Computers and Office and Accounting Machines: 2001

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Current Industrial Reports

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SUMMARY OF FINDINGS. In 2001, manufacturers' shipments of computers were valued at \$49.3

billion, a 21.6-percent decrease from the 2000 total of \$62.9 billion. Units of computers shipped decreased from 27.2 million in 2000 to to 22.7 million in 2001. Personal computers were valued at \$18.9 billion in 2001, compared to \$22.9 billion in 2000. Workstations were valued at \$3.4 billion in 2001, compared to \$5.6 billion in 2000. Notebooks were valued at \$8.7 billion in 2001. Loaded processor boards and subassemblies were valued at \$30.7 billion, compared to \$37.3 billion in 2000. Computer storage devices were valued at \$8.2 billion in 2001, compared to \$9.0 billion in 2000. Magnetic and optical recording media were valued at \$2.1 billion in 2001, compared to \$3.2 billion in 2000.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Investment Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Keith McKenzie, 301-457-4777.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-457-4673.



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Table 1. Value of Shipments of Computers and Office and Accounting Machines by Product Class: 1994 to 2001 [Millions of dollars]

Product	B 1 . 1	0001		2000	1000	1000	1007	1000	1007	1004
code	Product description	2001		2000	1999	1998	1997	1996	1995	1994
3341110000	Electronic computer manufacturing 1/	49,289.0		62,856.9	64,696.1	56,891.5	50,249.9	50,681.5	49,038.1	38,260.7
3341111000	Host computers (multiusers)	17,301.6		22,877.4	21,089.4	15,010.2	12,240.0	(NA)	(NA)	(NA)
3541117000	Single user computers	31,448.3		38,981.3	42,765.3	41,001.9	36,987.5	(NA)	(NA)	(NA)
334111D021	Other computers, including array,									
	analog, hybrid, or special computers									
	not listed above	539.0		998.2	841.4	879.4	1,022.4	(NA)	(NA)	(NA)
0044404000										
334418A000	Loaded computer processor boards and									
	board subassemblies 2/	30,712.9		37,272.5	30,090.9	26,046.5	27,040.2	24,937.3	24,447.7	17,514.8
3341121000	Computer storage devices and equipment	8,153.4	r/	8,995.4	9,826.5	9,318.6	8,837.4	8,909.2	7,903.0	5,555.6
3341124001	Parts for computer storage devices									
	and subassemblies	1,699.5	r/	1,691.9	2,253.5	2,309.7	2,382.3	1,719.9	2,235.6	1,951.9
3341131000	Computer terminals	447.7		415.1	541.1	529.4	781.4	1,103.9	1,086.0	1,243.5
3341134001	Parts for computer terminals	(D)		(D)	(D)	(D)	(D)	199.2	(D)	(D)
3341191000	Computer peripheral equipment, n.e.c	10,593.4		12,434.4	12,889.4	12,145.4	13,555.2	11,462.8	12,331.0	11,943.6
3341194001	Parts for input/output equipment	2,359.9		2,766.3	2,387.5	2,629.5	2,627.9	5,504.8	2,391.0	2,498.7
3341197	Calculating and accounting machines	1,330.0	r/	1,210.4	1,195.6	1,060.5	1,621.9	1,485.0	1,278.9	1,261.5
3333136000	Parts for calculating, coin, or currency									
	handling, and accounting machines	105.2		105.7	(D)	126.5	127.5	82.9	106.1	86.7
333313A000	Mailing, letter-handling, and addressing									
	machines	1,758.4		1,375.7	1,158.1	989.0	1,397.9	1,230.6	1,280.1	967.5
333313D000	Check handling, electric stapling and									
	dictating machines, typewriters, and									
	all other office machines, n.e.c	791.7	r/	806.6	826.1	778.5	609.8	579.7	577.7	664
333313J000	Parts for office machines, n.e.c.	179.2	r/	239.5	463.2	359.5	439.4	454.4	440.3	359.6
3346130000	Magnetic and optical recording media	2,077.4	r/	3,205.5	3,906.8	4,736.3	5,739.1	5,739.1	5,106.2	4,777.1

 $D \ \ Withheld \ to \ avoid \ disclosing \ data \ for \ individual \ companies. \qquad NA \ \ Not \ available. \qquad n.e.c. \ \ Not \ elsewhere \ classified. \qquad r/Revised \ by \ 5 \ percent \ or \ more \ from \ previously \ published \ data.$

 $^{1/\}text{In}\ 1997$, the computer industry data were revised. Previous years are not comparable.

