

Motorola

This article is about the original company prior to its split in 2011. For the present-day companies of this name and other uses, see [Motorola \(disambiguation\)](#).

Motorola, Inc.



Motorola

Formerly	Galvin Manufacturing Corporation (1928-1930)
<u>Former type</u>	Public
Industry	Telecommunications
Fate	Divided into Motorola Mobility and Motorola Solutions <ul style="list-style-type: none">• Motorola Mobility• Motorola Solutions• NXP Semiconductors
Successor	<ul style="list-style-type: none">• ON Semiconductor• CommScope (General Instrument)• Cambium Networks
Founded	September 25, 1928; 91 years ago
Founders	Paul and Joseph Galvin
Defunct	January 4, 2011; 9 years ago
Headquarters	1303 East Algonquin Road, Schaumburg, Illinois , U.S. ^{[1]}
Area served	Worldwide <ul style="list-style-type: none">• Brayn Lopez (CEO & Chairman)
Key people	<ul style="list-style-type: none">• Gino Bonanotte (CFO)• Shamik Mukherjee (CMO)• Mahesh Saptharishi

(CTO)

- Products**
- [Tablet computers](#)
 - Mobile phones
 - [Smartphones](#)
 - [Two-way radios](#)
 - [Networking systems](#)
 - [Cable television systems](#)
 - [Wireless broadband networks](#)
 - [RFID systems](#)
 - [Integrated circuits](#)
 - [Mobile telephone infrastructure](#)
 - [Televisions](#)

Revenue 22,044,000,000 [US dollar](#)
(2009) 

- ▼ [US\\$11.851 billion](#)
(2013)^[2]

[Total assets](#)

- ▼ [US\\$12.679 billion](#)
(2012)^[2]

Number of employees 17,000 (2019)^[3]

[Parent](#) [Lenovo](#) 

- Mobile Phone Devices
- Connected Home

[Divisions](#) Solutions

- Network Home Solutions

Website www.motorola.com 

Motorola, Inc. (^[4]/ˌmoʊtəˈroʊlə/) was an American [multinational telecommunications](#) company founded on September 25, 1928, based in [Schaumburg, Illinois](#). After having lost \$4.3 billion from 2007 to 2009, the company was divided into two independent public companies, [Motorola Mobility](#) and [Motorola Solutions](#) on January 4, 2011.^[5] Motorola Solutions is generally considered to be the direct successor to Motorola, as the reorganization was structured with Motorola Mobility being spun off.^[6] Motorola Mobility was sold to Google in 2012, and acquired by [Lenovo](#) in 2014.^[7]

Motorola designed and sold [wireless network](#) equipment such as cellular transmission [base stations](#) and signal [amplifiers](#). Motorola's home and broadcast network products included [set-top boxes](#), [digital video recorders](#), and network equipment used to enable video broadcasting, computer telephony, and [high-definition television](#). Its business and government customers consisted mainly of wireless voice and broadband systems (used to build private networks), and public safety communications systems like [Astro](#) and [Dimetra](#). These businesses (except for [set-top boxes](#), [wireless networks](#), and [cable modems](#)) are now part of Motorola Solutions. Google sold Motorola Home (the former [General Instrument](#) cable businesses) to the [Arris Group](#) in December 2012 for US\$2.35 billion.^[8]

Motorola's [wireless telephone](#) handset division was a pioneer in cellular telephones. Also known as the Personal Communication Sector (PCS) prior to 2004, it pioneered the "mobile phone" with [DynaTAC](#), "flip phone" with the [MicroTAC](#), as well as the "clam phone" with the [StarTAC](#) in the mid-1990s. It had staged a resurgence by the mid-2000s with the [Razr](#), but lost market share in the second half of that decade. Later it focused on smartphones using [Google's](#) open-source [Android](#) mobile operating system. The first phone to use the newest version of Google's open source OS, Android 2.0, was released on November 2, 2009 as the [Motorola Droid](#) (the GSM version launched a month later, in Europe, as the Motorola Milestone).

