

U.S. Census Bureau

Semiconductors, Electronic Components, and Semiconductor Manufacturing Equipment - 2010

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Address inquiries concerning these data to Census and Related Programs Support Branch, U.S. Department of Commerce, Census Bureau, Manufacturing and Construction Division, Washington, DC 20233-6900, or call Jenny Tran, 301-763-8715.

Table 1. Value of Shipments of Semiconductors, Electronic Components, and Semiconductor Manufacturing Equipment by Product Class
 [Values in millions of dollars]

Product class	Product description	Year		Value
3332950	Semiconductor machinery	2010		9,747
		2009		4,996
		2008		9,357
		2007		13,190
		2006		12,598
3344111	Transmitting, industrial, and special purpose electron tubes	2010		788
		2009		770
		2008		806
		2007		734
		2006		690
3344114	Receiving-type electron tubes, including cathode ray (new and rebuilt)	2010		(D)
		2009		(D)
		2008		(D)
		2007		(D)
		2006		216
3344117	Electron tubes and parts, excluding glass blanks	2010		32
		2009		30
		2008		31
		2007		36
		2006		49
3344120	Bare printed circuit boards	2010	b/	4,335
		2009	c/	4,113
		2008	a/	5,269
		2007		4,443
		2006		4,933

3344131	Integrated microcircuits, including semiconductor networks, microprocessors, and MOS memories	2010		49,704
		2009		40,235
		2008		51,104
		2007		49,781
		2006		54,963
3344134	Transistors	2010		(S)
		2009		(S)
		2008	a/	409
		2007	a/	599
		2006		679
3344137	Diodes and rectifiers	2010		545
		2009	c/ r/	350
		2008	b/	458
		2007		457
		2006		467
334413A	Other semiconductor devices	2010	a/	13,520
		2009	r/	10,995
		2008		11,363
		2007		10,176
		2006		10,483
3344140	Capacitors for electronic circuitry	2010	a/	891
		2009	a/	736
		2008		937
		2007		945
		2006		1,064
3344150	Resistors for electronic circuitry	2010	a/	563
		2009	a/	488
		2008	b/	622
		2007	b/	645
		2006		660
3344160	Electronic coils, transformers, and other inductors	2010	a/	1,099
		2009	a/	1,076
		2008		1,380
		2007		1,393
		2006		1,231

3344170	Connectors for electronic circuitry	2010	b/	3,720
		2009	b/	3,088
		2008	a/	4,065
		2007		4,189
		2006		3,980
334418B	Printed circuit assemblies, loaded boards and modules (printed circuit boards with inserted electronic components)	2010	a/	16,724
		2009	a/	14,370
		2008	a/	20,257
		2007	a/	20,382
		2006		19,591
3344191	Crystals, filters, piezoelectric, and other related electronic devices (except microwave filters)	2010	a/	544
		2009	b/	570
		2008		656
		2007		689
		2006		754
3344194	All other miscellaneous transducers, including electrical-electronic input/output transducers	2010	b/	1,175
		2009	b/	1,058
		2008	b/	1,352
		2007		1,466
		2006		1,323
3344197	Switches, mechanical, for electronic circuitry	2010	a/	360
		2009		396
		2008		581
		2007		662
		2006		645
334419A	Microwave components and devices, except antennae, tubes, and semiconductors	2010	a/	1,304
		2009	a/	1,191
		2008	a/	1,286
		2007	a/	1,541
		2006		1,470

334419E	All other miscellaneous electronic components	2010	c/	4,371
		2009	b/	3,947
		2008	a/	4,772
		2007	a/	4,831
		2006		4,346

Table 2. Shipments of Semiconductors, Electronic Components, and Semiconductor Manufacturing Equipment
 [Values in thousands of dollars]

Product code	Product description	Year	Companies	Value
3332950	Semiconductor machinery	2010	(X)	9,746,597
		2009		4,996,094
3332950106	Semiconductor wafer processing equipment, thin layer chemical vapor deposition	2010	16	(D)
		2009	r/	477,749
3332950211	Semiconductor wafer processing equipment, thin layer physical vapor deposition	2010	8	(D)
		2009		(D)
3332950326	Semiconductor wafer processing equipment, plasma etch	2010	7	(D)
		2009		(D)
3332950401	Microlithography, including aligners	2010	7	(D)
		2009		125,084
3332950416	Semiconductor wafer processing equipment, thin layer epitaxial growth deposition	2010	3	(D)
		2009		(D)
3332950421	Semiconductor wafer processing equipment, wet etch	2010	9	a/
		2009	a/	140,832
3332950441	Ion implantation, including current and voltage ion implanters	2010	2	(D)
		2009		(D)
3332950456	Wafer processing equipment, pattern generating apparatus	2010	1	(D)
		2009		(D)
3332950461	Other semiconductor wafer processing equipment	2010	34	3,010,901
		2009		1,741,618
3332950500	Parts for semiconductor manufacturing machinery, including packaging equipment	2010	47	a/
		2009		1,283,146
				838,705