^{2/}These data are collected on two Current Industrial Report forms, MA334R, "Computer and Office and Accounting Machines," and MA334Q, "Semiconductors, Printed Circuit Boards, and Other Electronic Components."

Table 2. Quantity and Value of Shipments of Computers and Office and Accounting Machines: 2001 and 2000 [Quantity in number of units. Value in thousands of dollars]

Product	Droduct decoription	No.	2001		2000		
Product code	Product description	of cos.	Quantity	Value	Quantity	Value	
334111	Electronic computer manufacturing	127	22,745,591	49,288,969	27,235,010	62,856,944	
3341111001	Host computers (multiusers): Large scale systems, including						
3341111003	mainframes and super computers Medium-scale systems and unix	14	309,141	4,714,336	r/ 540,942	6,856,470	
3341111005	Servers Personal computer servers 1/		934,468 (D)	9,119,336 (D)	1,213,197 739,393	12,654,073 3,175,969	
3341111006	Other host computers 1/		(D)	(D)	15,368	190,917	
3341111009	Server appliance 1/	1	(D)	(D)	(NA)	(NA)	
0041117007	Single user computers:	0.4	14 570 000	10.050.074	10 007 401	00.077.000	
3341117007 3341117009	Personal computers Workstations	34 37	14,579,263 1,298,618	18,856,674 3,359,849	16,305,421 2,728,140	$22,855,986 \\ 5,598,449$	
3341117009	Laptops (AC/DC)	8	5,446		6,671	12,945	
3341117013	Notebooks, subnotebooks (battery	Ü	0,110	u/ 10,010	0,071	12,010	
	operated)	16	4,248,919	8,682,428	4,169,407	9,599,839	
3341117015	Personal digital assistants 2/	4	(D)	(D)	(D)	(D)	
3341117017	Other portable computers 2/		(D)	(D)	(D)	(D)	
3341117019	Other single user computers		184,209	a/ 94,380	217,099		
3341117025	Home internet appliance	-	-	-	(NA)	(NA)	
334111D021	Other computers, including array, analog,						
	hybrid or special-purpose computers not included above	29	74,622	539,016	264,166	998,209	
			,	,	, , , ,		
33418A	Printed circuit assemblies (loaded boards,	750	(TA)	00.710.005	(10)	07 070 710	
	subassemblies, and modules) 3/	758	(X)	30,712,895	(X)	37,272,519	
	Loaded computer processor boards and board subassemblies:						
334418A005	Computer and peripheral printed						
001110/1000	board assemblies	265	(X)	11,170,750	(X)	r/ 14,189,451	
334418A010	Communications printed board			11,11.0,1.00	(-2)		
334418A015	assembliesIndustrial process control board	252	(X)	9,094,359	(X)	r/ 10,880,133	
	assemblies	219	(X)	1,115,058	(X)	r/ 1,132,385	
334418A020	Instrumentation printed board assemblies (except industrial)	189	(X)	2,181,651	(X)	r/ 2,458,563	
334418A025	Search and detection printed board assemblies	55	(X)	100,768	(X)	103,980	
334418A030	Consumer electronics printed board						
334418A035	assembliesOther electronics, printed board	137	(X)	556,420	(X)	r/ 578,641	
	assemblies including office equipment						
	and point of sales	299	(X)	6,493,889	(X)	r/ 7,929,366	
3341121	Computer storage devices and equipment	66	(X)	8,153,449	(X)	8,995,421	
3341121002	Rigid magnetic drives	22	(D)	(D)	(D)	(D)	
3341121009	Disk subsystems and disk arrays for	~~	(2)	(2)	(2)	(2)	
	multiuser computer systems	21	45,106	1,141,255	61,566	900,115	
3341121011	Flexible magnetic disk drives Optical disk drives, including CD-ROM	6	(D)	(D)	(D)	(D)	
	and magneto-optical equipment:						
	CD-ROM:						
3341121013	"Juke-box" capable of handling	_					
0041101017	multiple disks		37,545		43,331		
3341121015	Single-disk equipment DVD 4/		(D)	(D)	(D)	(D)	
3341121016 3341121018	Magneto-optical (MO)	-	(D)	(D)	(D)	(D)	
3341121020	Other optical disk drives 4/	3	(D)	(D)	(D)	(D)	
22/1101001	Ontical subsystems for multi						
3341121021	Optical subsystems for multiusers computer systems	5	(D)	(D)	(D)	(D)	
	<u>F</u> <i>J</i>	•	(3)	(D)	(2)	(2)	
3341121024	Auxiliary storage, not disk or tape-based, for multiuser computer systems	6	(D)	(D)	(D)	(D)	
	101 multiuser computer systems	J	(D)	(D)	(D)	(D)	