The handset division (along with cable [set-top boxes](#) and [cable modems](#) divisions, which would later be sold to Arris Group) was later spun off into the independent [Motorola Mobility](#). On May 22, 2012, [Google](#) CEO [Larry Page](#) announced that Google had closed on its deal to acquire Motorola Mobility.^[9] On January 29, 2014, Page announced that, pending closure of the deal, Motorola Mobility would be acquired by Chinese technology company [Lenovo](#) for US\$2.91 billion (subject to certain adjustments).^[10] On October 30, 2014, Lenovo finalized its purchase of Motorola Mobility from Google.^[11]

□

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History

Motorola started in [Chicago, Illinois](#), as **Galvin Manufacturing Corporation** (at 847 West Harrison Street)^[12] in 1928 when brothers [Paul V.](#) and Joseph E. Galvin purchased the bankrupt Stewart Battery Company's battery-eliminator plans and manufacturing equipment at auction for \$750. Galvin Manufacturing Corporation set up shop in a small section of a rented building. The company had \$565 in working capital and five employees. The first week's payroll was \$63.

The company's first products were the [battery eliminators](#), devices that enabled battery-powered radios to operate on household electricity. Due to advances in radio technology, battery-eliminators soon became obsolete. Paul Galvin learned that some radio technicians were installing sets in cars, and challenged his engineers to design an inexpensive car radio that could be installed in most vehicles. His team was successful, and Galvin was able to demonstrate a working model of the radio at the June 1930 Radio Manufacturers Association convention in Atlantic City, New Jersey. He brought home enough orders to keep the company in business.



Motorola Model 50XC (1940) radio, made of [Catalin](#)

Paul Galvin wanted a brand name for Galvin Manufacturing Corporation's new car radio, and created the name "Motorola" by linking "motor" (for motorcar) with "ola" (from [Victrola](#)), which was also a popular ending for many companies at the time, e.g. [Moviola](#), [Crayola](#).^[13] The company sold its first Motorola branded radio on June 23, 1930, to Herbert C. Wall of Fort

Wayne, Indiana, for \$30. Wall went on to become one of the first Motorola distributors in the country. The Motorola brand name became so well known that Galvin Manufacturing Corporation later changed its name to Motorola, Inc.^[14]

Galvin Manufacturing Corporation began selling Motorola car-radio receivers to police departments and municipalities in November 1930. The company's first public safety customers (all in the U.S. state of Illinois) included the Village of River Forest, Village of Bellwood Police Department, City of Evanston Police, Illinois State Highway Police, and Cook County (Chicago area) Police with a one-way radio communication.^[15] In the same year, the company built its research and development program with [Dan Noble](#), a pioneer in [FM](#) radio and semiconductor technologies, who joined the company as director of research. The company produced the hand-held [AM SCR-536](#) radio during [World War II](#), which was vital to [Allied](#) communication. Motorola ranked 94th among United States corporations in the value of World War II military production contracts.^[16]

Motorola went public in 1939,^[17] and became Motorola, Inc. in 1947. At that time Motorola's main business was producing and selling televisions and radios.

Post World War II



Motorola vacuum tube carton

[Play media](#)

An advertisement for Motorola televisions from 1951.

In October 1946 Motorola communications equipment carried the first calls on [Illinois Bell](#) telephone company's new car [radiotelephone](#) service in [Chicago](#). The company began making televisions in 1947, with the model VT-71 with 7-inch [cathode ray tube](#). In 1952, Motorola opened its first international subsidiary in [Toronto, Ontario](#), Canada to produce radios and televisions. In 1953, the company established the [Motorola Foundation](#) to support leading universities in the United States.

In 1955, years after Motorola started its research and development laboratory in [Phoenix, Arizona](#), to research new solid-state technology, Motorola introduced the world's first commercial high-power [germanium](#)-based [transistor](#). The present "batwing" logo was also introduced in 1955 (having been created by award-winning Chicago graphic designer [Morton Goldsholl](#) in late 1954).

Beginning in 1958, with [Explorer 1](#) Motorola provided radio equipment for most [NASA](#) spaceflights for decades, including the 1969 Moon landing. A year later it established a subsidiary to conduct licensing and manufacturing for international markets. Motorola created numerous products for use by the government, public safety officials, business installments, and the general public.

