronto, Canada, Subsidiary

Motorola's first international subsidiary, Motorola Canada Ltd., opened in Toronto, Canada, in 1952. The facility produced radios and televisions.

1953 Motorola Foundation

In 1953 Motorola established the Motorola Foundation to support leading universities in the United States. The foundation later expanded to support science, math and technical education, and human services throughout the world where Motorola had a major operating presence.

1954 Television and Radio Sales

Televisions and radios were 70 percent of Motorola sales in 1954. Home radios, car radios and TVs featured stylish designs, colors and materials to appeal to 1950s consumers.

1955 Stylized "M" Motorola Logo

In June 1955 Motorola introduced a new brand logo, the stylized "M" insignia, or "emsignia." A company leader said the two aspiring triangle peaks arching into an abstracted "M" typified the progressive leadership-minded outlook of the company.

1955 First Commercial High-Power Transistor

A 1955 Motorola germanium transistor for car radios was the world's first commercial high-power transistor. It was also Motorola's first mass-produced semiconductor.

1956 Robert W. Galvin, President

Robert W. Galvin, son of company founder Paul V. Galvin, became president of Motorola, Inc. in 1956.

1956 Motorola's First Pager

Motorola's first pager, the 1956 Handie-Talkie radio pager, could send a radio message to a specific person. Pagers began replacing public announcement systems in hospitals and factories.

1957 First Pay TV System

Jerrold Electronics, later part of General Instrument and

Motorola, supplied equipment for the first experimental pay-TV. The Telemovies service offered movies to subscribers through cable television in Bartlesville, Oklahoma, USA.

1958 Motrac Vehicular Two-Way Radio

In 1958 Motorola introduced the Motrac radio, the world's first vehicular two-way radio with a fully transistorized power supply and receiver. Its low power use enabled the radio to transmit without running the vehicle's engine.

1958 Explorer I Satellite Radio

Beginning in 1958 with Explorer I, an Earth-orbiting satellite, Motorola provided radio equipment for most NASA space flights for more than 40 years.

1959 Motorola International, S.A.

In 1959 Motorola established a subsidiary, Motorola International, S.A., to conduct licensing and manufacturing for international markets. An office opened in Zurich, Switzerland.

1960s

1960 Astronaut TV

The 1960 Motorola Astronaut television, a 19-inch model, was the world's first large-screen, transistorized, cordless portable television.

1962 HT200 Portable Two-Way Radio

Motorola introduced the transistorized Handie-Talkie HT200 portable two-way radio in 1962. It weighed 33 ounces (935 grams) and was nicknamed the "brick" because of its shape and durability.

1963 World's First Truly Rectangular Color TV Tube

In 1963 Motorola introduced the world's first truly rectangular color TV picture tube. The tube, developed in a joint venture with National Video Corporation, quickly became the industry standard.

1964 Robert W. Galvin, Chairman and CEO

Robert W. Galvin became chairman of the board and chief executive officer of Motorola, Inc. on May 15, 1964.

1965 Automotive 8-Track Tape Players

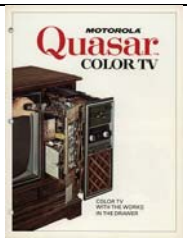
With Ford Motor Company and RCA Corp., Motorola designed and manufactured 8-track tape players for the automotive market in 1965.

1965 Transistor Packaging Innovations

Motorola's innovative 1965 design for low-cost plastic-encapsulated transistors became a semiconductor industry standard.

1967 Quasar TV

Motorola's 1967 Quasar color television had an innovative "Works in a Drawer" design that was easy to service.



1969 First Words From the Moon

A Motorola radio transponder relayed the first words from the moon to Earth in July 1969. The transponder aboard the Apollo 11 lunar module transmitted telemetry, tracking, voice communications and television signals between Earth and the moon.

1970s

1970 Science Advisory Board Associates (SABA)

In 1970 Motorola formed the Science Advisory Board Associates (SABA) to recognize outstanding technical contributions of exceptionally creative Motorola engineers and scientists.

1971 Broadband Cable Network Standards

In 1971 Motorola Chairman Robert W. Galvin urged the implementation of broadband cable networks and common network technical standards in the United States.

