

U.S. Census Bureau

Semiconductors, Electronic Components, and Semiconductor Manufacturing Equipment - 2007

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Address inquiries concerning these data to Investment Goods Industries Branch, U.S. Department of Commerce, Census Bureau, Manufacturing and Construction Division, Washington, DC 20233-6900, or call Philippe S.J. Morris, 301-763-4819.

These data are also available online through STAT-USA by subscription. For further information, visit <http://www.stat-usa.gov/> or call 1-800-STAT-USA.

Table 1. Value of Shipments of Semiconductors, Electronic Components, and Semiconductor Manufacturing Equipment by Product Class Code: 2003 to 2007
 [Value in million dollars]

Product class code	Product description	2007	2006	2005	2004	2003
3332950600	Semiconductor machinery.....	13,107.3	12,598.1	9,728.2	NA	NA
3344110100	Electron tubes and parts, excluding glass blanks.....	816.7	955.0	1,344.6	1,768.2	2,200.2
3344120100	Bare printed circuit boards.....	4,387.5	4,932.9	4,855.5	4,708.8	4,871.1
3344131	Integrated microcircuits, including semiconductor networks, microprocessors, and MOS memories.....	49,639.9	54,962.6	61,631.2	60,097.3	54,830.4
3344134100	Transistors.....	606.3	679.4	603.0	656.0	607.8
3344137100	Diodes and rectifiers.....	484.9	467.4	371.9	304.9	391.2
334413A100	Other semiconductor devices, including semiconductor parts such as chips, wafers, and heat sinks.....	9,771.2	10,483.1	8,330.3	7,247.4	6,519.2
3344140100	Capacitors for electronic circuitry.....	917.5	1,064.1	1,113.4	1,184.1	1,191.6
3344150100	Resistors for electronic circuitry.....	655.0 r/	660.3	652.5	743.9	636.3
3344160100	Electronic coils, transformers, and other inductors.....	1,339.3 r/	1,231.4	1,215.9	1,115.6	956.5
3344170100	Connectors for electronic circuitry.....	4,289.4	3,980.0	3,589.3	3,415.9	3,485.9
334418B100	Printed circuit assemblies, loaded boards and modules (printed circuit boards with inserted electronic components).....	19,881.1 r/	19,590.8	20,105.5	19,565.6	19,714.7
3344191100	Crystals, filters, piezoelectric, and other related electronic devices (except microwave filters).....	686.3	753.6	778.8	654.0	600.5
3344194100	All other miscellaneous transducers, including electrical-electronic input/output transducers.....	1,400.2 r/	1,322.5	1,401.3	1,494.8	1,218.5
3344197100	Switches, mechanical, for electronic circuitry.....	608.8 r/	644.8	794.2	715.8	739.1
334419A100	Microwave components and devices, except antennae, tubes, and semiconductors.....	1,541.7	1,469.6	1,306.0	1,326.0	1,414.8
334419E100	All other miscellaneous electronic components.....	4,749.9	4,346.4	4,040.4	4,158.3	4,060.4

NA Not available. r/Revised by 5 percent or more from previously published data.

Table 2. Quantity and Value of Shipments of Semiconductors, Electronic Components, and Semiconductor Manufacturing Equipment: 2007 and 2006
[Values in thousands of dollars]