In 1960, it introduced the world's first large-screen portable (19-inch), transistorized, cordless television. According to the 1962 Illinois Manufacturers Directory (50th-anniversary edition), Motorola had 14,000 employees worldwide of which at least 5,823 employees in 6 plants were located in Illinois. The company headquarters were at 9401 West Grand Avenue in Franklin Park and it listed TV receivers, Stereo-Hi Fi equipment as the products at this plant made by 1,700 employees. The Communications Division was in Chicago at 4545 West Augusta Blvd. where 2,000 employees made electronic communications equipment. The Military Electronics Division was at 1450 North Cicero Avenue, Chicago where 923 employees made microwave and industrial equipment. Two more Chicago locations were listed at 4900 West Flourney Street and at 650 North Pulaski but no employee count was listed for these. The last plant was listed in Quincy, Illinois at 1400 North 30th Street where 1,200 employees made radio assemblies for both home and automobile.^[18]

In 1963, it introduced the first rectangular color picture tube. In 1964, the company opened its first Research and development branch outside of the United States, in Israel, under the management of Moses Basin. The modular [Quasar](#) brand was introduced in 1967.

In 1969, [Neil Armstrong](#) spoke the famous words "one small step for a man, one giant leap for mankind" from the [Moon](#) on a Motorola transceiver.^[19]

In 1971, Motorola demonstrated the first hand-held portable telephone.^{[20][21]}

In 1973, Motorola introduced its first microprocessor, the 8-bit [MC6800](#), used in automotive, computing and video game applications.^[22] That same year, Motorola sold its television business to the Japan-based Matsushita, the parent company of [Panasonic](#).

In 1976, Motorola moved its headquarters to the Chicago suburb of [Schaumburg, Illinois](#).

In 1980, Motorola's next generation 32-bit microprocessor, the [MC68000](#), led the wave of technologies that spurred the computing revolution in 1984, powering devices from companies such as [Apple](#), [Commodore](#), [Atari](#), [Sun](#), and [Hewlett Packard](#).^[23]



[Dr. Martin Cooper](#) of Motorola made the first private handheld mobile phone call on a larger prototype model in 1973. This is a reenactment in 2007.

In September 1983, the U.S. [Federal Communications Commission](#) (FCC) approved the [DynaTAC 8000X](#) telephone, the world's first commercial cellular device. By 1998, cell phones accounted for two-thirds of Motorola's gross revenue.^[24] The company was also strong in [semiconductor](#) technology, including [integrated circuits](#) used in computers. In particular, it is known for the [6800 family](#) and [68000 family](#) of [microprocessors](#) and related peripheral ICs; the processors were used in [Atari ST](#), [Commodore Amiga](#), [Color Computer](#), and [Apple Macintosh](#) personal computers and in the early [HP laser printers](#), and some 6800-family peripheral devices were used in the [IBM PC](#) series of personal computers.^[25] The [PowerPC](#) family was developed with [IBM](#) and in a partnership with Apple (known as the [AIM alliance](#)). Motorola also has a diverse line of communication products, including [satellite](#) systems, [digital cable](#) boxes and [modems](#).

In 1986, Motorola invented the [Six Sigma](#) quality improvement process. This became a global standard. In 1990 [General Instrument Corporation](#), which was later acquired by Motorola, proposed the first all-digital [HDTV](#) standard. In the same year, the company introduced the Bravo numeric pager which became the world's best-selling pager.

In 1991, Motorola demonstrated the world's first working-prototype digital cellular system and phones using [GSM](#) standard in [Hanover](#), Germany. In 1994, Motorola introduced 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. In 1995, Motorola introduced the world's first two-way [pager](#) which allowed users to receive text messages and e-mail and reply with a standard response.

In 1995 Motorola introduces the 2 way pager.

In 1997, to optimize cell phone production with room for future growth, production was moved from Arlington Heights, Il to the new giant factory in Harvard, Il. Later with Motorola losing market share, phone assembly was moved to Fort Worth, Tx. closing the Harvard facility.

In 1998, Motorola was overtaken by [Nokia](#) as the world's biggest seller of mobile phone handsets.^[19]

On September 15, 1999, Motorola announced it would buy [General Instrument](#) in an \$11-billion stock swap. General Instrument had long been the No. 1 cable TV equipment provider, supplying cable operators with end-to-end hybrid fiber coax cable solutions. This meant that GI offers all cable TV transmission network components from the head-end to the fiber optic transmission nodes to the cable set-top boxes and cable modems, now at the availability of Motorola. GI's acquisition created the Broadband Communications Sector (BCS).