3344111	Transmitting, industrial, and special purpose electron tubes	2010 2009	(X)		787,938 770,365
3344111130	Power and special-purpose electron tubes, except forward wave tubes	2010 2009	11	b/	258,380 249,895
3344111210	Forward wave transmitting and industrial electron tubes (excluding X-ray)	2010 2009	4		385,347 340,849
3344111310	All other transmitting, industrial, and special-purpose electron tubes, (excluding X-ray), including light sensing, light emitting devices, and miscellaneous special-purpose tubes	2010 2009	10		144,211 179,621
3344114	Receiving-type electron tubes, including cathode ray (new and rebuilt)	2010 2009	1		(D) (D)
3344114100	Receiving-type electron tubes, including cathode ray (new and rebuilt)	2010 2009	1		(D) (D)
3344117	Electron tubes and parts, excluding glass blanks	2010 2009	7		31,972 29,501
3344117100	Electron tubes and parts, excluding glass blanks	2010 2009	7		31,972 29,501
3344120	Bare printed circuit boards	2010 2009	(X)	b/ c/	4,334,547 4,112,669
3344120105	Single-sided glass printed circuit boards	2010 2009	126	a/	388,026 72,148
3344120110	Double-sided glass printed circuit boards	2010 2009	154	a/ c/	359,555 353,255
3344120115	Multilayer glass printed circuit boards	2010 2009	157		(S) (S)
3344120120	Single-sided flex printed circuit boards	2010 2009	33		190,733 128,803

3344120125	Double-sided flex printed circuit boards	2010	34		148,843
		2009		r/	97,414
3344120130	Multilayer flex and rigid/flex printed circuit boards	2010	38	a/	182,743
		2009		r/	233,066
3344120139	Other printed circuit boards	2010	61	a/	699,649
		2009			622,247
3344131	Integrated microcircuits, including semiconductor networks, microprocessors, and MOS memories	2010	(X)		49,704,372
		2009			40,235,385
3344131550	Monolithic integrated circuits, digital, nonsilicon	2010	6	b/	1,739,607
		2009		r/	1,257,423
3344131552	Monolithic integrated circuits, digital, silicon	2010	14	a/	3,653,099
		2009		a/	3,372,636
3344131573	Metal oxide semiconductor (MOS) field effect transistors, volatile memory DRAMs, all sizes	2010	2		(D)
		2009			(D)
3344131580	Volatile memory SRAMs, all sizes	2010	2		(D)
		2009			(D)
3344131588	Nonvolatile EEPROM	2010	4		(D)
		2009			(D)
3344131589	Other nonvolatile memory	2010	4		(D)
		2009			(D)
3344131581	NAND type flash EEPROM	2010	5		3,821,330
		2009			2,381,011
3344131593	NOR type flash EEPROM	2010	6		(D)
		2009			(D)
3344131256	Single core microprocessors (MPU)	2010	6		(D)
		2009			699,628

3344131257	Multi-core microprocessors (MPU) operating with an external data bus of 16 bits or less	2010 2009	7		(D) (D)
3344131260	Multi-core microprocessors (MPU) operating with an external data bus of 32 bits or more	2010 2009	5		(D) (D)
3344131234	Microcontrollers (MCU) operating with an external data bus of 8 bits or less	2010 2009	7		1,941,846 1,358,201
3344131235	Microcontrollers (MCU) operating with an external data bus of 16 bits	2010 2009	13	c/	1,341,167 1,122,549
3344131236	Microcontrollers (MCU) operating with an external data bus of 32 bits or more	2010 2009	8		(D) (D)
3344131943	Complementary BiMOS	2010 2009	7		(D) (D)
3344131945	Other digital silicon Ics	2010 2009	15		(D) (D)
3344131910	Nondigital silicon monolithic integrated circuits	2010 2009	25	c/	6,114,815 (D)
3344131YWV	Hybrid integrated circuits	2010 2009	36		(D) (D)
3344131912	Other integrated circuits packages	2010 2009	25		2,670,262 2,033,885
3344134	Transistors	2010 2009	20		(S) (S)
3344134100	Transistors	2010 2009	20		(S) (S)
3344137	Diodes and rectifiers	2010 2009	29	c/ r/	544,923 349,830