Table 2. Quantity and Value of Shipments of Computers and Office and Accounting Machines: 2001 and 2000 [Quantity in number of units. Value in thousands of dollars]

		No.			200	1			200	00
Product code	Product description	of cos.		Quantity		Value		Quantity		Value
3341121027	Other direct access storage equipment Serial-access storage equipment (e.g., tape drives):	12	a/	52,197	a/	586,201		55,458		453,821
3341121029	1/2 inch tape drives	10		563,676		1,729,161		616,800		1,780,962
3341121023	1/4 inch tape drives	5		15,251	a/	4,454		(D)		(D)
3341121031	Helical scan tape drives	9		61,062	a,	212,164		109,831		360,862
3341121035	Cassette tape drives	4		13,514	a/	3,520		19,158	a/	4,182
3341121037	Other serial access storage equipment	9		(D)	u,	(D)		(D)	u,	4, 102 (D)
3341121037	Computer storage parts and subassemblies	19		(X)		1,699,539		(X)	r/	1,691,912
3341131	Computer terminals	35		(X)		452,092	,	(X)		415,078
3341131001	Remote batch terminals	5	1 /	10,369	,	29,052	a/	28,227		38,070
3341131003	Teleprinters Display terminals, including graphics type whether or not incorporating a printing mechanism:	3	b/	829	c /	7,120		4,086	C /	9,240
3341131005	X-terminalsOther than X-terminals:	7		240,287		166,950	r/	204,632	r/	129,476
3341131007 3341131009	13-inch or less display 5/ More than 13-inch but less than	4		(D)		(D)		(D)		(D)
5541151009	19-inch display	18		256.066		184.133	r/	326,201	r/	200,320
3341131011	19-inch or more display 5/	5		(D)		(D)	1/	(D)	1/	(D)
3341134001	Computer terminal parts and subassemblies	6		(X)		(D)		(X)		(D)
3341191	Computer peripheral equipment, n.e.c	209		(X)		10,593,405		(X)		12,434,388
3341191000	Digital cameras	_		-		-		(D)		(D)
3341191001	Keyboards	24		(D)		(D)		(D)		(D)
3341191002	Memory cards and readers	1		(D)		(D)		(D)		(D)
3341191003	Other keying equipment	3		(D)		(D)		(D)		(D)
3341191005	Mouse devices	8		(D)		(D)		(D)		(D)
3341191007	Digitizers and light pen tablets	5		(D)		(D)		134,536		87,982
3341191009	Other manual input devices (joysticks, trackballs, touchscreens, etc.)	12	a/	1,143,130	a/	97,892	r/	933,616	r/	78,729
3341191011	Computer output to microfilm (COM) equipment	2		(D)		(D)		(D)		(D)
3341191013	Media copying and/or conversion									
	equipment Optical scanning devices:	6	c/	5,903	c/	49,948	c/	16,073	c/	116,619
3341191015	Bar code devices	22		4,122,351	b/	810,810		4,692,699		1,012,002
3341191017	OCR equipment	9		30,586		155,352		64,942		320,869
3341191019	Flat bed scanners	2		(D)		(D)		(D)		(D)
3341191020	Drum scanners	~		(D)		(D)		(D)		(D)
3341191021	Hand-held scanners	3		(D)		(D)		(D)		(D)
3341191022	Photo scanners	-		(D)		(D)		(D)		(2)
3341191023	Other	10		117,011		117,650		127,186	a/	128,137
3341191025	Voice recognition equipment	5		(D)		(D)	r/	52,023		37,103
3341191027	Magnetic strip and ink recognition									•
2241101000	equipment	10		191,038		210,399	17	185,292	17	194,181
3341191029	Other document entry equipment	2		(D)		(D)		(D)		(D)
3341191031	Impact printers: Line type (typically with a Centronics interface with output									
3341191033	measured in line per minute) Serial type (typically with a serial	13		283,110		207,657		926,433		297,944
	and/or parallel interface with output measured in characters per second)	15		140,662		66,299		146,613		86,572
2241101027	Nonimpact printers:	0.4		9 474 949		9.010.700		2 212 702		9 996 907
3341191035	Laser	24		3,474,848		2,010,792		3,313,708		2,886,807
3341191037	Inkjet	10		7,985,509		614,956		(D)		(D)
3341191039	Other (thermal, ion deposition, etc.)	19		195,265	. /	358,841		238,836	۰,	461,084
3341191041	Peripheral sharing devices	8		42,841	a/	6,301		102,274	a/	20,288
3341191043	Font cartridges	3	a/	(D)	2 /	(D)	2 /	(D)	2 /	(D)
3341191045	Plotters, including electrostatic	9	a/	11,642	a/	114,500	a/	12,893	a/	119,181