Product code	Product description	No. of cos.	2007	2006
			Value	Value
3332950600	Semiconductor Machinery.....	103	13,107,253	12,598,142
3332950106	Semiconductor wafer processing equipment: thin layer chemical vapor deposition.....	12	2,553,942	2,609,376
3332950211	Semiconductor wafer processing equipment: thin layer physical vapor deposition.....	8	(D)	(D)
3332950326	Semiconductor wafer processing equipment: plasma etch.....	9	1,806,660	1,626,834
3332950401	Microlithography, including aligners.....	9 a/	37,135	r/ 35,369
3332950416	Semiconductor wafer processing equipment: thin layer epitaxial growth deposition.....	4	(D)	(D)
3332950421	Semiconductor wafer processing equipment: wet etch.....	9	117,118	112,237
3332950441	Ion implantation, including current and voltage ion implanters.....	4	1,210,161	1,088,720
3332950456	Wafer processing equipment: pattern generating apparatus.....	1	(D)	(D)
3332950461	Other semiconductor wafer processing equipment.....	40	3,845,183	3,899,260
3332950500	Parts for semiconductor manufacturing machinery, including packaging equipment.....	50	1,929,085	r/ 1,708,807
3344110100	Transmittal, industrial, and special-purpose electron tubes (except X-ray).....	28	816,699	954,994
	Power and special-purpose tubes:			
3344110130	Power and special-purpose electron tubes, except forward wave tubes.....	12	263,398	295,960
3344110210	Forward wave transmitting and industrial electron tubes (excluding X-ray).....	4	328,608	249,364
3344110310	All other transmitting, industrial, and special-purpose electron tubes, (excluding X-ray), including light sensing, light emitting devices, and miscellaneous special-purpose tubes.....	12 a/	142,016	144,714
3344110410	Receiving-type electron tubes, including cathode ray (new and rebuilt).....	3	(D)	216,245
3344110510	Electron tube parts.....	9	(D)	48,711
3344120100	Bare printed circuit boards.....	316 a/	4,387,452	4,932,907
3344120105	Single-sided glass printed.....	152 a/	68,184	70,344
3344120110	Double-sided glass printed.....	202 a/	419,603	460,748
3344120115	Multilayer glass printed.....	199 a/	2,477,468	2,842,306
3344120120	Single-sided flex printed.....	36	257,091	354,124
3344120125	Double-sided flex printed.....	41	98,548	r/ 123,033
3344120130	Multilayer flex and rigid/flex printed.....	45 a/	219,485	212,700
3344120139	Other.....	58 a/	673,969	658,858
9300031000	Receipts for contract work on printed circuit boards (etching, dip-soldering, imprinting, etc.), but not printed board assembly.....	20 a/	173,104	r/ 210,794
3344131	Integrated microcircuits, including semiconductor networks, microprocessors, and MOS memories.....	113	49,639,930	54,962,572
3344131510	Total memory.....	36	11,390,038	11,307,860
3344131550	Monolithic integrated circuits, digital, nonsilicon.....	8	1,194,197	1,095,666
3344131552	Monolithic integrated circuits, digital, silicon.....	14	3,794,379	r/ 3,556,557
	Metal oxide semiconductor (MOS) field effect transistors:			
	Volatile memory DRAMs (dynamic read-write random access):			
3344131574	16 megabit and less.....	4	(D)	(D)
3344131575	Greater than 16 Mb, but less than 64 Mb.....	1	(D)	(D)
3344131576	64 Mb, but less than 128 Mb.....	3	(D)	(D)
3344131577	Greater than 128 Mb, but less than 256 Mb.....	4	(D)	(D)
3344131578	Greater than 256 Mb.....	6	3,153,292	3,219,729
	Volatile memory SRAMs (static read-write random access):			
3344131583	2 Mb and less.....	3	(D)	(D)
3344131587	Greater than 2 Mb.....	3	(D)	(D)
	Nonvolatile EEPROMs (electrically erasable programmable read-only memory):			
3344131588	Nonvolatile EEPROM.....	5	(D)	(D)
3344131589	Other Nonvolatile.....	7	329,326	r/ 678,797

Table 2. Quantity and Value of Shipments of Semiconductors, Electronic Components, and Semiconductor Manufacturing Equipment: 2007 and 2006
[Values in thousands of dollars]