3344137100	Diodes and rectifiers	2010	29		544,923
		2009		c/ r/	349,830
334413A	Other semiconductor devices	2010	(X)	a/	13,520,390
		2009		r/	10,995,417
334413A105	Solar cells	2010	10	a/	439,913
		2009		a/ r/	459,120
334413A110	Photovoltaic modules	2010	13	a/	896,849
		2009		r/	749,599
334413A123	Light-emitting diodes (LEDs)	2010	19	b/	1,392,598
		2009			655,575
334413A137	Other light sensitive and light-emitting devices	2010	14		781,728
		2009		r/	852,037
334413A140	Thyristors (SCR's, triacs, PNP diodes)	2010	6		(S)
		2009			(S)
334413A150	All other semiconductor devices (tunnel diodes, thermo-electric semiconductor junctions, metal-oxide varistors, solid-state transducers, and special semiconductor devices)	2010	23	c/	491,503
		2009		c/ r/	402,043
334413A154	Semiconductor parts, chips and wafers	2010	48	a/	6,254,511
		2009			4,866,311
334413A165	All other semiconductor parts (headers, packages, heat sinks, other accessories, etc.)	2010	37		3,232,541
		2009			2,963,155
3344140	Capacitors for electronic circuitry	2010	(X)	a/	891,134
		2009		a/	735,956
3344140173	Capacitors	2010	55	a/	886,409
		2009		a/	732,223
3344140175	Parts for capacitors, including unfinished chips for further finishing and assembly	2010	4	b/	4,725
		2009			3,733

3344150	Resistors for electronic circuitry	2010	(X)	a/	563,220
		2009		a/	487,912
3344150182	Resistors	2010	49	b/	435,284
		2009		b/	373,128
3344150184	Parts for resistors	2010	8		127,936
		2009			114,784
3344160	Electronic coils, transformers, and other inductors	2010	149	a/	1,098,598
		2009		a/	1,076,023
3344160100	Electronic coils, transformers, and other inductors	2010	149	a/	1,098,598
		2009		a/	1,076,023
3344170	Connectors for electronic circuitry	2010	(X)	b/	3,719,584
		2009		b/	3,088,290
3344170100	Coaxial (RF) connectors for electronic circuitry	2010	43	b/	465,492
		2009		a/	384,643
3344170400	Cylindrical connectors for electronic circuitry	2010	32	c/	898,701
		2009		c/	746,495
3344170700	Rack and panel (rectangular) connectors for electronic circuitry	2010	24		218,078
		2009			235,571
3344170A00	Printed circuit connectors for electronic circuitry	2010	28	a/	872,463
		2009		a/	713,048
3344170D17	Other connectors	2010	60	c/	1,000,753
		2009		b/	794,948
3344170D25	Parts for connectors (connectors shipped but still requiring further manufacture)	2010	24	a/	264,097
		2009			213,585
334418B	Printed circuit assemblies, loaded boards and modules (printed circuit boards with inserted electronic components)	2010	(X)	a/	16,724,094
		2009		a/	14,369,682

334418B105	Computer and peripheral printed board assemblies	2010	147		5,347,149
		2009			4,030,160
334418B110	Communications printed board assemblies	2010	154	c/	1,930,349
		2009		b/	1,708,760
334418B115	Industrial process control board assemblies	2010	185	c/	1,387,837
		2009		c/	1,178,529
334418B120	Instrumentation printed board assemblies (except industrial process)	2010	172	b/	1,803,390
		2009		b/	1,725,758
334418B125	Search and detection printed board assemblies	2010	77	b/	751,222
		2009		b/	652,012
334418B130	Consumer electronics, printed board assemblies	2010	109	a/	531,785
		2009		r/	489,080
334418B137	Other printed board assemblies, subassemblies and modules, including office equipment, point of sales and plotter controllers	2010	234	a/	4,972,362
		2009		a/	4,585,383
3344191	Crystals, filters, piezoelectric, and other related devices (except microwave filters)	2010	(X)	a/	544,442
		2009		b/	570,115
3344191127	Filters (except microwave)	2010	35		248,499
		2009			212,019
3344191180	Piezoelectric devices	2010	38	b/	295,943
		2009		c/	358,096
3344194	All other miscellaneous transducers, including electrical-electronic input/output transducers	2010	(X)	b/	1,174,853
		2009		b/	1,058,355
3344194105	Transducers, electroacoustic (sonar, ultrasonic, vibration, etc.)	2010	16	a/	152,647
		2009		a/ r/	128,210
3344194110	Transducers, accelerometers	2010	5	b/	161,651
		2009			160,369

