

# Electronic Products

**Table EL. 1** Electronic products: U.S. general imports by selected trading partners, 2018–22

Value in millions of dollars; share of total imports in percentages.

Import source	2018	2019	2020	2021	2022
China (million \$)	209,673	166,837	160,498	183,085	182,935
Mexico (million \$)	82,092	83,747	79,657	91,183	106,561
Vietnam (million \$)	12,180	23,042	29,334	39,016	49,832
Taiwan (million \$)	18,993	26,587	32,231	40,541	49,236
Malaysia (million \$)	29,261	29,891	30,872	37,736	36,636
Thailand (million \$)	13,753	13,502	16,739	20,473	25,973
South Korea (million \$)	17,546	16,952	18,897	24,014	25,477
Japan (million \$)	22,436	21,616	19,294	22,210	22,997
All other sources (million \$)	98,861	101,255	95,140	113,195	130,223
Total (million \$)	504,795	483,429	482,662	571,453	629,871
China (%)	41.5	34.5	33.3	32.0	29.0
Mexico (%)	16.3	17.3	16.5	16.0	16.9
Vietnam (%)	2.4	4.8	6.1	6.8	7.9
Taiwan (%)	3.8	5.5	6.7	7.1	7.8
Malaysia (%)	5.8	6.2	6.4	6.6	5.8
Thailand (%)	2.7	2.8	3.5	3.6	4.1
South Korea (%)	3.5	3.5	3.9	4.2	4.0
Japan (%)	4.4	4.5	4.0	3.9	3.7
All other sources (%)	19.6	20.9	19.7	19.8	20.7
Total (%)	100.0	100.0	100.0	100.0	100.0

Source: USITC DataWeb/Census, accessed February 16, 2023.

Notes: Import values are based on U.S. customs value; export values are based on free alongside ship value, U.S. port of export. Calculations are based on unrounded data.

## Shifts in U.S. Merchandise Trade, 2022

**Table EL.2** Electronic products: U.S. domestic exports by selected trading partners and re-exports, 2018–22

Value in millions of dollars; share of total in percentages.

Destination market	2018	2019	2020	2021	2022
Mexico (million \$)	19,179	17,151	15,107	17,791	19,672
China (million \$)	16,537	17,817	19,391	21,846	18,328
Canada (million \$)	16,078	15,752	14,082	15,286	16,267
Netherlands (million \$)	8,729	8,896	8,042	9,296	10,640
Germany (million \$)	8,865	9,148	8,118	8,822	9,496
Japan (million \$)	9,215	8,761	8,104	8,107	8,125
Taiwan (million \$)	4,789	4,736	5,516	6,458	7,179
All other destination markets (million \$)	79,431	79,869	70,119	74,161	77,459
Re-exports (million \$)	114,485	113,429	107,093	124,378	135,684
U.S. total exports (million \$)	277,307	275,558	255,570	286,145	302,850
Mexico (%)	6.9	6.2	5.9	6.2	6.5
China (%)	6.0	6.5	7.6	7.6	6.1
Canada (%)	5.8	5.7	5.5	5.3	5.4
Netherlands (%)	3.1	3.2	3.1	3.2	3.5
Germany (%)	3.2	3.3	3.2	3.1	3.1
Japan (%)	3.3	3.2	3.2	2.8	2.7
Taiwan (%)	1.7	1.7	2.2	2.3	2.4
All other destination markets (%)	28.6	29.0	27.4	25.9	25.6
Re-exports (%)	41.3	41.2	41.9	43.5	44.8
U.S. total exports (%)	100.0	100.0	100.0	100.0	100.0

Source: USITC DataWeb/Census, accessed February 16, 2023.

Notes: Import values are based on customs value; export values are based on free alongside ship value, U.S. port of export. Calculations are based on unrounded data.

**Table EL.3** Electronic products: Rank of top U.S. general import source, 2018–22

Import source	2018	2019	2020	2021	2022
China	1	1	1	1	1
Mexico	2	2	2	2	2
Vietnam	9	5	5	4	3
Taiwan	5	4	3	3	4
Malaysia	3	3	4	5	5
Thailand	8	9	8	8	6
South Korea	6	8	7	6	7
Japan	4	6	6	7	8
Germany	7	7	9	9	9
Ireland	11	11	11	11	10
Canada	10	10	10	12	11

Source: USITC DataWeb/Census, accessed February 16, 2023.