Table 2. Quantity and Value of Shipments of Computers and Office and Accounting Machines: 2001 and 2000 [Quantity in number of units. Value in thousands of dollars]

		No.			200)1			200	00
Product code	Product description	of cos.		Quantity		Value		Quantity		Value
	Monitors, excluding terminals:									
3341191047	Flat panel displaysOther than flat panel displays:	11		67,062		48,871	r/	74,096	r/	52,252
3341191049	Less than 19-inch display	18		1,296,864		388,509		1,647,696		510,423
3341191051	19-inch or more display	13		795,909		330,559		1,018,309		423,436
3341191053	Monitor screen projection devices	_		-				-		(T)
2241101055	(e.g. LCD panels)	7 41		(D)	0/	(D)		(D)	0/	(D) 2,721,504
3341191055 3341191057	All other input/putput devices Accessories for computer peripherals	41		(A)	a/	3,071,166		(X)	a/	2,721,304
	(e.g. device supports, ergonomic									
	aids, etc.)	25		(X)		238,411		(X)		520,474
3341104001	Parts and subassemblies for computer									
3341194001	peripherals and input/output equipment	53		(X)		2,359,928		(X)		2,766,258
	r			()		,,,		()		,,
3341197	Calculating and accounting machines	34		(X)		1,329,976		(X)		1,210,431
3341197003	Funds transfer devices 6/	5		(D)		(D)		(D)		(D)
3341197007 3333134015	Point-of-sale terminals 6/	19		(D)		(D)		(D)		(D)
3333134013	counting, changing or dispensing									
	coins and/or currency	7		292,836		168,455		657,585	a/	186,716
3333134025	Other coin or currency handling									
	machines, including cash registers,									
	calculators, accounting, bookkeeping, and billing machines,									
	and credit card imprinters	10		(X)		212,571		(X)	r/	171,366
3333136000	Parts for calculating, coin or currency	10		(V)		105 170		(V)		105 705
	handling and accounting machines	10		(X)		105,179		(X)		105,705
333313A	Mailing, letter handling, and addressing									
	machines	26		(X)		1,758,416		(X)		1,375,696
333313A001	Forms handling equipment, including			(T)						
333313A005	bursters, decollators, and imprinters 7/ Letter and envelope handling machines	9 12		(D) 37,375		(D) 430,819		460,126 55,293		37,655 $324,679$
333313A003	Other mailing, letter handling and	12		37,373		430,819		33,293	1/	324,079
	addressing machines 7/	14		(D)		(D)		329,191		1,013,362
0000100	A11 .1 .00			(TD)		701 000		an.		000 040
333313D 333313D001	All other office machines, n.e.c	35 6		(X) (D)		791,666 (D)		(X) (D)		809,646 (D)
333313D001 333313D003	Electric stapling machines, office type	3		474,835		6,529		590,656		9,665
3345183131	Time recording and time stamp machines		a/	400,321	a/	271,884		407,060		247,831
333313D005	Paper cutting machines and apparatus									
0000100000	office type	3		949,213		17,009		861,204		17,569
333313D006 333313D007	Pencil sharpeners Paper shredders	1 1		(D) (D)		(D) (D)		(D) (D)		(D) (D)
333313D008	Perforating or stapling machines,	•		(D)		(D)		(D)		(D)
	nonelectric	5		(D)		(D)		(D)		(D)
333313D009	All other office machines, n.e.c.,									
	including pencil sharpeners, typewriters, dictating machines,									
	binding machines, ticket counting,									
	machines and voting machines	10		(X)		403,108		(X)	r/	422,102
333313J000	Parts for office machines, n.e.c	25		(X)		179,202		(X)		239,484
334613	Magnetic and entired recording media	47		(V)		9 077 209		(V)		2 205 546
334013	Magnetic and optical recording media Rigid disks:	47		(X)		2,077,398		(X)		3,205,546
3346130111	Less than 3-1/2 inches	-		-		-		(D)		(D)
3346130211	3-1/2 inches up to, but not including	_						40 400 000		***
3346130213	5-1/4 inches and greater	6 3		4,931,578 (D)	c/	140,612 (D)		16,129,079 (D)	a/	737,645 (D)
3340130213	5-1/4 inches and greater	3		(D)		(D)		(D)		(D)
3346130611	3-1/2 inches up to, but not including									
	5-1/4/ inches 8/	8		(D)		(D)	r/	2,821,792		173,586
3346130613 3346130615	5-1/4 inches and greater 8/	3 13		(D) 797,838		(D) 377,273		17,007 888,984	a/	3,819 586 156
3346130501	Optical disks Bulk magnetic tape	7		1,413,245		177,560		1,475,853		586,156 242,684
	O F	•		,,~ 10		, 5 5 6		, ,		,001