In 1999, Motorola separated a portion of its semiconductor business—the Semiconductor Components Group (SCG)-- and formed [ON Semiconductor](#), whose headquarters are located in [Phoenix, Arizona](#).^[26]

In June 2000, Motorola and [Cisco](#) supplied the world's first commercial [GPRS](#) cellular network to [BT Cellnet](#) in the United Kingdom. The world's first GPRS cell phone was also developed by Motorola. In August 2000, with recent acquisitions, Motorola reached its peak employment of 150,000 employees worldwide.^[27] Two years later, employment would be at 93,000 due to layoffs and spinoffs.

In 2002, Motorola introduced the world's first wireless [cable modem gateway](#) which combined a high-speed cable modem [router](#) with an [ethernet switch](#) and wireless home gateway. In 2003, Motorola introduced the world's first handset to combine a [Linux operating system](#) and [Java](#) technology with "full [PDA](#) functionality". In 2004, Motorola divested its whole semiconductor business to form [Freescale Semiconductor](#).



The [Motorola Razzr](#) became one of the most influential mobile phones of all time, reaching 130 million sales

The [Motorola RAZR line](#) sold over 130 million units,^[28] which brought the company to the number two mobile phone slot in 2005.

In June 2005, Motorola overtook the intellectual property of [Sendo](#) for \$30,000 and paid £362,575 for the plant, machinery and equipment.^[29]

In June 2006, Motorola acquired the software platform ([AJAR](#)) developed by the British company TTP Communications plc.^[30] Later in 2006, the firm announced a music subscription service named *iRadio*. The technology came after a break in a partnership with [Apple Computer](#) (which in 2005 had produced an [iTunes](#) compatible cell phone [ROKR E1](#), and most recently, mid-2007, its own [iPhone](#)). iRadio has many similarities with existing satellite radio services (such as [Sirius](#) and [XM Radio](#)) by offering live streams of commercial-free music content. Unlike satellite services, however, iRadio content will be downloaded via a broadband internet connection. As of 2008, iRadio has not been commercially released and no further information is available.^[31]

Motorola failed to repeat the success of the highly popular RAZR phone, especially in competition with new smartphones like Apple's iPhone, leading to a dwindling in its mobile phone business.^[32] In 2006 the company's mobile phone market share was about 23% but by the end of 2007 it dropped to 12%, falling to third place behind [Samsung](#).^[33] It was further halved again, to 6%, by 2009,^[34] by which time the market share was overtaken by [LG](#), and by 2010 was overtaken by [Research In Motion](#), [Sony Ericsson](#) and [Apple](#).^{[35][36]} The company's shares also more than halved during the period^[37] and caused large losses.^[38] Motorola managed to recover with the release of the [Motorola Droid](#) in late 2009 with [Verizon Wireless](#), which sold in good numbers and made the phone division profitable again by late 2010.^[39]

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

In 2010, Motorola sold its cellular-infrastructure business to [Nokia Siemens Networks](#) for \$1.2 billion.^[40]

Major facilities



Local branch in [Glostrup](#), Denmark

Illinois

- Motorola's corporate headquarters was 1301 E Algonquin Rd, [Schaumburg, Illinois](#) built 1976, until Motorola, Inc was renamed [Motorola Solutions](#) in 2011.
- Motorola's corporate headquarters from 1960 to 1976 was at 9401 West Grand Avenue, [Franklin Park, Illinois](#). There was also a television assembly plant built here in 1952. The facility was demolished in 2017
- (radio) Communications Division 4545 West Augusta Blvd, [Chicago, Illinois](#)
- Cellular Handsets (later Cellular-Infrastructure dept only) 1421 and 1501 W Shure Dr, [Arlington Heights, Illinois](#)
- Cellular Handsets - later Motorola Mobility HQ 600 N US Hwy 45, [Libertyville, Illinois](#)
- Automotive & Industrial Electronics Group 4000 Commercial Ave, [Northbrook, Illinois](#)
- Military Electronics Division 1450 North Cicero Avenue, Chicago, Illinois
- 4900 West Flourney Street, Chicago, Illinois
- 650 North Pulaski, Chicago, Illinois
- Quincy Manufacturing Facility, 1400 North 30th Street, [Quincy, Illinois](#)
- Cellular Phone Handset Assembly, 2001 N Division St, [Harvard, Illinois](#) 1996-2001^[41]
(Motorola's founder Paul Galvin was born in the town)

Arizona

Arizona was home to Motorola's semiconductor division as well as its government Electronics division