Product code	Product description	No. of cos.	2007	2006
			Value	Value
3344131581	NAND type flash EEPROM.....	7	830,669	r/ 239,012
3344131593	NOR type flash EEPROM.....	5	723,032	r/ 792,289
3344131210	Total microprocessors.....	21	24,461,426	28,917,146
	Other, including microprocessors, microcontrollers, application specific integrated circuits (ASIC's), and programmable logic arrays (PLA's):			
3344131253	Dual core processors.....	1	(D)	(D)
3344131255	Microprocessors (MPU) operating with an external data bus of 8 bits or less.....	8	1,074,107	1,231,277
3344131258	Microprocessors (MPU) operating with an external data bus of 16 bits.....	12	(D)	(D)
3344131261	Microprocessors (MPU) operating with an external data bus of 32 bits or more.....	6	(D)	(D)
3344131234	Microcontrollers (MCU) operating with an external data bus of 8 bits or less.....	4	344,821	r/ 374,878
3344131235	Microcontrollers (MCU) operating with an external data bus of 16 bits.....	12	(D)	(D)
3344131236	Microcontrollers (MCU) operating with an external data bus of 32 bits or more.....	3	(D)	(D)
3344131910	Total other integrated circuit packages.....	91	13,788,466	14,737,566
	Other digital, silicon, including bipolar combined with MOS:			
3344131943	Complementary BiMOS.....	7	646,664	826,643
3344131945	Other digital silicon ICs.....	17	2,218,324	(D)
	Nondigital silicon monolithic integrated circuits (e.g., linear, analog):			
3344131962	Radio frequency.....	4	379,789	r/ 146,650
3344131903	Other, analog.....	22	3,154,186	r/ 3,338,740
3344131907	Other.....	17	3,122,684	3,140,289
	Hybrid integrated circuits:			
3344131918	Radio frequency.....	17	1,074,816	(D)
3344131951	Other.....	34	927,328	812,096
3344131912	Other.....	32	2,264,675	2,513,996
3344134100	Transistors.....	25 b/	606,315	679,360
3344137100	Diodes and rectifiers.....	35 a/	484,853	467,427
334413A100	Other semiconductor devices.....	139	9,771,212	10,483,144
	Light-sensitive and light-emitting devices:			
334413A105	Solar cells.....	9 a/	426,859	r/ 243,512
334413A110	Photovoltaic modules.....	9	543,720	r/ 409,337
334413A123	Light-emitting diodes (LEDs).....	17	635,758	680,271
334413A137	Other light sensitive and light-emitting devices.....	18	492,916	462,059
	Other semiconductor devices:			
334413A140	Thyristors (SCR's, triacs, PNPN diodes).....	4	77,631	(D)
334413A150	All other semiconductor devices (tunnel diodes, thermoelectric semiconductor junctions, metal-oxide varistors, solid-state transducers, and special semiconductor devices).....	16	695,357	(D)
	Semiconductor parts:			
334413A155	Chips and wafers:			
	For integrated circuits (IC's).....	38	4,592,241	r/ 4,801,068
334413A160	For discrete semiconductors.....	27	877,688	1,658,278
334413A165	All other semiconductor parts (headers, packages, heat sinks, other accessories, etc.).....	43	1,429,042	r/ 1,459,172
3344140100	Capacitors for electronic circuitry.....	56	917,515	1,064,131
3344140173	Capacitors.....	53	(D)	902,379
3344140175	Parts for capacitors, including unfinished chips for further finishing and assembly.....	5	(D)	161,752
3344150100	Resistors for electronic circuitry.....	58 b/	655,046	r/ 660,335
3344150182	Resistors.....	52 a/	528,012	r/ 513,642
3344150184	Parts for resistors.....	8 c/	127,034	146,693

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[Values in thousands of dollars]