Table 2. Quantity and Value of Shipments of Computers and Office and Accounting Machines: 2001 and 2000 [Quantity in number of units. Value in thousands of dollars]

Product	Duo desat description	No. of			2001		2000
code	Product description	cos.		Quantity	Value	Quantity	Value
	Packaged magnetic tape:						
3346130411 3346130413	In reels for computer use In cassette and cartridge for computer	6	b/	14,716	102,562	b/ 8,531	64,884
	use	12		6,463,686	723,485	6,190,262	826,419
3346130415	In forms suitable for audio use	9		224,294	93,056	383,628	154,485
3346130417	In video cassette, 8-mm and 1/2-inch	11		215,936	189,307	271,424	304,024
3346130419	In video cassette, 3/4 (19-mm) and						
	2-inch (51-mm)	2		(D)	(D)	(D)	(D)
3346130421	Other package magnetic tape	2		(D)	(D)	(D)	(D)
3346130617	Other magnetic recording media,						
	including parts	5		(X)	(D)	(X)	25,760
	Nonmanufacturing revenue of manufacturing establishments:						
4216900000	Supplies and accessories for use with computers or business machines						
	(resales)	40		(X)	1,805,053	(X)	1,624,319
9999980000	Research and development, testing and						
	evaluation of systems and components Software sold with computer systems	11		(X)	4,584	(X)	130,491
	shipped by manufacturers:						
3346110001	Operating system software	10		(X)	5,776	(X)	7,172
3346110002	Utilities and device managers	12		(X)	3,134	(X)	,
3346110002	Application software	31		(X)	204,549	(X)	,
3346110004	Other software	6		(X)	54,920	(X)	,
5415120000	Systems integration revenues, including configuration, installation and site	Ü		(22)	01,020	(11)	07,111
5415190000	preparation, and custom programming Other nonmanufacturing revenues	18		(X)	181,869	(X)	118,009
	associated with computer systems	57		(X)	734,011	(X)	843,843

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified. r/Revised by 5 percent or more from previously published data. X Not applicable.

1/Product codes 3341111005, 3341111006, and 3341111009 have a combined total of 705,822 for quantity and 3,467,952 for shipments for 2001.

2/Product codes 3341117015 and 3341117017 have a combined total of 405,083 for quantity and 436,483 for shipments for 2001, and 1,035,206 for quantity and 807,300 for shipments for 2000.

3/These data are collected on two Current Industrial Report forms: MA334R, "Computer and Office Accounting Machines," and MA334Q, "Semiconductors, Printed Circuit Boards, and Other Electronic Components."

4/Product codes 3341121016 and 3341121020 have a combined total of 1,330,284 for quantity and 31,732 for shipments for 2001, and 949,360 for quantity and 45,770 for shipments for 2000.

5/Product codes 3341131007 and 3341131011 have a combined total of 40,868 for quantity and 64,837 for shipments for 2001, and 39,709 for quantity and 37,972 for shipments for 2000.

6/Product codes 3341197003 and 3341197007 have a combined total of 328,168 for quantity and 948,950 for shipments for 2001, and 341,161 for quantity and 852,349 for shipments for 2000.

7/Product codes 333313A001 and 333313A007 have a combined total of 1,079,718 for quantity and 1,327,597 for shipments for 2001.

8/Product codes 3346130611 and 3346130613 have a combined total of 2,872,110 for quantity and 157,862 for shipments for 2001.