3344194115	Transducers, pressure	2010	22	c/	491,799
		2009		b/	439,981
3344194120	Transducers, strain gauges and other mechanical	2010	14	c/	110,615
		2009		b/	95,814
3344194135	Transducers, other	2010	22	b/	258,141
		2009		c/	233,981
3344197	Switches, mechanical, for electronic circuitry	2010	30	a/	359,739
		2009			396,352
3344197100	Switches, mechanical, for electronic circuitry	2010	30	a/	359,739
		2009			396,352
334419A	Microwave components and devices, except antennae, tubes, and semiconductors	2010	(X)	a/	1,304,429
		2009		a/	1,191,434
334419A105	Ferrite, including yttrium garnets, microwave components (circulators, isolators, phase shifters, attenuators, equalizers, limiters, mixers, etc.)	2010	28	b/	161,587
		2009			140,308
334419A110	Attenuators (dummy loads, high and low-power terminations, etc.)	2010	27	b/	121,213
		2009			106,578
334419A125	Reactive microwave components	2010	24	c/	152,974
		2009		a/	152,261
334419A130	Switches, coaxial and waveguide	2010	25	a/	115,923
		2009		a/	135,505
334419A147	Other microwave devices	2010	49	a/	503,544
		2009		b/	448,623
334419A150	Microwave subassemblies, including parametric amplifiers and other solid-state assemblies	2010	24	b/	249,188
		2009		b/	208,159

334419E	All other miscellaneous electronic components	2010	(X)	c/	4,371,409
		2009		b/	3,946,715
334419E125	Oscillators (except instrumentation and crystal types)	2010	16		148,890
		2009			124,243
334419E130	Static power supply converters for electronic applications, regulated	2010	36	c/	501,479
		2009		a/	429,377
334419E135	Static power supply converters for electronic applications, other (unregulated, variable frequency, ac, dc, converters and inverters, vibrator, etc.)	2010	25		111,298
		2009			122,104
334419E140	Electronic cable harnesses and cable assemblies	2010	179	c/	1,795,659
		2009		a/	1,569,709
334419E155	Magnetic cores	2010	9		103,607
		2009			78,736
334419E180	All other specialized electronic hardware	2010	121	c/	1,710,476
		2009		c/	1,622,546

Table 3. Shipments, Exports, and Imports of Semiconductors, Printed Circuit Boards, and Other Electronics Components: 2010
 [Values in thousands of dollars]

Product code 1/	Product description		Manufactures' shipments	Exports of domestic merchandise 2/	Imports for consumption 3/ 4/
333295000T	Semiconductor manufacturing equipment		8,463,451	8,733,372	3,626,893
3332950500	Parts for semiconductor manufacturing machinery, including packaging equipment	a/	1,283,146	2,255,051	1,910,403
334411100T	Power and special-purpose electron tubes, except forward wave tubes	a/	402,591	137,226	97,415
3344114000	Receiving-type electron tubes, including cathode ray (new and rebuilt)		(D)	8,017	3,871
3344117000	Electron tube parts		31,972	15,120	21,952
3344120100	Bare printed circuit boards	b/	4,334,547	1,324,937	1,920,758
334413000T	Processors and controllers		(D)	11,374,538	9,238,005
334413100T	Memories, Dynamic read-write random access (DRAM)		(D)	1,073,598	1,926,249
334413200T	Memories, Static read-write random access (SRAM)		(D)	91,699	282,270
334413300T	Electrically erasable programmable read-only memory (EEPROM)		(D)	2,536,125	1,432,399
3344131589	Other nonvolatile memory		(D)	20,170	25,491
334413500T	Memories, other		13,168,321	213,090	290,779
334413600T	Integrated circuits, other		(D)	6,179,658	7,622,924
3344134100	Transistors		(S)	1,608,894	1,412,608
3344137100	Diodes and rectifiers		544,923	419,938	677,047
334413A105	Solar cells	a/	439,913	1,409,018	2,691,868
334413A123	Light-emitting diodes (LEDs)	b/	1,392,598	758,885	1,051,904
334413A137	Other light-sensitive and light-emitting devices		781,728	175,183	442,243
334413A140	Thyristors, SCR's, triacs, and PNP diodes		(S)	34,773	127,535
334413A154	Semiconductor parts, chips and wafers	a/	6,254,511	2,393,501	539,117
334413A165	All other semiconductor parts (headers, packages, heat sinks, other accessories, etc)		3,232,541	1,314,147	436,461