Note: Import values are based on U.S. customs value; export values are based on free alongside ship value, U.S. port of export.

**Table EL.4** Electronic products: Rank of top U.S. domestic export market, 2018–22

Destination market	2018	2019	2020	2021	2022
Mexico	1	1	1	1	1
Canada	2	2	2	2	2
China	3	3	3	3	3
Netherlands	5	4	4	4	4
Germany	7	6	7	6	5
Hong Kong	4	5	5	5	6
Japan	6	7	6	7	7
Taiwan	11	11	9	8	8
Singapore	9	9	10	10	9
Malaysia	12	13	12	11	10
South Korea	8	8	8	9	11

Source: USITC DataWeb/Census, accessed February 16, 2023.

Note: Import values are based on U.S. customs value; export values are based on free alongside ship value, U.S. port of export.

**Table EL.5** Electronic products: U.S. domestic exports by select trading partners and re-exports, 2018–22

In millions of dollars.

Destination market	2018	2019	2020	2021	2022
Mexico	19,179	17,151	15,107	17,791	19,672
China	16,537	17,817	19,391	21,846	18,328
Canada	16,078	15,752	14,082	15,286	16,267
Netherlands	8,729	8,896	8,042	9,296	10,640
Germany	8,865	9,148	8,118	8,822	9,496
Japan	9,215	8,761	8,104	8,107	8,125
Taiwan	4,789	4,736	5,516	6,458	7,179
South Korea	7,247	7,193	6,996	6,605	5,949
Malaysia	3,995	3,626	3,458	4,807	5,226
Singapore	4,894	4,781	4,601	4,793	5,160
United Kingdom	5,396	5,159	4,244	4,259	4,898
Australia	3,462	3,358	3,150	3,295	3,503
France	3,455	3,343	2,864	2,925	3,189
Hong Kong	5,188	4,366	3,579	3,770	3,053
Belgium	2,949	2,998	2,646	3,020	3,007
All other destination markets	42,844	45,046	38,581	40,686	43,474
U.S. domestic exports to all destination markets	162,822	162,129	148,478	161,767	167,166
Re-exports	114,485	113,429	107,093	124,378	135,684
U.S. total exports	277,307	275,558	255,570	286,145	302,850

Source: USITC DataWeb/Census, accessed February 16, 2023.

Notes: Export values are based on free alongside ship value, U.S. port of export. Calculations are based on unrounded data.

## Shifts in U.S. Merchandise Trade, 2022

**Table EL.6** Electronic products: Dollar changes in U.S. domestic exports by select trading partners and re-exports, 2018–22

In millions of dollars.

Destination market	2018–19	2019–20	2020–21	2021–22	2018–22
Mexico	-2,028	-2,044	2,684	1,881	493
China	1,279	1,574	2,455	-3,517	1,791
Canada	-326	-1,670	1,205	981	190
Netherlands	167	-854	1,253	1,344	1,911
Germany	283	-1,030	704	673	631
Japan	-454	-657	3	18	-1,090
Taiwan	-53	780	943	720	2,390
South Korea	-55	-197	-391	-656	-1,298
Malaysia	-370	-168	1,349	419	1,231
Singapore	-113	-180	192	367	266
United Kingdom	-237	-915	15	638	-498
Australia	-103	-209	146	208	41
France	-113	-478	61	264	-267
Hong Kong	-822	-787	190	-717	-2,135
Belgium	49	-352	374	-13	58
All other destination markets	2,202	-6,465	2,105	2,788	630
U.S. domestic exports to all destination markets	-693	-13,651	13,290	5,399	4,343
Re-exports	-1,056	-6,336	17,285	11,306	21,199
U.S. total exports	-1,749	-19,987	30,575	16,705	25,543

Source: USITC DataWeb/Census, accessed February 16, 2023.

Notes: Export values are based on free alongside ship value, U.S. port of export. Calculations are based on unrounded data.