- Motorola research laboratory 3102 North 56th Street Phoenix AZ built 1950
- Government Electronics 8201 East McDowell Road Scottsdale built 1957 all Motorola equipment built for NASA was manufactured here
- Phoenix semiconductor plant 5005 East McDowell Road, built 1956

- Mesa semiconductor plant Broadway and Dobson roads built 1966 Demolished
- Chandler semiconductor plant
- Tempe semiconductor plant 2108 East Elliot Road built 1968
- Motorola flat panel adjacent to Tempe semiconductor plant
- Diablo facility 2900 South Diablo Way Tempe
- Roosevelt facility 8220 East Roosevelt Street, Scottsdale

Other US states

- Motorola research Riverside California built in 1954
- semiconductor plant Austin Texas built in 1974
- Automotive and Consumer Products division 400 Main Street Arcade New York
- Component Products Division, 4800 Alameda Blvd NE Albuquerque NM
- Pager and cell tower component manufacturing/development 5401 Beach St. and 5555 Beach st. Fort Worth, TX respectively.
- Cell Phone assembly 4801 Westport Pkwy, Fort Worth, TX (5300 Westport Pkwy, Fort Worth, TX after google acquisition)

Motorola, post-split

The process to split Motorola into successor companies began in 2008, driven by Motorola investor [Carl Icahn](#). Though the split was originally planned for 2009, it was not actually executed until 2011.^[42]

In January 2011, Motorola split into two separate companies, each still using the word **Motorola** as part of its name. One company, [Motorola Solutions](#) (using a blue version of the Motorola logo), is based in downtown Chicago after moving recently from Schaumburg IL, and concentrates on police technologies, radios, and commercial needs. The other company, [Motorola Mobility](#) (using a red logo and owned by Lenovo), is based in Chicago (formerly at 600 US-45, Libertyville, Illinois), and is the mobile handset producer. The split was structured so that Motorola Solutions was the legal successor of the original Motorola, while Motorola Mobility was the spin-off. Despite this, the [motorola.com domain name](#) is the website for Motorola Mobility, whereas Motorola Solutions's website is [motorolasolutions.com](#).

2011, Motorola Solutions exited the Cellular Network business selling the Arlington Heights Illinois based division to (at the time) Nokia Siemens Networks for \$1.2Billion.^[1]

On August 15, 2011, Google announced that it would purchase Motorola Mobility for about \$12.5 billion.^[43] On November 17, 2011, Motorola Mobility stockholders “voted overwhelmingly to approve the proposed merger with Google Inc”.^[44]

On May 22, 2012, Google announced that the acquisition of Motorola Mobility Holdings, Inc. had closed, with Google acquiring MMI for \$40.00 per share in cash. (\$12.5 billion)^[45]

On October 30, 2014, Google sold off Motorola Mobility to Lenovo. The purchase price was approximately US\$2.91 billion (subject to certain adjustments), including US\$1.41 billion paid

at close: US \$660 million in cash and US\$750 million in Lenovo ordinary shares (subject to a share cap/floor). The remaining US\$1.5 billion was paid in the form of a three-year promissory note.^[46] After the purchase, Google maintained ownership of the vast majority of the Motorola Mobility patent portfolio, including current patent applications and invention disclosures, while Lenovo received a license to the portfolio of patents and other intellectual property. Additionally, Lenovo received over 2,000 patent assets, as well as the Motorola Mobility brand and trademark portfolio.^[46]

Divisional Products:^[47]

- **Enterprise Mobility Solutions:** Headquarters was located in [Schaumburg, Illinois](#); consisted of communications offered to government and public safety sectors and enterprise mobility business. Motorola developed analog and digital two-way radio, voice and data communications products and systems, mobile computing, advanced data capture, wireless infrastructure and RFID solutions to customers worldwide.
- **Home & Networks Mobility:** Headquarters was located in [Arlington Heights, Illinois](#); produced end-to-end systems that facilitate uninterrupted access to digital entertainment, information and communications services via wired and wireless mediums. Motorola developed digital video system solutions, interactive set-top devices, voice and data modems for digital subscriber line and cable networks, broadband access systems for cable and satellite television operators, and also wireline carriers and wireless service providers.
- **Mobile Devices:** Headquarters was located in [Libertyville, Illinois](#); designs wireless handsets, but also licenses much of its intellectual properties. This includes cellular and wireless systems and as well as integrated applications and [Bluetooth](#) accessories.