Product code	Product description	No. of cos.	2007	2006
			Value	Value
3344160100	Electronic coils, transformers, and other inductors	180 a/	1,339,280	r/ 1,231,385
3344170100	Total connectors and parts.....	130 a/	4,289,443	3,979,890
3344170200	Coaxial (RF) connectors for electronic circuitry.....	42 a/	489,581	402,250
3344170400	Cylindrical connectors for electronic circuitry.....	31 b/	1,028,711	825,351
3344170700	Rack and panel (rectangular) connectors for electronic circuitry.....	30 a/	306,912	328,295
3344170A00	Printed circuit connectors for electronic circuitry.....	35	1,065,372	1,131,040
3344170D17	Other connectors.....	63 a/	1,065,015	1,012,980
3344170D25	Parts for connectors (connectors shipped but still requiring further manufacture).....	26	333,852	279,974
334418B100	Printed circuit assemblies, loaded boards and modules (printed circuit boards with inserted electronic components).....	531 a/	19,881,054	r/ 19,590,790
334418B105	Computer and peripheral printed board assemblies.....	165	5,574,147	r/ 6,143,542
334418B110	Communications printed board assemblies.....	163 a/	4,052,860	4,034,536
334418B115	Industrial process control board assemblies.....	203 a/	1,409,567	1,293,778
334418B120	Instrumentation printed board assemblies (except industrial process).....	165 a/	1,342,456	1,526,621
334418B125	Search and detection printed board assemblies.....	68	425,642	359,072
334418B130	Consumer electronics, printed board assemblies.....	110	724,375	r/ 548,854
334418B137	Other printed board assemblies, subassemblies and modules, including office equipment, point of sales and plotter controllers.....	271 a/	6,352,007	r/ 5,684,387
3344191100	Crystals, filters, piezoelectric, and other related devices (except microwave filters).....	75	686,291	753,558
3344191127	Filters (except microwave).....	40	247,606	282,970
3344191180	Piezoelectric devices.....	44	438,685	470,588
3344194100	All other miscellaneous transducers, including electrical-electronic input/output transducers.....	70	1,400,244	r/ 1,322,489
3344194105	Electro acoustic (sonar, ultrasonic, vibration*, etc.).....	17	147,504	r/ 139,136
3344194110	Electromechanical:			
3344194115	Accelerometers*.....	6	197,360	181,690
3344194120	Pressure*.....	27	554,322	521,147
3344194125	Strain gauges and other mechanical*.....	14	109,079	115,757
3344194135	Other.....	24 a/	391,979	r/ 364,759
3344197100	Switches, mechanical, for electronic circuitry*.....	46	608,845	r/ 632,815
334419A100	Microwave components and devices, except antennae, tubes, and semiconductors.....	88 a/	1,541,671	1,469,635
334419A105	Ferrite, including yttrium garnets, microwave components (circulators, isolators, phase shifters, attenuators, equalizers, limiters, mixers, etc.).....	32	226,124	r/ 214,356
334419A110	Microwave devices, other than ferrite and solid state:			
334419A120	Attenuators (dummy loads, high and low-power terminations, etc.).....	29	151,411	154,352
334419A125	Reactive microwave components.....	28 a/	235,371	219,013
334419A130	Switches, coaxial and waveguide.....	27	223,607	r/ 203,008
334419A147	Other microwave devices.....	50	443,942	422,215
334419A150	Microwave subassemblies, including parametric amplifiers and other solid-state assemblies.....	22 b/	261,216	256,691
334419E100	All other miscellaneous electronic components.....	362 a/	4,749,855	4,346,440
334419E125	Oscillators (except instrumentation and crystal types).....	15	136,931	141,729
	Static power supply converters for electronic applications, sold separately:			
334419E130	Regulated.....	40	532,546	538,966

Table 2. Quantity and Value of Shipments of Semiconductors, Electronic Components, and Semiconductor Manufacturing Equipment: 2007 and 2006
 [Values in thousands of dollars]

Product code	Product description	No. of cos.	2007 Value	2006 Value
334419E135	Other (unregulated, variable frequency, ac, dc, converters and inverters, vibrator, etc.).....	29	274,233	223,901
334419E140	Electronic cable harnesses and cable assemblies.....	197 a/	2,082,771	1,697,006
334419E155	Magnetic cores.....	9	125,707	138,795
	Electronic parts, n.e.c. and specialized electronic hardware:			
	Sockets for electronic component insertion:			
334419E180	All other specialized electronic hardware.....	136 a/	1,597,667	1,606,043

*Similar products are collected on Current Industrial Report series MA334C, "Control instruments" and MA335K, "Wiring Devices and Supplies."
 D Withheld to avoid disclosing data for individual companies. N.e.c. Not specified by kind. R/Revised by 5 percent or more from previously published data.

Note: Percent of estimation for each item is indicated as follows: a/10 to 25 percent of this item has been estimated. b/26 to 50 percent of this item has been estimated. c/Over 50 percent of this item has been estimate.