**Table EL.7** Electronic products: Percentage changes in U.S. domestic exports by select trading partners and re-exports, 2018–22

In percentages.

Destination market	2018–19	2019–20	2020–21	2021–22	2018–22
Mexico	-10.6	-11.9	17.8	10.6	2.6
China	7.7	8.8	12.7	-16.1	10.8
Canada	-2.0	-10.6	8.6	6.4	1.2
Netherlands	1.9	-9.6	15.6	14.5	21.9
Germany	3.2	-11.3	8.7	7.6	7.1
Japan	-4.9	-7.5	0.0	0.2	-11.8
Taiwan	-1.1	16.5	17.1	11.1	49.9
South Korea	-0.8	-2.7	-5.6	-9.9	-17.9
Malaysia	-9.3	-4.6	39.0	8.7	30.8
Singapore	-2.3	-3.8	4.2	7.7	5.4
United Kingdom	-4.4	-17.7	0.4	15.0	-9.2
Australia	-3.0	-6.2	4.6	6.3	1.2
France	-3.3	-14.3	2.1	9.0	-7.7
Hong Kong	-15.8	-18.0	5.3	-19.0	-41.2
Belgium	1.7	-11.7	14.1	-0.4	2.0
All other destination markets	5.1	-14.4	5.5	6.9	1.5
U.S. domestic exports to all destination markets	-0.4	-8.4	9.0	3.3	2.7
Re-exports	-0.9	-5.6	16.1	9.1	18.5
U.S. total exports	-0.6	-7.3	12.0	5.8	9.2

Source: USITC DataWeb/Census, accessed February 16, 2023.

Notes: Export values are based on free alongside ship value, U.S. port of export. Calculations are based on unrounded data.

**Table EL.8** Electronic products: Top 10 U.S. domestic export markets, 2018–22

Rank	2018	2019	2020	2021	2022
1	Mexico	China	China	China	Mexico
2	China	Mexico	Mexico	Mexico	China
3	Canada	Canada	Canada	Canada	Canada
4	Japan	Germany	Germany	Netherlands	Netherlands
5	Germany	Netherlands	Japan	Germany	Germany
6	Netherlands	Japan	Netherlands	Japan	Japan
7	South Korea	South Korea	South Korea	South Korea	Taiwan
8	United Kingdom	United Kingdom	Taiwan	Taiwan	South Korea
9	Hong Kong	Singapore	Singapore	Malaysia	Malaysia
10	Singapore	Taiwan	United Kingdom	Singapore	Singapore

Source: USITC DataWeb/Census, accessed February 16, 2023.

**Table EL.9** Electronic products: Changes in rank of the top 10 U.S. domestic export markets, 2018–22

Each numeral = the number of positions gained or lost in rank.

Destination market	2018–19	2019–20	2020–21	2021–22	2018–22
Mexico	-1	0	0	1	0
China	1	0	0	-1	0
Canada	0	0	0	0	0
Netherlands	1	-1	2	0	2
Germany	1	0	-1	0	0
Japan	-2	1	-1	0	-2
Taiwan	1	2	0	1	4
South Korea	0	0	0	-1	-1
Malaysia	0	0	3	0	3
Singapore	1	0	-1	0	0

Source: USITC DataWeb/Census, accessed February 16, 2023.

## Shifts in U.S. Merchandise Trade, 2022

**Table EL.10** Electronic products: Leading changes in U.S. domestic exports, 2018–22

In millions of dollars and percentages.