Note: Percent of estimation of 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 is estimated. c/Over 50 percent of this item has been estimated.

Table 3. Shipments, Exports, Imports, and Apparent Consumption of Computing and Accounting Machines: 2001 [Quantity in thousands of units. Value in millions of dollars]

Product code	Product description				Exports of domestic merchandise 1/2/		rts for otion 1/3/
		Quantity	Value	Quantity	Value	Quantity	Value
3341111001, 003, 005, 006, 3341117007, 009, 011, 013, 015, 017, 019, 334111D021	Computers, digital, analog, hybrid, and other	22,745.6	49,289.0	4,102.4	8,802.6	18,126.8	12,360.1
3341121011	Flexible magnetic disk drives	(D)	(D)	185.1	28.4	33,707.0	531.1
3341121001, 005, 007, 009	Rigid magnetic disk drives, including disk subsystems and disk arrays	393.2	1,812.2	3,254.7	993.7	75,650.4	8,807.2
3341121013, 015, 016, 018, 020, 021, 024, 027, 029, 031, 033, 035, 037, 3341124001	Computer storage devices and equipment, n.e.c.	(X)	(D)	1,193.8	1,391.4	57,006.0	4,248.7
3341191035	Laser computer printers	3,474.8	2,010.8	945.4	526.7	5,185.0	3,883.3
3341191037	Inkjet computer printers	7,985.5	615.0	1,334.1	211.6	26,262.8	2,640.4
3341191031, 033, 039	Computer printers, n.e.c	619.0	632.8	634.5	470.7	2,514.0	737.1
3341191045	Plotters	11.6	114.5	(X)	12.9	111.3	5.5
3341191001	Computer keyboards	(D)	(D)	780.4	100.6	44,585.7	436.8
3341131001, 003, 005, 007, 009, 011	Computer terminals	(X)	452.1	43.5	50.8	1,235.1	430.2
3341191049, 051	Monitors, CRT-type	2,092.8	719.1	872.7	295.3	26,022.1	4,183.1
3341191047, 053	Monitors, n.e.c.	(D)	(D)	317.9	322.7	14,189.3	3,921.4
3341191015, 017, 019, 020, 021, 023, 025, 027	Optical scanning devices and magnetic strip and ink recognition equipment	4,552.0	1,442.3	604.4	376	8,674.3	764.3
3341191005, 009	Control devices	(D)	(D)	5,076.4	5,423.6	57,873.1	5,629.4
3341191007	Digitizers and light pens	(D)	(D)	777.5	124.3	336.4	11.1
3341191002, 003, 011, 013, 025, 029, 041, 043, 055	Computer equipment, n.e.c	(X)	3,234.5	2,014.4	795.9	64,029.4	656.2
3341197007	Point-of-sales terminals	(D)	(D)	66.7	79.2	1,037.7	269.2

Table 3. Shipments, Exports, Imports, and Apparent Consumption of Computing and Accounting Machines: 2001 [Quantity in thousands of units. Value in millions of dollars]

Product code	Product description	Manufacturers' shipments (f.o.b. plant)		Exports of merchand		Imports for consumption 1/3/	
		Quantity	Value	Quantity	Value	Quantity	Value
3341191057, 4001, 334418A001, 003, 005, 007, 009, 011, 013	Parts, subassemblies, and accessories for computers and computer peripheral equipment	(X)	33,311.2	(X)	16,034.5	(X)	11,782.7
3341197003, 015, 025	Coin or currency handling machines, n.e.c., including cash registers, accounting, bookkeeping, and billing	(X)	(D)	1,773.6	322.4	118,244.2	967.1
333313A001, 005, 007 333313A007	Mailing, letter handling, and addressing machines	(D)	(D)	70.8	97.3	329	121.6
3345183131	Time recording and time stamping machines	400.3	271.9	182.8	11.1	113.9	7.8
333313D006	Pencil sharpeners	(D)	(D)	1,806.4	106.3	4,157.4	14.4
333313D001, 003, 005, 007, 008, 009	Office machines, n.e.c.	(X)	483.2	18.7	4.3	30,102.3	291.4
3333136000	Parts for calculating, coin, or currency handling, and accounting machines	(X)	105.2	(X)	223.4	(X)	287.5
333313J000	Parts for office machines, n.e.c	(X)	179.2	(X)	356.6	(X)	150.6
3346130111, 211, 213, 611, 613, 615	Rigid, flexible, and optical disks	8,602.7	679.9	119,250.6	489.2	817,287.8	213.2
3346130411, 413, 415, 417, 419, 421, 501	Bulk and packaged magnetic tape	8,453.4	1,386.4	41,581	400.1	938,268.0	1,402.0
3346130617	Other magnetic recording media, including parts	(X)	(D)	90.6	241.2	694.4	1,174.8

D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. X Not applicable.