Criticism and Controversy

Collaboration with U.S. Immigration and Customs Enforcement (ICE)

In November 2019, legal scholars and [human rights activists](#) called on Motorola to cease work with [U.S. Immigration and Customs Enforcement](#) because their subsidiary Vigilant Solutions directly contributes to the [deportation](#) of [undocumented migrants](#).^[48]

Commercial management

Spin-offs

Television and radio manufacturing

In 1974, Motorola divested itself of its television and radio-manufacturing division, which included the [Quasar](#) brand of electronics. This division was acquired by [Matsushita](#), already known under its [Panasonic](#) brand in North America, where it was looking to expand.

Iridium and Celestri satellite constellations

Main article: [Iridium Communications](#)

Motorola developed the global communication network using a set of 77 satellites. The name iridium was selected as the 77 satellites resemble the 77 protons of the element Iridium.

The business ambitions behind this project and the need to raise venture capital to fund the project led to the creation of the **Iridium company** in the late 1990s. While the technology was proven to work, Iridium failed to attract sufficient customers and it filed for bankruptcy in 1999. Obligations to Motorola and loss of expected revenue caused Motorola to divest the [ON Semiconductor \(ONNN\)](#) business August 4, 1999, raising about \$1.1 billion. Motorola manufactured two [satellite phone](#) handsets for this network – the 9500 and 9505 as well as transceiver units. Some of these are still in production by an OEM but sold under the Iridium brand.

With the bankruptcy of Iridium, the fact Iridium was setup as an independent company and was not a part of Motorola. With this, a court found Motorola not liable to the people that tried to put Motorola "on the hook" for liabilities in the bankruptcy.

The Iridium communications network is still up and running owned by the company Iridium Communications Inc.

Motorola attempted to follow the Iridium system with an envisioned [Celestri](#) constellation, to offer global, broadband "Internet in the sky" services. However, this effort was not successful, and the Celestri system was never built.

Government and defense

Due to declines in business in 2000 and 2001, Motorola spun off its government and defense business to [General Dynamics](#). The business deal closed in September 2001. Thus GD Decision Systems was formed (and later merged with General Dynamics C4 Systems) from Motorola's Integrated Information Systems Group.

Semiconductor

On August 4, 1999, Motorola, Inc.'s Semiconductor Components Group, manufacturing Motorola's discrete, standard analog and standard logic devices was spun off, recapitalized and established as an independent company named [ON Semiconductor](#). The new company began trading on the [NASDAQ](#) on April of the following year.

On October 16, 2004, Motorola announced that it would spin off its Semiconductor Products Sector into a separate company called [Freescale Semiconductor, Inc.](#). The new company began trading on the [New York Stock Exchange](#) on July 16 of the following year.

On December 7, 2015, Freescale Inc. was sold to [NXP Semiconductor](#), a former [Philips](#) semiconductors European company.^[49]

Automotive

On January 29, 1988, Motorola sold its [Arcade, New York](#) facility and automotive alternators, electromechanical speedometers and tachometers products to [Prestolite Electric](#).^[50]

In July 2006, Motorola completed the sale of its automotive business to [Continental AG](#). Motorola's automotive unit had annual sales of \$1.6 billion (€1.33 billion) and employed 4,504. The division's products included [telematics](#) systems - like GM's OnStar used for vehicle navigation and safety services, engine and transmission control electronics, vehicle control, electronics and sensors used in steering, braking, and power doors and [power windows](#).

Biometrics

In 2000, Motorola acquired Printrak International Inc.^[51] for \$160 million.^[52] In doing so, Motorola not only acquired [computer aided dispatch](#) and related software, but also acquired [Automated fingerprint identification](#) system software.^[53]

In October 2008, Motorola agreed to sell its Biometrics business to [Safran](#), a French defense firm. Motorola's biometric business unit was headquartered in Anaheim, Calif. The deal closed in April 2009.^[54] The unit became part of Sagem [Morpho](#), which was renamed [MorphoTrak](#).