Table 3. Shipments, Exports, and Imports of Semiconductors, Printed Circuit Boards, and Other Electronics Components: 2007
[Values in thousands]

Product code	Product description	Manufacturers' shipments (value, f.o.b. plant)	Exports of domestic merchandise (value at port) 1/	Imports for consumption 2/3/
3332950106, 211, 326, 401, 416, 421, 441, 456, 461	Semiconductor manufacturing equipment.....	11,178,168	7,082,465	3,533,174
3332950500	Parts for semiconductor manufacturing machinery, including packaging equipment.....	1,929,085	1,612,201	1,081,388
3344110130, 310	Power and special-purpose electron tubes, except forward wave tubes.....	405,414	90,333	107,559
3344110410	Receiving-type electron tubes, including cathode ray (new and rebuilt).....	(D)	50,173	91,652
3344110510	Electron tube parts.....	(D)	41,578	22,451
3344120100	Bare printed circuit boards.....	4,387,452	1,531,273	2,323,877
3344131234, 235, 236, 253, 255, 258, 261	Processors and controllers.....	24,461,426	11,501,287	6,167,515
3344131574, 575, 576, 577, 578	Memories, Dynamic read-write random access (DRAM).....	(D)	2,430,348	3,214,291
3344131583, 587	Memories, Static read-write random access (SRAM).....	(D)	207,125	445,579
3344131581, 588, 593	Electrically erasable programmable read-only memory (EEPROM).....	(D)	2,590,748	1,872,093
3344131589	Erasable (except electrically) programmable read-only memory (EPROM).....	329,326	41,887	54,944
3344131550, 552, 943, 945	Memories, other.....	7,853,564	203,834	444,670
3344131903, 907, 912, 918, 951, 962	Integrated circuits, other.....	10,923,478	9,447,590	8,093,692
3344134100	Transistors.....	606,315	1,059,833	1,336,060
3344137100	Diodes and rectifiers.....	484,853	484,778	653,664
334413A105	Solar cells.....	426,859	646,934	686,324
334413A123	Light-emitting diodes (LEDs).....	635,758	487,876	814,988
334413A137	Other light-sensitive and light-emitting devices.....	492,916	147,324	439,012
334413A140	Thyristors, SCR's, triacs, and PNPN diodes.....	77,631	35,204	169,026
334413A155	Chips and wafers for integrated circuits.....	4,592,241	2,018,619	511,031
334413A160	Chips and wafers for discrete semiconductors.....	877,688	3,052,482	475,021
334413A165	All other semiconductor parts (headers, packages, heat sinks, other accessories, etc).....	1,429,042	2,245,249	710,149
3344140173	Capacitors.....	(D)	887,027	786,848
3344140175	Parts for capacitors, including unfinished chips for further finishing and assembly.....	(D)	89,095	28,887
3344150182	Resistors.....	528,012	288,481	688,095
3344150184	Parts for resistors.....	127,034	74,212	52,298
3344160100	Electronic coils, transformers, and other inductors.....	1,339,280	368,508	922,504
3344170200	Coaxial (RF) connectors for electronic circuitry.....	489,581	168,807	317,516
3344170400	Cylindrical connectors for electronic circuitry.....	1,028,711	120,381	282,640
3344170700	Rack and panel (rectangular) connectors for electronic circuitry	306,912	57,494	75,856
3344170A00	Printed circuit connectors for electronic circuitry	1,065,372	668,975	446,311
3344191180	Piezoelectric devices.....	438,685	286,477	385,371
3344197100	Switches, mechanical, for electronic circuitry.....	608,845	896,970	1,942,153

D Withheld to avoid disclosing data for individual companies.

1/Source: Census Bureau report EM 545, U.S. Exports.

2/Source: Census Bureau report IM 145, General Imports for Consumption.

3/Value represents the c.i.f. (cost, insurance, and freight) value at port of entry in the United States plus import duties.

Note 1: Some data may not be comparable due to definitional differences between the value of product shipments and the value of export shipments.

Note 2: For comparison of the North American Industry Classification System (NAICS)-based product codes with Schedule B export codes, and HTSUSA import codes, see Table 4.

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes
with Schedule B Export Codes, and HTSUSA Import Codes: 2007