Table 3. Shipments, Exports, and Imports of Semiconductors, Printed Circuit Boards, and Other Electronics Components: 2010
 [Values in thousands of dollars]

Product code 1/	Product description		Manufactures' shipments	Exports of domestic merchandise 2/	Imports for consumption 3/ 4/
3344140173	Capacitors	a/	886,409	695,608	811,125
3344140175	Parts for capacitors, including unfinished chips for further finishing and assembly	b/	4,725	50,481	29,198
3344150182	Resistors	b/	435,284	255,664	698,030
3344150184	Parts for resistors		127,936	64,221	39,764
3344160100	Electronic coils, transformers, and other inductors	a/	1,098,598	342,593	964,053
3344170100	Coaxial (RF) connectors for electronic circuitry	b/	465,492	159,278	279,115
3344170400	Cylindrical connectors for electronic circuitry	c/	898,701	167,211	341,992
3344170700	Rack and panel (rectangular) connectors for electronic circuitry		218,078	59,841	87,612
3344170A00	Printed circuit connectors for electronic circuitry	a/	872,463	604,148	435,368
3344191180	Piezoelectric devices	b/	295,943	123,945	468,620
3344197100	Switches, mechanical, for electronic circuitry	a/	359,739	1,026,207	1,881,546

Footnotes:

1/ 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.

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

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

4/ 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.

Table 4. Comparison of combined North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2010

Combined code	Product code	Product description	Export code 1/	Import code 2/
333295000T	3332950106	Semiconductor manufacturing equipment	8486.10.0000	8486.10.0000
	3332950211		8486.20.0000	8486.20.0000
	3332950326		8486.40.0020	8486.40.0020
	3332950401		8486.40.0030	8486.40.0030
	3332950416		8543.70.2000	8543.70.2000
	3332950421			
	3332950441			
	3332950456			
	3332950461			
3332950500	3332950500	Parts for semiconductor manufacturing machinery, including packaging equipment	8486.90.0000	8486.90.0000
334411100T	3344111130	Power and special purpose electron tubes, except forward wave tubes	8540.71.2000	8540.71.2000
	3344111310		8540.71.4000	8540.71.4000
			8540.72.0000	8540.72.0000
			8540.79.0000	8540.79.0000
			8540.89.0020	8540.89.0020
			8540.89.0040	8540.89.0040
			8540.89.0080	8540.89.0080
3344114000	3344114000	Receiving-type electron tubes, including cathode ray (new and rebuilt)	8540.11.0035	8540.11.1030
			8540.11.0070	8540.11.1040
			8540.11.0080	8540.11.1050
			8540.12.0000	8540.11.1055
			8540.60.0055	8540.11.1065
			8540.60.0080	8540.11.1080
			8540.81.0000	8540.11.2401
				8540.11.2801
				8540.11.3000
				8540.11.4401
				8540.11.4801
				8540.11.5000
				8540.12.1040
				8540.12.1080
				8540.12.2000
	8540.12.5040			
	8540.12.5080			
	8540.12.7000			
	8540.60.0020			
	8540.60.0040			

Table 4. Comparison of combined North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2010

Combined code	Product code	Product description	Export code 1/	Import code 2/ 8540.60.0060 8540.60.0080 8540.81.0000
3344117000	3344117000	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
3344120100	3344120100	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
334413000T	3344131234 3344131235 3344131236 3344131256 3344131257 3344131260	Processors and controllers	8542.31.0000	8542.31.0000
334413100T	3344131573	Memories, dynamic read-write random access (DRAM)	8542.32.0015	8542.32.0001 8542.32.0020 8542.32.0021 8542.32.0022 8542.32.0023
334413200T	3344131580	Memories, static read-write random access (SRAM)	8542.32.0040	8542.32.0040
334413300T	3344131581 3344131588 3344131593	Electrically erasable programmable read-only memory (EEPROM)	8542.32.0050	8542.32.0050

Table 4. Comparison of combined North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2010