1972 Modat Vehicular Data Radio

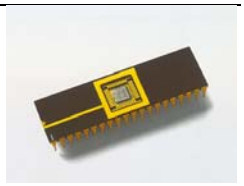
Motorola's 1972 MODAT mobile data radio system allowed users in vehicles to transmit data directly to and from dispatch computers.

1973 Prototype DynaTAC Portable Cellular System

By 1973 Motorola demonstrated a prototype DynaTAC (DYNamic Adaptive Total Area Coverage) portable radiotelephone cellular system. A low-power handset was a fundamental element of the system.

1974 MC6800 Microprocessor

In 1974 Motorola introduced its first microprocessor, the MC6800 8-bit model. The MC6800 microprocessor was used in automotive, computing and video game applications.



1974 Coronary Observation Data Radio

Motorola's 1974 Coronary Observation Radio (COR) allowed emergency personnel to transmit a patient's electrocardiogram data to a hospital.

1974 Television Business Exit

Motorola sold its television business, including the well-known Quasar brand, in 1974.

1975 Apollo-Soyuz Radio

Motorola transponders were used aboard the historic 1975 Apollo-Soyuz "Handshake in Space" docking mission. The American and Soviet space teams met in Earth's orbit to test an international docking system and joint flight procedures.

1975 MX300 Portable Radios

Motorola's 1975 MX300 series of portable two-way radios operated in the 900 MHz band. They included status, identification and emergency alert features that were compatible with computer-aided radio dispatch systems.

1976 New Motorola Headquarters

In 1976 Motorola's international headquarters moved to the Chicago suburb of Schaumburg, Illinois, USA.

1977 Developmental DynaTAC Cellular System

In 1977 the FCC granted a developmental license for a Motorola DynaTAC cellular system in the Washington, D.C.--Baltimore, Maryland, USA, metropolitan area. The system was operated by American Radio-Telephone Service, Inc.

1978 RDX 1000 Data Radio

Motorola introduced its first handheld two-way data radio, the RDX 1000 model, in 1978.

1980s

1980 Ahwatukee Experimental Home

Motorola was a sponsor of the experimental 1980 Ahwatukee home in Arizona, USA. Motorola technologies controlled information, security, entertainment, electrical, environmental and energy management systems for the home.

1980 World's First Computerized Engine Control

In 1980 Motorola and its automotive customers developed the world's first microprocessor-based engine control, the EEC III module. The module was designed to reduce fuel consumption and emissions.

1983 World's First Commercial Portable Cellular Phone

The world's first commercial handheld cellular phone, the Motorola DynaTAC phone, received approval from the U.S. Federal Communications Commission on September 21, 1983. The 28-ounce (794-gram) phone became available to consumers in 1984.

1983 Motorola's First Cellular System

Motorola's first DynaTAC cellular system began commercial operation in 1983. Over the previous 15 years, the company invested more than US$100 million in cellular technology research and development.

1983 KDT 800 Portable Two-Way Data Radio and Network

In 1983 Motorola developed a radio network, later named ARDIS, that allowed IBM service technicians to use KDT 800 portable two-way data radios to communicate with host computers. The radios functioned as wireless computer terminals.

1984 MC68020 Microprocessor

In 1984 Motorola introduced the MC68020, the world's first true 32-bit microprocessor. The MC68020 microprocessor contained 200,000 transistors on a three-eighths-inch square chip.

1986 William J. Weisz, CEO

William J. Weisz became chief executive officer of Motorola, Inc. in 1986.

1986 **Bravo Pager**

Motorola introduced the Bravo numeric pager in 1986. It became the world's best-selling pager.

1986 **Six Sigma Quality Process**

Motorola invented the Six Sigma quality improvement process in 1986. Six Sigma provided a common worldwide language for measuring quality and became a global standard.

1988 **George M.C. Fisher, CEO**

George M.C. Fisher became president and chief executive officer of Motorola, Inc. in 1988.

1988 **First U.S. National Quality Award**

Motorola was one of three winners of the first Malcolm Baldrige National Quality Award in 1988. The U.S. Congress established the award to recognize and inspire the pursuit of quality in American business.

1989 **MicroTAC Personal Cellular Telephone**

In April 1989 Motorola launched the MicroTAC personal cellular telephone, then the smallest and lightest model on the market.