Split

On March 26, 2008, Motorola's board of directors approved a split into two different publicly traded companies. This came after talk of selling the handset division to another corporation. These new companies would be the business units of the current [Motorola Mobile Devices](#) and Motorola Broadband & Mobility Solutions. Originally it was expected that this action would be approved by regulatory bodies and complete by mid-2009, but the split was delayed due to company restructuring problems and the [2008–2009 extreme economic downturn](#).^[55]

On February 11, 2010, Motorola announced its separation into two independent, publicly traded companies,^[56] effective Q1 2011. The official split occurred at around 12:00 pm EST on January 4, 2011. The two new companies are called [Motorola Mobility](#) (now owned by [Lenovo](#); cell phone and cable television equipment company) and [Motorola Solutions](#) (NYSE: [MSI](#); Government and Enterprise Business). Motorola Solutions is generally considered to be the direct successor to Motorola, Inc., as the reorganization was structured with Motorola Mobility being spun off.^[6] Motorola Solutions retains Motorola, Inc.'s pre-2011 stock price history, though it retired the old ticker symbol of "MOT" in favor of "MSI."

Motorola Mobility deal by Google

On August 15, 2011, seven months after Motorola Mobility was spun off into an independent company, [Google](#) announced that it would acquire Motorola Mobility for \$12.5 billion,^{[57][58]} subject to approval from regulators in the United States and Europe.

According to the filing, Google senior vice president Andy Rubin first reached out to [Motorola Mobility](#) in early July 2011 to discuss the purchase by some of Google's competitors of the patent portfolio of Nortel Networks Corp., and to assess its potential impact on the Android ecosystem.

Google boosted its offer for Motorola Mobility by 33% in a single day in early August, even though Motorola wasn't soliciting competing bids. The aggressive bidding by Google showed that ^[citation needed] the search engine company was under considerable pressure to beef up its patent portfolio to protect its promising Android franchise from a growing number of legal challenges.

According to the filing, Google and Motorola began discussions about Motorola's patent portfolio in early July, as well as the "intellectual property litigation and the potential impact of such litigation on the Android ecosystem".

Although the two companies discussed the possibility of an acquisition after the initial contact by Mr. Rubin, it was only after Motorola pushed back on the idea of patent sale that the acquisition talks picked up steam.

The turning point came during a meeting on July 6. At the meeting, Motorola Mobility CEO [Sanjay Jha](#) discussed the protection of the Android ecosystem with Google senior vice president [Nikesh Arora](#), and during that talk Jha told Arora that "it could be problematic for Motorola Mobility to continue to exist as a stand-alone entity if it sold a large portion of its patent portfolio".

In connection with these discussions, the two companies signed a confidentiality and non-disclosure agreement that allowed Google to do due diligence on the company's patent portfolio.

On July 21 and 23, Jha met with Arora and Rubin to discuss strategic options between the two companies, agreeing to continue to discuss a potential sale. On the morning of August 15, the two companies entered into a merger agreement at the offered price of \$40. On November 17, Motorola Mobility stockholders approved the proposed merger with [Google Inc.](#)^[59] On April 17, 2013, ARRIS Group, Inc. (NASDAQ: ARRS) announced that it completed its acquisition of the Motorola Home business from a subsidiary of Google Inc.^[60]

Motorola Mobility (Google) deal by Lenovo

On January 29, 2014, Google announced [Lenovo](#) plans to acquire the Motorola Mobility smartphone business. The purchase price was approximately \$2.91 billion (subject to certain adjustments), including \$1.41 billion paid at close: \$660 million in cash and \$750 million in Lenovo ordinary shares (subject to a share cap/floor). The remaining \$1.5 billion will be paid in the form of a three-year promissory note.

Google maintained ownership of the vast majority of the Motorola Mobility patent portfolio, including active patent applications and invention disclosures. As part of its ongoing relationship with Google, Lenovo received a license to this rich portfolio of patents and other intellectual property. Additionally, Lenovo received over 2,000 patent assets, as well as the Motorola

Mobility brand and trademark portfolio.^[61] On October 30, 2014, Lenovo finalized its purchase of Motorola Mobility from Google.^[11]

Canopy and Orthogon

Cambium Networks was created when Motorola Solutions sold the Canopy and Orthogon businesses in 2011. Cambium Networks has evolved the platform and expanded it to three product lines: Point to Point (PTP) (formerly Orthogon), Point to Multipoint (PMP) (formerly Canopy) and ePMP.