Combined code	Product code	Product description	Export code 1/	Import code 2/
3344131589	3344131589	Erasable (except electrically) programmable read-only memory (EPROM)	8542.32.0060	8542.32.0060
334413500T	3344131550 3344131552 3344131943 3344131945	Memories, other	8542.32.0070	8542.32.0070
334413600T	3344131910 3344131912 3344131YWV	Integrated circuits, other	8542.39.0000	8542.39.0000
3344134100	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	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	334413A105	Solar cells	8541.40.6020 8541.40.6030	8541.40.6020 8541.40.6030
334413A123	334413A123	Light-emitting diodes (LEDs)	8541.40.2000	8541.40.2000
334413A137	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	334413A140	Thyristors, SCR's, triacs, and PNP diodes	8541.30.0080	8541.30.0080

Table 4. Comparison of combined North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2010

Combined code	Product code	Product description	Export code 1/	Import code 2/
334413A154	334413A154	Chips and wafers	8541.10.0040	8541.10.0040
			8541.21.0040	8541.30.0040
			8541.29.0040	8541.40.6010
			8541.30.0040	8541.40.7040
			8541.40.6010	8541.50.0040
			8541.40.7040	8541.50.0080
			8541.50.0040	8542.10.0000
			8541.50.0080	8542.21.8005
				8542.21.8010
				8542.29.0010
	8542.90.0000			
334413A165	334413A165	All other semiconductor parts, including headers, packages, and heat sinks, accessories, etc.	8542.90.0000	8542.90.0000
3344140173	3344140173	Capacitors	8532.21.0020	8532.21.0020
			8532.21.0040	8532.21.0040
			8532.21.0050	8532.21.0050
			8532.21.0080	8532.21.0080
			8532.22.0020	8532.22.0020
			8532.22.0040	8532.22.0040
			8532.22.0055	8532.22.0055
			8532.22.0085	8532.22.0085
			8532.23.0020	8532.23.0020
			8532.23.0040	8532.23.0040
			8532.23.0060	8532.23.0060
			8532.24.0020	8532.25.0010
			8532.24.0040	8532.25.0020
			8532.24.0060	8532.25.0030
			8532.25.0010	8532.25.0060
			8532.25.0020	8532.25.0070
			8532.25.0030	8532.25.0080
			8532.25.0040	8532.29.0020
8532.25.0060	8532.29.0040			
8532.25.0070	8532.30.0010			
8532.29.0020	8532.30.0090			
8532.29.0040				
8532.30.0010				

Table 4. Comparison of combined North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2010

Combined code	Product code	Product description	Export code 1/ 8532.30.0090	Import code 2/ 8532.30.0090
3344140175	3344140175	Parts for capacitors, including unfinished chips for further finishing and assembly	8532.90.0000	8532.90.0000
3344150182	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 8533.39.0080 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	3344150184	Parts for resistors	8533.90.0000	8533.90.4000 8533.90.8000
3344160100	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	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

Table 4. Comparison of combined North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2010

Combined code	Product code	Product description	Export code 1/	Import code 2/
3344170100	3344170100	Coaxial (RF) connectors for electronic circuitry	8536.69.4010	8536.69.4010
3344170400	3344170400	Cylindrical connectors for electronic circuitry	8536.69.4020	8536.69.4020
3344170700	3344170700	Rack and panel (rectangular) connectors for electronic circuitry	8536.69.4030	8536.69.4030
3344170A00	3344170A00	Printed circuit connectors for electronic circuitry	8536.69.5050	8536.69.4050
3344191180	3344191180	Piezoelectric devices	7104.10.0000 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	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	8536.50.7000 8536.50.9020 8536.50.9025 8536.50.9031 8536.50.9032 8536.50.9033 8536.50.9035 8536.50.9040 8536.50.9045 8536.50.9050 8536.50.9055 8536.50.9065

Footnotes:

1/ Source: 2010 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 (2010).

Symbols:

- (D) - Withheld to avoid disclosing data of individual companies.
- (X) - Not applicable.
- (NA) - Not available.
- r/ - Revised by 5 percent or more from previously published data.
- (n.e.c.) - Not elsewhere classified.
- (n.s.k.) - Not specified by kind.
- (nehp) - Net engine horsepower
- (btuh) - British thermal units per hour
- (pt.) Part.
- Represents zero.

Estimation symbols - Percent of estimation for each item is indicated as follows:

- a/ - 10 to 19 percent of this item has been estimated.
- b/ - 20 to 29 percent of this item has been estimated.
- c/ - 30 to 49 percent of this item has been estimated.
- (S) - Withheld because estimates did not meet publication standards

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>.