Product code	Product description	Export code 1/	Import code 2/
3332950106, 211, 326, 401, 416, 421, 441, 456, 461	Semiconductor manufacturing equipment.....	8486.10.0000 8486.20.0000 8486.40.0020 8486.40.0030 8543.70.2000	8486.10.0000 8486.20.0000 8486.40.0020 8486.40.0030 8543.70.2000
3332950500	Parts for semiconductor manufacturing machinery, including packaging equipment.....	8486.90.0000	8486.90.0000
3344110130, 310	Power and special purpose electron tubes, except forward wave tubes	8540.71.2000 8540.71.4000 8540.72.0000 8540.79.0000 8540.89.0020 8540.89.0040 8540.89.0080	8540.71.2000 8540.71.4000 8540.72.0000 8540.79.0000 8540.89.0020 8540.89.0040 8540.89.0080
3344110410	Receiving-type electron tubes, inluding cathode ray (new and rebuilt).....	8540.11.0035 8540.11.0070 8540.11.0080 8540.12.0000 8540.60.0055 8540.60.0080 8540.81.0000	8540.11.1030 8540.11.1040 8540.11.1050 8540.11.1055 8540.11.1065 8540.11.1080 8540.11.2401
3344110510	Electron tube parts.....	8540.91.2000 8540.91.4000 8540.99.0000	8540.91.1500 8540.91.2000 8540.91.5000 8540.99.4000 8540.99.8000
3344120105, 110, 115, 120, 125, 130, 139	Bare printed circuit boards.....	8534.00.0020 8534.00.0040 8534.00.0050 8534.00.0070 8534.00.0080 8534.00.0085 8534.00.0095	8534.00.0020 8534.00.0040 8534.00.0050 8534.00.0070 8534.00.0080 8534.00.0085 8534.00.0095
3344131234, 235, 236, 253, 255, 258, 261	Processors and controllers.....	8542.31.0000	8542.31.0000
3344131574, 575, 576, 577, 578	Memories, Dynamic read-write random access (DRAM).....	8542.32.0015 8542.32.0024	8542.32.0001 8542.32.0020 8542.32.0021 8542.32.0022 8542.32.0023
3344131583, 587	Memories, Static read-write random access (SRAM).....	8542.32.0040	8542.32.0040
3344131581, 588, 593	Electrically erasable programmable read-only memory (EEPROM).....	8542.32.0050	8542.32.0050
3344131589	Erasable (except electrically) programmable read-only memory (EPROM).....	8542.32.0060	8542.32.0060
3344131550, 552, 943, 945	Memories, other.....	8542.32.0070	8542.32.0070

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2007

Product code	Product description	Export code 1/	Import code 2/
3344131903, 907, 912, 918, 951, 962	Integrated circuits, other.....	8542.39.0000	8542.39.0000
3344134100	Transistors.....	8541.21.0080 8541.29.0080	8541.21.0040 8541.21.0075 8541.21.0095 8541.29.0040 8541.29.0075 8541.29.0095
3344137100	Diodes and rectifiers.....	8541.10.0050 8541.10.0060 8541.10.0070 8541.10.0080 8541.40.6050	8541.10.0050 8541.10.0060 8541.10.0070 8541.10.0080 8541.40.6050
334413A105	Solar cells.....	8541.40.6020 8541.40.6030	8541.40.6020 8541.40.6030
334413A123	Light-emitting diodes (LEDs).....	8541.40.2000	8541.40.2000
334413A137	Other light sensitive and light-emitting devices.....	8541.40.7080 8541.40.8000 8541.40.9500	8541.40.7080 8541.40.8000 8541.40.9500
334413A140	Thyristors, SCR's, triacs, and PNPN diodes.....	8541.30.0080	8541.30.0080
334413A155	Chips and wafers for integrated circuits.....	8542.90.0000 8542.21.8005 8542.21.8010 8542.29.0010 8542.90.0000	8542.10.0000 8542.21.8005 8542.21.8010 8542.29.0010 8542.90.0000
334413A160	Chips and wafers for discrete semiconductors.....	8541.10.0040 8541.21.0040 8541.29.0040 8541.30.0040 8541.40.6010 8541.40.7040 8541.50.0040 8541.50.0080	8541.10.0040 8541.21.0040 8541.29.0040 8541.30.0040 8541.40.6010 8541.40.7040 8541.50.0040 8541.50.0080
334413A165	All other semiconductor parts, including headers, packages, and heat sinks, accessories, etc.	8542.90.0000	8542.90.0000
3344140173	Capacitors.....	8532.21.0020 8532.21.0040 8532.21.0050 8532.21.0080 8532.22.0020 8532.22.0040 8532.22.0055 8532.22.0085 8532.23.0020 8532.23.0040 8532.23.0060 8532.24.0020 8532.24.0040 8532.24.0060 8532.25.0010 8532.25.0020 8532.25.0030 8532.25.0040 8532.25.0060 8532.25.0070 8532.25.0080 8532.29.0020 8532.29.0040 8532.30.0010 8532.30.0090	8532.21.0020 8532.21.0040 8532.21.0050 8532.21.0080 8532.22.0020 8532.22.0040 8532.22.0055 8532.22.0085 8532.23.0020 8532.23.0040 8532.23.0060 8532.24.0020 8532.24.0040 8532.24.0060 8532.25.0010 8532.25.0020 8532.25.0030 8532.25.0040 8532.25.0060 8532.25.0070 8532.25.0080 8532.29.0020 8532.29.0040 8532.30.0010 8532.30.0090
3344140175	Parts for capacitors, including unfinished chips for further finishing and assembly.....	8532.90.0000	8532.90.0000