Product group (digest)	2018	2019	2020	2021	2022	Absolute	Percentage
	(million \$)	(million \$)	(million \$)	(million \$)	(million \$)	change, 2021–22 (million \$)	change 2021–22 (%)
Medical goods	34,375	35,358	32,726	35,739	38,348	2,608	7.3
Measuring, testing, and controlling instruments	24,878	24,803	22,360	23,849	25,655	1,806	7.6
Computers, peripherals, and parts	18,045	16,360	15,246	17,331	18,071	739	4.3
Circuit apparatus not exceeding 1,000 V	7,078	6,802	5,928	6,622	7,312	690	10.4
Circuit apparatus assemblies	4,119	4,048	3,441	3,626	4,202	576	15.9
Miscellaneous electrical equipment	3,305	3,264	2,773	2,574	3,132	557	21.7
Navigational instruments and remote control apparatus	3,500	3,942	3,059	2,893	3,400	508	17.5
Telecommunications equipment	14,994	13,333	11,349	11,997	12,465	469	3.9
Parts of circuit apparatus	3,213	2,997	2,709	3,272	3,656	383	11.7
Optical goods, including ophthalmic goods	6,694	6,397	5,830	6,475	6,822	347	5.4
Consumer electronics	3,718	3,395	3,005	3,293	3,459	166	5.0
Optical fibers, optical fiber bundles and cables	1,351	1,374	1,049	1,340	1,505	164	12.3
Electric sound and visual signaling apparatus	1,375	1,380	1,140	1,179	1,328	149	12.6
Printed circuits	1,069	831	824	802	901	99	12.3
Photographic cameras and equipment	1,048	1,005	776	807	841	34	4.3
Circuit apparatus exceeding 1,000 V	636	667	629	666	695	29	4.3
Drawing, drafting, and calculating instruments	271	236	212	216	237	21	9.6
Office machines	416	383	322	326	347	20	6.2
Watches and clocks	361	320	211	257	271	14	5.3
Electrical capacitors and resistors	1,297	1,214	1,213	1,342	1,350	8	0.6
Electron tubes	220	258	246	271	263	-8	-2.8
Radio and television broadcasting equipment	957	834	746	736	658	-79	-10.7
Photographic film and paper	1,544	1,599	1,428	1,567	1,469	-99	-6.3
Blank and prerecorded media	2,112	2,072	1,872	1,930	1,669	-261	-13.5
Semiconductors and integrated circuits	26,245	29,259	29,383	32,655	29,111	-3,544	-10.9
<b>Total</b>	<b>162,822</b>	<b>162,129</b>	<b>148,478</b>	<b>161,767</b>	<b>167,166</b>	<b>5,399</b>	<b>3.3</b>

Source: USITC DataWeb/Census, accessed February 16, 2023.

Notes: Export values are based on free along ship value, U.S. port of export. Calculations are based on unrounded data. Industry sectors are further divided into digests. Each USITC sector digest encompasses various 8-digit subheadings in the Harmonized Tariff Schedule of the United States (HTS). The USITC maintains and publishes the HTS, which sets out the tariff rates and statistical categories for all merchandise imported into the United States. The U.S. Census Bureau (Census) collects and compiles export statistics of approximately 8,000 commodity

classifications (10-digit classification codes) in Schedule B: Statistical Classification of Domestic and Foreign Commodities Exported from the United States. Schedule B classification codes are concorded to HTS 10-digit statistical reporting numbers according to USITC estimates; therefore, the classification codes for exports are presented using HTS 8-digit subheadings for imports.

**Table EL.11** Electronic products: U.S. general imports by select trading partners, 2018–22

In millions of dollars.

Import source	2018	2019	2020	2021	2022
China	209,673	166,837	160,498	183,085	182,935
Mexico	82,092	83,747	79,657	91,183	106,561
Vietnam	12,180	23,042	29,334	39,016	49,832
Taiwan	18,993	26,587	32,231	40,541	49,236
Malaysia	29,261	29,891	30,872	37,736	36,636
Thailand	13,753	13,502	16,739	20,473	25,973
South Korea	17,546	16,952	18,897	24,014	25,477
Japan	22,436	21,616	19,294	22,210	22,997
Germany	16,562	17,128	15,117	17,875	19,697
Ireland	8,980	9,607	7,948	9,515	11,488
Canada	9,799	9,698	8,356	9,514	10,927
Switzerland	7,601	7,949	7,323	9,732	10,299
Philippines	6,975	6,843	6,203	7,746	8,724
Singapore	6,019	6,250	6,891	7,482	7,372
United Kingdom	5,942	6,170	5,484	5,778	6,116
All other sources	36,983	37,610	37,820	45,552	55,600
Total	504,795	483,429	482,662	571,453	629,871

Source: USITC DataWeb/Census, accessed February 16, 2023.