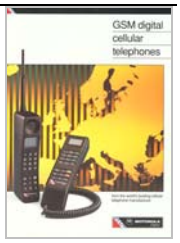
1990s

1990 First HDTV Technical Standard

In 1990 a Motorola business—then known as General Instrument Corporation—proposed the first all-digital high-definition television (HDTV) technical standard.

1991 First GSM Cellular System

Motorola demonstrated the world's first working-prototype digital cellular system and phones using the GSM (Global System for Mobile Communications) standard in Hanover, Germany, in 1991.



1991 World’s First Dual-Mode Cellular Phone

In August 1991 Motorola introduced the world’s first dual-mode portable cellular phone, the MicroTAC Lite model. The MicroTAC Lite phone was compatible with both AMPS and NAMPS analog cellular transmission standards.

1991 ASTRO Digital Two-Way Radio

Motorola's ASTRO two-way radio system was one of the first commercial digital radio systems in the industry in 1991.

1993 Gary L. Tooker, CEO

Gary L. Tooker became vice chairman and chief executive officer of Motorola, Inc. in 1993.

1994 CableComm Interactive System

The 1994 Motorola CableComm interactive system allowed home cable subscribers to make telephone calls and access the Internet at higher data rates through home cable television systems.

1994 iDEN Digital Radio

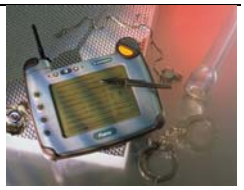
In 1994 Motorola introduced iDEN digital radio, the world's first commercial digital radio system that combined paging, data and cellular communications, and voice dispatch in a single radio network and handset.

1995 MC68328 DragonBall Microprocessor

Introduced in 1995, Motorola's DragonBall MC68328 microprocessor was used in consumer electronics such as handheld video games and personal digital assistants. A Motorola team in Hong Kong developed the chip.

1995 FORTE CommPad Data Radio

Motorola's FORTE CommPad data radio won the 1995 Industrial Design Excellence Award for communications equipment. The device contained handwriting recognition software and a two-way radio.



1995 World's First Two-Way Pager

In 1995 Motorola introduced the world's first two-way pager, the Tango two-way personal messaging pager. It allowed users to receive text messages and email, and reply with a standard response. It also could be connected to a computer to download long messages.

1995 RESCU Telematics System

In 1996 Motorola introduced the RESCU emergency messaging system, a telematics product for drivers of Ford Motor Company vehicles.

1996 StarTAC Wearable Phone

When introduced in 1996, Motorola's StarTAC wearable cellular telephone was the world's smallest and lightest. It weighed just 3.1 ounces (88 grams).

1997 Christopher B. Galvin, CEO

Christopher B. Galvin, grandson of founder Paul V. Galvin, was elected chief executive officer of Motorola, Inc. in 1997.

1997 Trans European Trunked Radio (TETRA)

In 1997 Motorola's first commercial Trans European Trunked Radio (TETRA) digital radio system began operations at Oslo Airport in Gardermoen, Norway.

1997 WisdomPen Chinese Handwriting Software

Motorola introduced the WisdomPen Chinese handwriting recognition system for portable communication devices in 1997.

1999 iDEN i1000plus Handset

Introduced in 1999, Motorola's iDEN i1000plus handset was the world's first to combine a digital phone, two-way radio, alphanumeric pager, Internet microbrowser, email, fax and two-way messaging.

2000s

2000 World's First GPRS Cellular System

In June 2000, Motorola and Cisco Systems, Inc. supplied the world's first commercial General Packet Radio Service (GPRS) cellular network to BT Cellnet in the United Kingdom. The system also used the world's first GPRS cellular phone, the Motorola Timeport P7389i model.

2000 Mission-Critical Wireless Data

In 2000 Motorola tested the world's first 700 MHz wideband high-speed data system for public safety users, enabling advanced mission-critical solutions. Pinellas County, Florida, USA, police, fire and EMS services deployed the trial system in 2001.

2001 IP-Based Digital Communication

In 2001 Motorola's Project 25 and TETRA-compliant IP-based wireless communications systems enabled two-way radio users to transfer pictures, fingerprints, video and Internet-based data.

