

**Table 1**  
**Worldwide Personal Computer Sales by Region,**  
**Unit Shipments by Vendor, 1988**

	U.S.	Europe	Japan	ROW	Total	Percent
Apple	961,000	240,000	25,000	104,000	1,330,000	6.8
Atari	154,000	508,000	-	30,000	692,000	3.5
Compaq	353,000	159,000	10,000	17,000	539,000	2.8
Commodore	535,000	1,423,000	20,000	100,000	2,078,000	10.6
IBM	1,490,000	706,000	85,000	184,000	2,465,000	12.6
Hewlett-Packard	127,000	113,000	5,000	4,000	249,000	1.3
Tandy	455,000	34,000	-	73,000	562,000	2.9
Zenith	483,000	101,000	-	23,000	607,000	3.1
Other U.S.	3,348,000	378,000	5,000	618,000	4,349,000	22.3
<b>Total U.S.</b>	<b>7,906,000</b>	<b>3,662,000</b>	<b>150,000</b>	<b>1,153,000</b>	<b>12,871,000</b>	<b>65.9</b>
Acorn	-	70,000	-	3,000	73,000	0.4
Amstrad	101,000	996,000	-	87,000	1,184,000	6.1
Olivetti	9,000	320,000	-	30,000	359,000	1.8
Philips	2,000	102,000	-	12,000	116,000	0.6
Victor	1,000	110,000	-	5,000	116,000	0.6
Other Europe	32,000	976,000	-	80,000	1,088,000	5.6
<b>Total Europe</b>	<b>145,000</b>	<b>2,574,000</b>	<b>-</b>	<b>217,000</b>	<b>2,936,000</b>	<b>15.0</b>
Epson	216,000	95,000	113,000	15,000	439,000	2.2
Fujitsu	-	4,000	126,000	10,000	140,000	0.7
Hitachi	-	-	23,000	10,000	33,000	0.2
Matsushita	-	-	48,000	5,000	53,000	0.3
NEC	178,000	-	676,000	40,000	894,000	4.6
Sharp	29,000	10,000	32,000	5,000	76,000	0.4
Sony	-	-	38,000	5,000	43,000	0.2
Toshiba	150,000	107,000	67,000	10,000	334,000	1.7
Other Japan	34,000	65,000	20,000	10,000	129,000	0.7
<b>Total Japan</b>	<b>607,000</b>	<b>281,000</b>	<b>1,143,000</b>	<b>110,000</b>	<b>2,141,000</b>	<b>11.0</b>
Other	452,000	244,000	47,000	837,000	1,580,000	8.1
<b>Grand Total</b>	<b>9,110,000</b>	<b>6,761,000</b>	<b>1,340,000</b>	<b>2,317,000</b>	<b>19,528,000</b>	<b>100.0</b>
<b>Percent</b>	<b>46.7</b>	<b>34.6</b>	<b>6.9</b>	<b>11.9</b>	<b>100.0</b>	

Olivetti U.S. includes AT&T and shipments of Olivetti Prodest Products.  
Bull HN and Bull are combined under "other European."

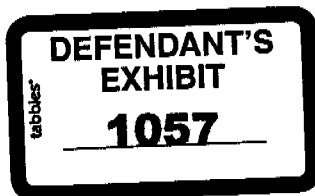
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IDC - PC Hardware - 1990



**Table 9**  
**Top PC Vendors Ranked by Unit Shipments, All Regions, 1989**

Vendors	U.S.	W. Europe	Japan	ROW	Worldwide	Share (%)
1 IBM	1,544,000	940,795	107,320	209,000	2,801,115	13.0
2 Commodore	295,000	1,040,720	5,000	128,000	1,468,720	6.8
3 Apple	980,100	291,210	45,000	125,000	1,441,310	6.7
4 NEC	225,375	0	880,500	42,000	1,147,875	5.3
5 Amstrad	67,200	698,660	0	55,000	820,860	3.8
6 Compaq	400,000	285,515	11,000	58,000	754,515	3.5
7 Seiko/Epson	302,300	87,077	167,000	48,000	604,377	2.8
8 Tandy/R.Shack/GRiD	496,250	36,140	0	45,000	577,390	2.7
9 Toshiba	190,100	166,165	193,600	23,000	572,865	2.7
10 Atari	80,000	439,230	0	20,000	539,230	2.5
11 Zenith Data Systems	385,500	104,110	0	15,000	504,610	2.3
12 Olivetti	4,475	339,830	0	45,000	389,305	1.8
13 Packard Bell	301,200	30,000	0	25,000	356,200	1.7
14 Hewlett-Packard/Apollo	132,725	148,535	5,000	22,000	308,260	1.4
15 AST	161,200	41,820	2,100	26,000	231,120	1.1
16 Tandon	29,000	193,950	0	5,000	227,950	1.1
17 Fujitsu	0	7,000	189,500	12,000	208,500	1.0
18 Laser Computer	155,000	37,990	0	10,000	202,990	0.9
19 Everex	173,325	15,350	0	5,000	193,675	0.9
20 Unisys	59,400	87,500	0	22,000	168,900	0.8
Other	3,432,650	2,151,403	285,580	2,180,300	8,049,933	37.3
Total	9,414,800	7,143,000	1,891,600	3,120,300	21,569,700	100.0