^{1/}For comparison of 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, U.S. Imports for Consumption.

Table 4. Comparision of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2001

Product code	Product description	Export code 1/	Import code 2/
3341111001,	Computers, digital, analog, hybrid,		
003, 005, 006, 3341117007,	and other	8471.10.0000 8471.30.0000	8471.10.0000 8471.30.0000
009, 011, 013,		8471.41.0035	8471.41.0035
015, 017, 019,		8471.41.0065	8471.41.0065
334111D021		8471.41.0095	8471.41.0095
		8471.49.1035	8471.49.1035
		8471.49.1065 8471.49.1095	8471.49.1065 8471.49.1095
		8471.50.0035	8471.50.0035
		8471.50.0065	8471.50.0065
		8471.50.0085	8471.50.0085
		01.1.00.000	01.1.00.000
3341121011	Flexible magnetic disk drives	8471.49.5020	8471.49.5020
		8471.70.4035	8471.70.4035
		8471.70.5035	8471.70.5035
3341121002,	Rigid magnetic disk drives, including	0471 40 5010	0471 40 5010
005, 007, 009	disk subsystems and disk arrays	8471.49.5010 8471.49.5040	8471.49.5010 8471.49.5040
		8471.70.1000	8471.70.1000
		8471.70.2000	8471.70.2000
		8471.70.3000	8471.70.3000
		8471.70.4065	8471.70.4065
		8471.70.5065	8471.70.5065
0044404040			
3341121013,	Computer storage devices and equipment, n.e.c.	9471 40 5060	9471 40 5060
015, 016, 018, 020, 021, 024,	equipment, n.e.c.	8471.49.5060 8471.49.5080	8471.49.5060 8471.49.5080
020, 021, 024, 027, 029, 031,		8471.70.4095	8471.70.4095
033, 035,		8471.70.5095	8471.70.5095
3341124001		8471.70.6000	8471.70.6000
		8471.70.9000	8471.70.9000
3341191035	Laser computer printers	8471.49.3100	8471.49.3100
		8471.49.3200	8471.49.3200
		8471.60.5100	8471.60.5100
		8471.60.5200 8471.60.6100	8471.60.5200
		8471.60.6100	8471.60.6100 8471.60.6200
		0471.00.0200	0471.00.0200
3341191037	Inkjet computer printers	8471.49.3400	8471.49.3400
	•	8471.60.5400	8471.60.5400
		8471.60.6400	8471.60.6400

Table 4. Comparision of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2001

Product code	Product description	Export code 1/	Import code 2/
3341191031,	Computer printers, n.e.c.	8471.49.3300	8471.49.3300
033, 039		8471.49.3500	8471.49.3500
		8471.49.3600	8471.49.3600
		8471.49.3730	8471.49.3730
		8471.49.3760	8471.49.3760
		8471.49.3790	8471.49.3790
		8471.60.5300	8471.60.5300
		8471.60.5500	8471.60.5500
		8471.60.5600	8471.60.5600
		8471.60.5730	8471.60.5730
		8471.60.5760	8471.60.5760
		8471.60.5790	8471.60.5790
		8471.60.6300	8471.60.6300
		8471.60.6500	8471.60.6500
		8471.60.6600	8471.60.6600
		8471.60.6730	8471.60.6730
		8471.60.6760	8471.60.6760
		8471.60.6790	8471.60.6790
3341191045	Plotters	9017.10.0000	9017.10.4000
			9017.20.7000
3341191001	Computer keyboards	8471.49.2100	8471.49.2100
		8471.60.2000	8471.60.2000
3341131001, 003, 005, 007, 009, 011	Computer terminals	8471.60.3000	8471.60.3000
3341191049,	Monitors, CRT-type	8471.49.2600	8471.49.2600
051	monitors, entity per	8471.60.1035	8471.60.1035
031		8471.60.1055	8471.60.1065
		8471.60.3500	8471.60.3500
		8471.60.4540	8471.60.4540
3341191047,	Monitors, n.e.c.	8471.49.2400	8471.49.2400
053	,	8471.49,2900	8471.49,2900
		8471.60.1095	8471.60.1095
		8471.60.4580	8471.60.4580
			9013.80.7000
			9013.80.9000
3341191015,	Optical scanning devices and magnetic		
017, 019, 020,	strip and ink recognition equipment	8471.49.4200	8471.49.4200
021, 023, 025, 027		8471.60.8000	8471.60.8000
33/1101005	Control devices	Q471 40 6000	Q471 40 6000
3341191005, 009	Control devices	8471.49.6000 8471.80.1000	8471.49.6000 8471.80.1000