2002 Canopy Wireless Broadband

Introduced in 2002, Motorola's Canopy wireless broadband platform enabled Internet service providers to deliver affordable and reliable high-speed Internet access to homes and small businesses.

2002 Motorola's First 3G Nationwide Network

In 2002 Motorola launched its first 3G nationwide voice and data network using CDMA 1X technology with KDDI, a large wireless operator in Japan. The technology enabled Internet access at speeds more than double that of existing networks.

2002 World's First Wireless Cable Modem Gateway

In 2002 Motorola's SURFboardAE SBG1000 cable modem gateway was the world's first to combine a high-speed cable modem router with an ethernet switch and wireless home gateway. It enabled cable TV subscribers to use their cable connection to share Internet access and to network multiple computers wirelessly.

2003 **A760 Cellular Phone**

Introduced in 2003, the Motorola A760 cellular phone was the world's first handset to combine a Linux operating system and Java technology with full PDA functionality.

2004 **Edward J. Zander, Chairman and CEO**

Edward J. Zander became chairman and chief executive officer of Motorola, Inc. in January 2004.

2004 **Freescale Semiconductor**

Freescale Semiconductor, Inc., formerly Motorola's Semiconductor Products Sector, began trading on the New York Stock Exchange as a separate public company in December 2004.

2004 **MOTORAZR V3 Cellular Phone**

In 2004 Motorola introduced the RAZR V3 cellular phone, an ultraslim, metal-clad, quad-band flip phone. The 13.9mm thin phone used aircraft-grade aluminum to achieve several design and engineering innovations, including a nickel-plated keypad.

2004 **Push-To-Talk Over Cellular**

In 2004 Motorola introduced its unique Cross-Technology Push-To-Talk Over Cellular (PoC) product line that gave subscribers connectivity among GPRS, CDMA2000 1X and WiFi networks.

2005 **Carbon Nanotube Display**

In 2005 Motorola Labs demonstrated a 5-inch color video display prototype using carbon nanotube technology.

2005 MOTOMESH Broadband Radio Network

In 2005 Motorola's MOTOMESH wireless mobile network was one of the first multiradio mesh networks to combine 4.9 GHz licensed mobile broadband radios and unlicensed Wi-Fi radios into a single access point. Mesh networking allowed public safety users to rapidly create a network of wireless devices linked in a relay system.

2006 Motorola MING Smart Phone

Motorola introduced the MING touch screen smart phone in Asia in 2006. It used advanced handwriting software to recognize more than 10,000 handwritten characters of the Chinese alphabet.

2006 National Medal of Technology Ceremony

In a White House ceremony in February 2006, Motorola received the 2004 National Medal of Technology, the United States' highest honor for technological innovation. Motorola was recognized "for over 75 years of technological achievement and leadership in the development of innovative electronic solutions, which have enabled portable and mobile communications to become the standard across society."

2007 Symbol Technologies, Inc.

Motorola acquired Symbol Technologies, Inc. in 2007 to provide products and systems for enterprise mobility solutions, including rugged mobile computing, advanced data capture and radio frequency identification (RFID).

2007 World's First WiMAX 802.16e Mobile Handoffs

Motorola demonstrated the world's first WiMAX 802.16e mobile handoffs in downtown Chicago on September 26, 2007. Users experienced live Web browsing and video streaming sessions on wireless computers while traveling in the city.

2008 **Gregory Q. Brown, CEO and Co-CEO**

On January 1, 2008, Gregory Q. Brown became chief executive officer of Motorola, Inc. He was named co-chief executive officer of Motorola with Sanjay Jha, and chief executive officer of Motorola's Broadband Mobility Solutions business on August 4, 2008.

2008 **Sanjay K. Jha, Co-CEO and CEO**

On August 4, 2008, Dr. Sanjay K. Jha became co-chief executive officer of Motorola and chief executive officer of Motorola's Mobile Devices business.

2008 **APX Multi-Band Two-Way Radios**

Motorola introduced the APX family of Project 25 multi-band two-way radios in 2008. Designed with first responder input, APX radios work in the 700/800 MHz and VHF bands, and have custom-designed microphones, integrated GPS, and text messaging.