Source: International Data Corp., 1990

**Table 8**  
**Top Worldwide PC Unit Vendor Shares by Region, 1992**

	U.S.	W. Europe	Japan	ROW	Worldwide	Share %
IBM	1,402	1,079	174	545	3,200	10.8
Apple	1,528	666	191	395	2,780	9.4
Compaq	675	609	11	260	1,555	5.3
Commodore	82	1,236	0	125	1,443	4.9
NEC	173	5	1,126	41	1,345	4.6
Packard Bell	592	100	0	8	700	2.4
Dell	452	203	2	18	675	2.3
Toshiba	245	198	131	76	650	2.2
AST	322	178	2	92	594	2.0
Olivetti	1	491	0	58	550	1.9
Tandy/Grd/Victor	306	65	0	49	420	1.4
ZDS/Groupe Bull	233	244	0	18	495	1.7
Gateway 2000	428	5	0	4	437	1.5
Hewlett-Packard	114	183	0	31	338	1.1
Vobis	0	390	0	0	390	1.3
Others	4,889	4,107	536	4,477	14,008	47.4
Total	11,442	9,768	2,173	6,197	29,580	

Source: International Data Corporation, 1993

The launch of ICPI, and the later Valuepoint range, is a measured response to this bold fact. The company that created the PC market and helped to forge its destiny no longer had a central role and was becoming increasingly marginalized. The response has been to move the PC division away from the bulk of the company with the aim of making up the lost ground as rapidly as possible.

Technology advancement is not new to IBM, and the vendor will continue to advance technology as before. What IDC believes will be new is IBM's commitment to getting such technology to market in a timely and affordable fashion. Market dynamics would have quickly pulled the company down if its previous direction had been allowed to become a lone furrow.

#### **Compaq**

*The new, reengineered Compaq bore considerable fruit in 1992 as the company enjoyed the biggest gain in market share and unit volume of any PC player worldwide.*

The new, reengineered Compaq bore considerable fruit in 1992 as the company enjoyed the biggest gain in market share and unit volume of any PC player worldwide. Compaq broke from its premium price mold in the summer of 1992 with the launch of its Prolinea and Contura lines. From midyear on, the company went into a steep growth ascent with unit shipments in the last quarter of 1992 hitting 600,000.

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IDC - PC Hardware - Worldwide PC Market  
Forecast and Market Share Update (June 1993)

**Table 16**  
**Top 10 Vendors, Worldwide Desktop PC Shipments, 1995 and 1994**

1995 Rank	Vendor	1995		1994		1995/94 Growth (%)
		Shipments (000)	Share (%)	Shipments (000)	Share (%)	
1	Compaq	4,508	9.3	3,621	9.3	24.5
2	Apple	3,973	8.2	3,284	8.4	21.0
3	IBM	3,789	7.8	3,267	8.4	16.0
4	Packard Bell	2,987	6.2	2,371	6.1	26.0
5	NEC	2,024	4.2	1,093	2.8	85.2
6	Hewlett-Packard	1,843	3.8	1,108	2.8	66.3
7	Acer	1,642	3.4	1,116	2.9	47.2
8	Dell	1,595	3.3	1,158	3.0	37.7
9	Gateway 2000	1,258	2.6	960	2.5	31.0
10	Fujitsu/ICL	1,202	2.5	528	1.3	127.7
	Others	23,557	48.7	20,613	52.7	14.3
	All Vendors	48,377	100.0	39,119	100.0	23.7

Shipments are branded shipments and exclude OEM sales for all vendors.  
Data for all vendors are reported for calendar periods.  
Source: International Data Corporation, 10/1996

#### Fourth-Quarter Review

*Revenue at most PC vendors grew significantly from year-ago levels. Gross margins dropped at several companies as heightened price competition, poor product-line choices, and lower-than-expected sales pressured profitability.*

*After two quarters of below-average growth, Compaq earned back some market share in Q4.*

Revenue at most PC vendors grew significantly from year-ago levels, with nearly all of those that we track posting double-digit increases. Gross margins dropped at several companies, however, as heightened price competition, poor product-line choices, and lower-than-expected sales pressured profitability. Another factor was weak growth in portable shipments, which normally carry higher margins. Operating profit performance reflected the pattern in gross margins. Dell and Compaq saw lower, but still healthy, operating margins. Gateway's were up slightly, and Apple slipped into red ink due to low prices and weak demand. AST posted another huge loss as it cleared out stale inventory at whatever the market would bear. ALR's margins continued to expand to their highest levels in three years as its high-end server business expanded.

After two quarters of below-average growth, Compaq earned back some market share in Q4. Its unit shipments grew 26% worldwide and 41% in the United States. Its new consumer desktop line was a hit, with both the high-end minitowers and midrange desktops doing very well. Only the low-end, all-in-one units lagged, as the entry-level customer sought less expensive solutions. Business desktop sales were solid, and servers showed good year-over-year growth. Compaq's portable business continued to disappoint. The company is planning new portable lines for 2Q96, but will be treading water until then.

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