Notes: Import values are based on customs value. Calculations are based on unrounded data.

**Table EL.12** Electronic products: Dollar changes in U.S. general imports by select trading partners, 2018–22

In millions of dollars.

Import source	2018–19	2019–20	2020–21	2021–22	2018–22
China	-42,836	-6,339	22,588	-150	-26,737
Mexico	1,655	-4,090	11,526	15,378	24,469
Vietnam	10,862	6,292	9,682	10,815	37,652
Taiwan	7,594	5,644	8,310	8,696	30,243
Malaysia	630	981	6,863	-1,100	7,375
Thailand	-250	3,237	3,734	5,500	12,220
South Korea	-594	1,945	5,117	1,463	7,931
Japan	-820	-2,323	2,917	787	561
Germany	566	-2,012	2,759	1,822	3,135
Ireland	627	-1,659	1,568	1,972	2,507
Canada	-102	-1,342	1,159	1,413	1,128
Switzerland	348	-626	2,409	567	2,698
Philippines	-133	-640	1,543	978	1,749
Singapore	231	641	591	-110	1,353
United Kingdom	228	-686	294	338	174
All other sources	627	209	7,732	10,049	18,617
Total	-21,366	-768	88,791	58,417	125,075

Source: USITC DataWeb/Census, accessed February 16, 2023.

Notes: Import values are based on customs value. Calculations are based on unrounded data.

## Shifts in U.S. Merchandise Trade, 2022

**Table EL. 13** Electronic products: Percentage changes in U.S. general imports by select trading partners, 2018–22

In percentages.

Import source	2018–19	2019–20	2020–21	2021–22	2018–22
China	-20.4	-3.8	14.1	-0.1	-12.8
Mexico	2.0	-4.9	14.5	16.9	29.8
Vietnam	89.2	27.3	33.0	27.7	309.1
Taiwan	40.0	21.2	25.8	21.4	159.2
Malaysia	2.2	3.3	22.2	-2.9	25.2
Thailand	-1.8	24.0	22.3	26.9	88.9
South Korea	-3.4	11.5	27.1	6.1	45.2
Japan	-3.7	-10.7	15.1	3.5	2.5
Germany	3.4	-11.7	18.2	10.2	18.9
Ireland	7.0	-17.3	19.7	20.7	27.9
Canada	-1.0	-13.8	13.9	14.8	11.5
Switzerland	4.6	-7.9	32.9	5.8	35.5
Philippines	-1.9	-9.4	24.9	12.6	25.1
Singapore	3.8	10.3	8.6	-1.5	22.5
United Kingdom	3.8	-11.1	5.4	5.8	2.9
All other sources	1.7	0.6	20.4	22.1	50.3
Total	-4.2	-0.2	18.4	10.2	24.8

Source: USITC DataWeb/Census, accessed February 16, 2023.

Notes: Import values are based on customs value. Calculations are based on unrounded data.

**Table EL.14** Electronic products: Top 10 U.S. general import sources, 2018–22

Rank	2018	2019	2020	2021	2022
1	China	China	China	China	China
2	Mexico	Mexico	Mexico	Mexico	Mexico
3	Malaysia	Malaysia	Taiwan	Taiwan	Vietnam
4	Japan	Taiwan	Malaysia	Vietnam	Taiwan
5	Taiwan	Vietnam	Vietnam	Malaysia	Malaysia
6	South Korea	Japan	Japan	South Korea	Thailand
7	Germany	Germany	South Korea	Japan	South Korea
8	Thailand	South Korea	Thailand	Thailand	Japan
9	Vietnam	Thailand	Germany	Germany	Germany
10	Canada	Canada	Canada	Switzerland	Ireland

Source: USITC DataWeb/Census, accessed February 16, 2023.



**Table EL.15** Electronic products: Changes in rank of the top 10 U.S. general import sources, 2018–22

Each numeral = the number of positions gained or lost in rank.