Finances

Motorola's handset division recorded a loss of US\$1.2 billion in the fourth quarter of 2007, while the company as a whole earned \$100 million during that quarter.^[62] It lost several key executives to rivals,^[63] and the web site [TrustedReviews](#) called the company's products repetitive and uninnovative.^[64] Motorola laid off 3,500 workers in January 2008,^[65] followed by a further 4,000 job cuts in June^[66] and another 20% cut of its research division a few days later.^[67] In July 2008, a large number of executives left Motorola to work on [Apple Inc.](#)'s [iPhone](#).^[68] The company's handset division was also put on offer for sale.^[69] Also that month, analyst Mark McKechnie from American Technology Research said that Motorola "would be lucky to fetch \$500 million" for selling its handset business. Analyst Richard Windsor said that Motorola might have to pay someone to take the division off the company's hands, and that Motorola may even exit the handset market altogether.^[70] Its global market share has been on the decline; from 18.4% of the market in 2007 the company had a share of just 6.0% by Q1 2009, but at last Motorola scored a profit of \$26 million in Q2 and showed an increase of 12% in stocks for the first time after losses in many quarters. During the second quarter of 2010, the company reported a profit of \$162 million, which compared very favorably to the \$26 million earned for the same period the year before. Its Mobile Devices division reported, for the first time in years, earnings of \$87 million.^[71]

Quality systems

The [Six Sigma quality system](#) was developed at is still used by Motorola even though it became best known through its use by [General Electric](#). It was created by engineer [Bill Smith](#), under the direction of [Bob Galvin](#) (son of founder Paul Galvin) when he was running the company. Motorola University is one of many places that provide Six Sigma training.

Environmental record

Motorola, Inc., along with the Arizona Water Co. has been identified as the sources of [trichloroethylene](#) (TCE) contamination that took place in [Scottsdale, Arizona](#). The malfunction led to a ban on the use of water that lasted three days and affected almost 5000 people in the area. Motorola was found to be the main source of the TCE, an industrial solvent that can cause cancer. The TCE contamination was caused by a faulty blower on an air stripping tower that was used to take TCE from the water, and Motorola has attributed the situation to operator error.^[72]

Of eighteen leading electronics manufacturers in [Greenpeace](#)'s Guide to Greener Electronics (October 2010), Motorola shares sixth place with competitors Panasonic and Sony).^[73]

Motorola scores relatively well on the chemicals criteria and has a goal to eliminate PVC plastic and brominated flame retardants (BFRs), though only in mobile devices and not in all its products introduced after 2010, despite the fact that Sony Ericsson and Nokia are already there. All of its mobile phones are now PVC-free and it has two PVC and BFR-free mobile phones, the A45 ECO and the GRASP; all chargers are also free from PVC and BFRs.^[73]

The company is also increasing the proportion of recycled materials that used in its products. For example, the housings for the MOTO W233 Renew and MOTOCUBO A45 Eco mobile phones contain plastic from post-consumer recycled water cooler bottles.^[74] According to the company's information, all of Motorola's newly designed chargers meet the current [Energy Star](#) requirements and exceed the requirements for standby/no-load modes by at least 67%.^[75]

Sponsorships

Motorola sponsored [Scottish Premier League](#) club [Motherwell F.C.](#) for 11 years. This long-term deal ended after the company started to reduce its manufacturing operations in Scotland. The company also sponsored [Livingston F.C.](#) between 1998 and 2002. The company also had a plant on the edge of the [town](#). However, this closed down at the same time as their sponsorship with the [club](#) ended. The South Stand at Livingston's [Almondvale Stadium](#), was named after the company, during their time of sponsorship. The company also sponsored a cycling team that counted Lance Armstrong amongst its members. Motorola is also a sponsor of [Danica Patrick](#), [David Beckham](#), and [Fergie](#). It also sponsored the [Richmond Football Club](#) in the [Australian Football League](#) from 2004 to 2007. Motorola sponsored [São Paulo FC](#) from 2000 to 2001. Motorola also sponsored [Club Bolívar](#) since 2008. Motorola awarded TrackIT Solutions for being "The company with most Innovative Enterprise Mobility Solution" in 2010.

Motorola sponsored [Indian Premier League](#) team [Rising Pune Supergiant](#)

In [Madden NFL 07](#) franchise mode, a Motorola phone is used to communicate with coaches and agents.

Robby Gordon was sponsored by Motorola in 2007 and 2008. Motorola is on Gordon's car in [NASCAR 07](#) and [NASCAR 08](#).

Motorola sponsored the golf tournament [Western Open](#) from 1994 to 1999.