Table 4. Comparision of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2001

Product code	Product description	Export code 1/	Import code 2/
3341191007	Digitizers and light pens	9017.20.8040	9017.20.8040
3341191003, 011, 013, 029, 041, 043, 045 055	Computer equipment, n.e.c.	8471.49.1500 8471.49.4850 8471.49.4875 8471.49.4895 8471.60.9030 8471.60.9070 8471.60.9090 8471.80.9000	8471.49.1500 8471.49.4850 8471.49.4875 8471.49.4895 8471.49.9500 8471.60.9030 8471.60.9070 8471.60.9090 8471.80.9000
3341197007	Point-of-sale terminals	8470.50.0020	8470.50.0020
3341191057 3341194001, 334418A001, 003, 005, 007, 009, 011, 013	Parts, subassemblies, and accessories for computers and computer peripheral peripheral equipment	8471.60.7040 8471.60.7080 8471.80.4000 8473.30.0000 8473.50.0000	8471.49.8500 8471.60.7040 8471.60.7080 8471.80.4000 8473.30.1000 8473.30.2000 8473.30.5000 8473.30.6000 8473.30.9000 8473.50.3000 8473.50.9000
3341197003, 015, 025	Coin or currency handling machines, n.e.c., including cash registers, accounting, bookkeeping, and billing machines, and credit card imprinters	8470.10.0000 8470.21.0000 8470.29.0000 8470.30.0000 8470.40.0000 8470.50.0060 8472.90.1000	8470.10.0040 8470.10.0060 8470.21.0000 8470.29.0000 8470.30.0000 8470.40.0000 8470.50.0060 8472,90.1000 8472.90.9520
333313A001, 005, 007	Mailing, letter handling, and addressing machines	8470.90.0010 8472.20.0000 8472.30.0000	8470.90.0010 8472.20.0000 8472.30.0000

Table 4. Comparision of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2001

Product code	Product description	Export code 1/	Import code 2/
3345183131	Time recording and time stamping machines	9106.10.0000	9106.10.0000
333313D006	Pencil sharpeners	8472.90.9050	8472.90.4000
333313D001, 003, 005, 007, 008, 009, 010	Office machines, n.e.c.	8469.20.0020 8469.20.0040 8469.30.0020 8469.30.0040	8469.20.0020 8469.20.0040 8469.30.0020 8469.30.0040 8472.90.6000 8472.90.7000 8472.90.9550
3333136000	Parts for calculating, coin, or currency handling, and accounting machines	8473.21.0000	8473.21.0000
		8473.29.0000	8473.29.0000
333313J000	Parts for office machines, n.e.c.	8473.10.0095 8473.40.0000	8473.10.9000 8473.40.1000 8473.40.6000 8473.40.9500
3346130111, 211, 213, 611, 613, 615	Rigid, flexible, and optical disks	8523.20.0000	8523.20.0000
3346130411, 413, 415, 417, 419, 421, 501	Bulk and packaged magnetic tape	8523.11.0000 8523.12.0010 8523.12.0020 8523.12.0040 8523.12.0060 8523.13.0020 8523.13.0040 8523.13.0060 8523.13.0080	8523.11.0000 8523.12.0010 8523.12.0020 8523.12.0040 8523.12.0060 8523.13.0020 8523.13.0040 8523.13.0060 8523.13.0080
3346130617	Other magnetic recording media, including parts	8522.10.0000 8522.90.0010 8522.90.0090 8523.90.0000	8522.10.0000 8522.90.7540 8522.90.7580 8523.90.0000

n.e.c. Not elsewhere classified.

 $1/Source: 2001\ edition,\ Harmonized\ System-Based\ Schedule\ B,\ Statistical\ Classification\ of\ Domestic\ and\ Foreign\ Commodities\ Exported\ from\ the\ United\ States.$

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2001).

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Food Services
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate

allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on computers and office and accounting machines have been collected by the Census Bureau since 1953. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.