

Control(s)	Country chart
CC applies to "technology" for computerized fingerprint equipment controlled by 4A003 for CC reasons.	CC Column 1.
AT applies to entire entry	AT Column 1.

NP applies, unless a License Exception is available. See § 742.3(b) of the EAR for information on applicable licensing review policies.

XP applies to "technology" for computers with a CTP greater than 190,000 MTOPS, unless a License Exception is available. XP controls vary according to destination and end-user and end-use; however, XP does not apply to Canada. See § 742.12 of the EAR for additional information.

License Requirement Notes: See § 743.1 of the EAR for reporting requirements for exports under License Exceptions.

License Exceptions * * *

List of Items Controlled

Unit: * * *

Related Controls: * * *

Related Definitions: * * *

Items:

a. "Technology" according to the General Technology Note, for the "development," "production," or "use" of equipment or "software" controlled by 4A (except 4A980, 4A993 or 4A994) or 4D (except 4D980, 4D993, 4D994).

b. "Technology", other than that controlled by 4E001.a, specially designed or modified for the "development" or "production" of:

b.1. "Digital computers" having a "composite theoretical performance" ("CTP") exceeding 28,000 MTOPS; or
b.2. "Electronic assemblies" specially designed or modified for enhancing performance by aggregation of "computing elements" ("CEs") so that the "CTP" of the aggregation exceeds the limit in 4E001.b.1.

■ 23. In Supplement No. 1 to part 774 (the Commerce Control List), Category 4—Computers, Export Control Classification Number (ECCN) 4E992 is amended by revising the "Heading", to read as follows:

4E992 "Technology" other than that controlled in 4E001 for the "development", "production", or "use" of equipment controlled by 4A994 and 4B994, materials controlled by 4C994, or "software" controlled by 4D993 or 4D994.

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■ 24. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and "Information Security", Part I—Telecommunications, Export Control Classification Number (ECCN) 5A001 is amended by revising the "items" paragraph in the List of Items Controlled section, to read as follows:

5A001 Telecommunications systems, equipment, and components.

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List of Items Controlled

Unit: * * *

Related Controls: * * *

Related Definitions: * * *

Items:

a. Any type of telecommunications equipment having any of the following characteristics, functions or features:
a.1. Specially designed to withstand transitory electronic effects or electromagnetic pulse effects, both arising from a nuclear explosion;

a.2. Specially hardened to withstand gamma, neutron or ion radiation; or

a.3. Specially designed to operate outside the temperature range from 218 K (−55° C) to 397 K (124° C).

Note: 5A001.a.3 applies only to electronic equipment.

Note: 5A001.a.2 and 5A001.a.3 do not apply to equipment on board satellites.

b. Telecommunication transmission equipment and systems, and specially designed components and accessories therefor, having any of the following characteristics, functions or features:
b.1. Being underwater communications systems having any of the following characteristics:

b.1.a. An acoustic carrier frequency outside the range from 20 kHz to 60 kHz;
b.1.b. Using an electromagnetic carrier frequency below 30 kHz; or
b.1.c. Using electronic beam steering techniques;

b.2. Being radio equipment operating in the 1.5 MHz to 87.5 MHz band and having any of the following characteristics:
b.2.a. Incorporating adaptive techniques providing more than 15 dB suppression of an interfering signal; or
b.2.b. Having all of the following:

b.2.b.1. Automatically predicting and selecting frequencies and "total digital transfer rates" per channel to optimize the transmission; and
b.2.b.2. Incorporating a linear power amplifier configuration having a capability to support multiple signals simultaneously at an output power of 1 kW or more in the frequency range of 1.5 MHz or more but less than 30 MHz, or 250 W or more in the frequency range of 30 MHz or more but not exceeding 87.5 MHz, over an "instantaneous bandwidth" of one octave or more and with an output harmonic and distortion content of better than −80 dB;

b.3. Being radio equipment employing "spread spectrum" techniques, including "frequency hopping" techniques, having any of the following characteristics:
b.3.a. User programmable spreading codes; or
b.3.b. A total transmitted bandwidth which is 100 or more times the bandwidth of any one information channel and in excess of 50 kHz;

Note: 5A001.b.3.b does not control radio equipment specially designed for use with civil cellular radio-communications systems.

Note: 5A001.b.3 does not control equipment operating at an output power of 1.0 Watt or less.

b.4. Being radio equipment employing "time-modulated ultra-wideband"

techniques, having user programmable channelizing or scrambling codes;

b.5. Being digitally controlled radio receivers having all of the following:

b.5.a. More than 1,000 channels;
b.5.b. A "frequency switching time" of less than 1 ms;

b.5.c. Automatic searching or scanning of a part of the electromagnetic spectrum; and
b.5.d. Identification of the received signals or the type of transmitter; or

Note: 5A001.b.5 does not control radio equipment specially designed for use with civil cellular radio-communications systems.

b.6. Employing functions of digital "signal processing" to provide voice coding output at rates of less than 2,400 bit/s.

Technical Note: For variable rate voice coding, 5A001.b.6 applies to the voice coding output of continuous speech.

c. Optical fiber communication cables, optical fibers and accessories, as follows:

c.1. Optical fibers of more than 500 m in length specified by the manufacturer as being capable of withstanding a proof test tensile stress of $2 \times 109 \text{ N/m}^2$ or more;

Technical Note: Proof Test: on-line or off-line production screen testing that dynamically applies a prescribed tensile stress over a 0.5 to 3 m length of fiber at a running rate of 2 to 5 m/s while passing between capstans approximately 150 mm in diameter. The ambient temperature is a nominal 293 K (20° C) and relative humidity 40%. Equivalent national standards may be used for executing the proof test.

c.2. Optical fiber cables and accessories designed for underwater use.

Note: 5A001.c.2 does not control standard civil telecommunication cables and accessories.

N.B. 1: For underwater umbilical cables, and connectors thereof, see 8A002.a.3.

N.B. 2: For fiber-optic hull penetrators or connectors, see 8A002.c.

d. "Electronically steerable phased array antennae" operating above 31 GHz.

Note: 5A001.d does not control "electronically steerable phased array antennae" for landing systems with instruments meeting ICAO standards covering microwave landing systems (MLS).

■ 25. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and "Information Security", Part I—Telecommunications, Export Control Classification Number (ECCN) 5A991 is amended by revising the "items" paragraph in the List of Items Controlled section, to read as follows:

5A991 Telecommunication equipment, not controlled by 5A001.

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List of Items Controlled

Unit: * * *

Related Controls: * * *

Related Definitions: * * *

Items:

a. Any type of telecommunications equipment, not controlled by 5A001.a,