<b>Import source</b>	<b>2018–19</b>	<b>2019–20</b>	<b>2020–21</b>	<b>2021–22</b>	<b>2018–22</b>
China	0	0	0	0	0
Mexico	0	0	0	0	0
Vietnam	4	0	1	1	6
Taiwan	1	1	0	-1	1
Malaysia	0	-1	-1	0	-2
Thailand	-1	1	0	2	2
South Korea	-2	1	1	-1	-1
Japan	-2	0	-1	-1	-4
Germany	0	-2	0	0	-2
Ireland	0	0	0	1	1

Source: USITC DataWeb/Census, accessed February 16, 2023.

## Shifts in U.S. Merchandise Trade, 2022

**Table EL.16** Electronic products: Leading changes in U.S. general imports, 2018–22

In millions of dollars and percentages.

Product group (digest)	2018 (million \$)	2019 (million \$)	2020 (million \$)	2021 (million \$)	2022 (million \$)	Absolute change, 2021–22 (million \$)	Percentage change 2021–22 (%)
Telecommunications equipment	111,883	101,559	94,724	111,228	126,748	15,520	14.0
Computers, peripherals, and parts	137,650	126,131	141,254	163,329	174,168	10,839	6.6
Semiconductors and integrated circuits	43,527	43,669	44,700	54,405	61,130	6,726	12.4
Medical goods	47,128	50,818	48,456	56,922	62,976	6,053	10.6
Miscellaneous electrical equipment	11,994	10,908	10,003	13,311	18,751	5,440	40.9
Measuring, testing, and controlling instruments	28,594	28,403	26,082	29,327	31,854	2,527	8.6
Circuit apparatus assemblies	12,278	12,941	12,146	13,873	16,040	2,167	15.6
Circuit apparatus not exceeding 1,000 V	11,273	10,763	9,746	12,284	14,327	2,044	16.6
Blank and prerecorded media	11,316	10,935	14,516	16,176	17,442	1,266	7.8
Optical fibers, optical fiber bundles and cables	1,423	1,188	1,197	1,991	3,202	1,211	60.8
Optical goods, including ophthalmic goods	12,521	12,302	10,906	14,114	14,919	806	5.7
Electrical capacitors and resistors	2,973	2,679	2,319	3,319	3,914	595	17.9
Parts of circuit apparatus	3,326	3,263	2,880	3,481	4,020	539	15.5
Consumer electronics	42,831	42,814	42,362	52,085	52,620	535	1.0
Navigational instruments and remote control apparatus	6,766	6,586	4,965	5,510	6,011	502	9.1
Watches and clocks	4,688	4,873	3,975	6,178	6,647	469	7.6
Printed circuits	2,126	1,858	1,738	2,327	2,757	430	18.5
Electric sound and visual signaling apparatus	4,033	3,864	3,183	3,711	3,998	287	7.7
Circuit apparatus exceeding 1,000 V	881	971	966	1,006	1,223	217	21.5
Office machines	1,498	1,310	1,151	1,320	1,504	183	13.9
Radio and television broadcasting equipment	3,529	3,167	3,220	3,020	3,080	59	2.0
Drawing, drafting, and calculating instruments	348	323	303	388	400	12	3.1
Photographic film and paper	1,046	1,068	982	1,027	1,032	5	0.5
Photographic cameras and equipment	901	756	631	843	843	0	0.0
Electron tubes	261	280	258	277	265	-11	-4.2
<b>Total</b>	<b>504,795</b>	<b>483,429</b>	<b>482,662</b>	<b>571,453</b>	<b>629,871</b>	<b>58,417</b>	<b>10.2</b>

Source: USITC DataWeb/Census, accessed February 16, 2023.

Notes: Import values are based on U.S. customs value. Calculations are based on unrounded data. Industry sectors are further divided into digests. Each USITC sector digest encompasses various 8-digit subheadings in the Harmonized Tariff Schedule of the United States (HTS). The USITC maintains and publishes the HTS, which sets out the tariff rates and statistical categories for all merchandise imported into the United States. The U.S. Census Bureau (Census) collects and compiles export statistics of approximately 8,000 commodity classifications (10-digit

classification codes) in Schedule B: Statistical Classification of Domestic and Foreign Commodities Exported from the United States. Schedule B classification codes are concorded to HTS 10-digit statistical reporting numbers according to USITC estimates; therefore, the classification codes for exports are presented using HTS 8-digit subheadings for imports.