

GLOSSARY OF TECHNOLOGY TERMS

Chips and microelectronics

Semiconductor. A material, most often silicon, that conducts electricity only under certain conditions. That property lets engineers control the flow of current, which is why semiconductors underpin almost every electronic device.

Integrated circuit (chip). A sliver of silicon a few millimeters across, carrying millions or billions of transistors. The chip is the brain of a phone, a car or a server.

IC design. The creation of a chip's electrical blueprint before it is manufactured. According to Yervand Zorian, Chairman of Synopsys Armenia, chip design has been done in Armenia for more than 25 years.

EDA (Electronic Design Automation). The software used to design and verify chips; no modern chip can be built without it. Synopsys, one of the world's largest EDA companies, built its Armenian arm in 2004 by acquiring two local firms.

Fab and foundry. A fab is a factory that manufactures chips on silicon wafers. A foundry is a fab that makes chips to other companies' designs.

Fabless. A company that designs chips but outsources their manufacturing to a foundry. Armenia's microelectronics experience lies mainly in design.

Technology node (nm). The conventional name for a generation of chip manufacturing, given in nanometers (for example, "5 nm"). The smaller the number, the faster and more energy-efficient the chip tends to be.

Export controls. Restrictions that governments place on exporting advanced technologies, such as AI chips. The US–Armenia memorandum of 8 August 2025 also covers creating the conditions for improving Armenia's assessed export-control status.

AI infrastructure

GPU. A graphics processor that performs thousands of simple calculations at once. That makes it the workhorse for training artificial intelligence models. The NVIDIA B200 is one such GPU.

AI factory. A data center built specifically for AI workloads, as opposed to an ordinary facility that houses general-purpose servers. The first phase of Firebird's AI factory opened in Hrazdan on 8 August 2026, with 6,144 B200 GPUs.

Megawatt capacity. Data centers are often measured not by the number of servers but by the electricity they draw. Firebird's first phase runs at 15 MW; the company plans to reach 300 MW by the end of 2027 (a plan, not operating capacity).

Training and inference. Training is teaching a model from data, a heavy and costly process. Inference is getting an answer from a finished model, such as asking a chatbot a question.

Supercomputer. A very powerful computing system built for the heaviest problems. Yerevan State University operates a supercomputing center with 64 NVIDIA H100 GPUs.

Startups and investment

Startup. A young company in search of a fast-growing, scalable business model, often built around an innovative product. Unlike a small business, its goal is rapid growth.

Accelerator. A program that gives startups mentoring, connections and often funding over a short period. On 3 July 2025, the Government approved a three-year partnership with Plug and Play.

Venture capital fund. An investment fund that puts money into early-stage companies in exchange for a stake. Formula VC II plans to invest USD 30 million in 40 startups with Armenian roots.

Funding rounds (seed, Series A). Seed is the earliest round, used to build a product. Series A follows, once there is a working product and a growing customer base, and the company starts to scale.

Product vs. outsourcing company. A product company builds and sells its own product. An outsourcing company provides software services to clients. Tech Market Insights counts 538 product companies among the 1,253 it considers active.

Industry and policy

ICT, IT and the high-tech sector. These are not the same thing. ICT also covers telecommunications and equipment, IT covers software and computing services, and "high-tech" is a legal status (see the register below). Differences in definition are one reason the



numbers vary: the count of companies differs between the ministry, the State Revenue Committee and independent studies.

High-tech register. A state list of companies eligible for tax incentives. One condition is that at least 90% of a company's turnover must come from high-tech activity.

1% turnover tax. Part of the incentive package for high-tech activity, replacing the previous 5% rate. The incentives run from 1 January 2025 to 31 December 2031.

Global Innovation Index (GII). The annual WIPO ranking that compares countries' innovation capacity. In 2026, Armenia ranks 59th out of 139 economies.

StartupBlink ranking. A global ranking of startup ecosystems by country and city. In 2025, Armenia stands 54th, up three places.