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2007

Product code	Product description	Export code 1/	Import code 2/
3344150182	Resistors.....	8533.10.0020 8533.10.0042 8533.10.0057 8533.10.0070 8533.21.0025 8533.21.0045 8533.21.0075 8533.21.0080 8533.21.0090 8533.31.0000 8533.39.0080 8533.40.0080	8533.10.0020 8533.10.0042 8533.10.0057 8533.10.0060 8533.10.0065 8533.21.0010 8533.21.0020 8533.21.0030 8533.21.0040 8533.21.0050 8533.21.0060 8533.21.0070 8533.21.0080 8533.21.0090 8533.31.0000 8533.39.0080 8533.40.8050 8533.40.8060 8533.40.8070
3344150184	Parts for resistors.....	8533.90.0000	8533.90.4000 8533.90.8000
3344160100	Electronic coils, transformers, and other inductors.....	8504.31.2000 8504.31.4035 8504.31.4065 8504.31.6000 8504.32.0000 8504.33.0020 8504.33.0040 8504.34.0000 8529.90.3540 8540.91.2000	8504.31.2000 8504.31.4035 8504.31.4065 8504.31.6000 8504.32.0000 8504.33.0020 8504.33.0040 8504.34.0000 8529.90.3300 8529.90.3600 8540.91.2000
3344170200	Coaxial (RF) connectors for electronic circuitry	8536.69.4010	8536.69.4010
3344170400	Cylindrical connectors for electronic circuitry.....	8536.69.4020	8536.69.4020
3344170700	Rack and panel (rectangular) connectors for electronic circuitry.....	8536.69.4030	8536.69.4030
3344170A00	Printed circuit connectors for electronic circuitry.....	8536.69.5050	8536.69.4050
3344191180	Piezoelectric devices.....	7104.10.0000 8541.60.0025 8541.60.0060 8541.60.0080 8541.60.0050 8541.60.0060 8541.60.0080	7104.10.0000 8541.60.0010 8541.60.0020 8541.60.0030 8541.60.0050 8541.60.0060 8541.60.0080
3344197100	Switches, mechanical, for electronic circuitry.....	8536.50.7000 8536.50.9020 8536.50.9025 8536.50.9030 8536.50.9035 8536.50.9040 8536.50.9045 8536.50.9050 8536.50.9055 8536.50.9065 8536.50.9055 8536.50.9065	8536.50.7000 ** 8536.50.9020 8536.50.9025 8536.50.9031 8536.50.9032 8536.50.9033 8536.50.9040 8536.50.9045 8536.50.9040 8536.50.9045 8536.50.9050 8536.50.9055 8536.50.9055 8536.50.9065 8536.50.9065

** HS codes include switches of product class 36433.

1/Source: 2007 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2007).

HISTORICAL NOTE

The Census Bureau has collected data on selected electronic and associated products since 1961 on survey MA36N, Selected Electronics and Associated Products. In 1985, survey MA36N was divided into three annual surveys which are presently collected as: MA334P, Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment; MA334Q, Semiconductors, Printed Circuit Boards, and Other Electronic Components; and MA334S, Electromedical Equipment and Irradiation Equipment (Including X-Ray).

Beginning in 2005 data for the MA334Q was collected under the title Semiconductors, Electronic Components, and Semiconductor Manufacturing Equipment.

Historical Current Industrial Reports data may be obtained from a Federal Depository Library. To locate a Federal Depository Library in your area, please visit <http://www.gpoaccess.gov/libraries.html>.