

PC

- PC -

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PC , , PC PC PC

<p>1. PC</p> <p>2. PC</p> <p>1.</p>	<p>2. (EHOE)</p> <p>1. PC</p> <p>2. 가</p>
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1.

PC PC }  
PC 가  
가 .

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\*\* (02) 570 - 4262, winwk@kisdi.re.kr

PC 가 . PC  
 . PC가 , PC  
 PDA 가 PC PC  
 PC  
 . PC 가  
 PC  
 , PC  
 . PC

< 1 > PC

	PC	PC 가 PC PDA
	PC plus, PC Extended Extended PC Beyond PC	PC PC가 PC PC

PC PC  
 PC PC . PC  
 PC IA, PC Companion 가 가 . < 2 >










< 2 > PC

	PC가	
Non-PC Device	IDC	, , 가
(IA; Internet Appliance, Internet-enabled device, Web Appliance)	eTForecasts	
	LG	non-PC

(Information Appliance)	IA 가 DVD, MP3, DVR 가
	IA
가	가
PC Companion Extended PC	Microsoft PC plus . PC Companion PC

PC, , PC, PDA가 ,  
TV ,  
< 3>

< 3> PC 1)

PDA		, 가
		
PC		Clamshell PDA , 2
		가
		
TV		TV
		
		, 가
가		가

1) PC 가 .

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PC “PC  
 , PC 가  
 ” .  
 2  
 , 가 가 . , ,가  
 , PC  
 .  
 PC . , PC  
 , 가 가 . , 1GHz PC가 1,000  
 2) , 가  
 . PC  
 ,  
 ,가  
 . 가 3)  
 PC  
 . ,  
 TV  
 PC

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2) “1,000 1GHz PC ”, ZDNet Korea, 2001. 2. 12., <http://www.zdnet.co.kr/servlet/newsprint?id=34132>

3) PDA PDA (“ , PDA ‘Scotty’”, MOBILECom eNews, , 2000. 2. 22., <http://www.mobilecomi.com/news/eread.asp?sort=&num=2682&x=2001-02-22>).

. PC

PC 8가 .  
가 .  
PC 가 , 가 . ,  
PC PC

. PC PDA,  
PC , 가 .  
, PC

가 PC .  
, , ,  
,

PC PC 2가 .  
가 PC .  
PC PDA .

, PC , , , 가  
. PDA PC 가  
PC , . ,  
PDA .

가 . 가 PC  
가 PC 3가 .  
가 , , PC . PDA

< 4> PC

	PC	
	PC	
	PDA	
		-
		-
	가	가
PC	PC	PC 가
	가	
	PDA PC PC	TV  가  ( )

PC

1.

가. PDA

PDA, PC, PDA, PC, Palm (PIMs: Personal Information Managements) Palm pilot  
PDA, MS Windows CE 3.0 OS PC

PC PDA PC PDA 가  
 . 7 10  
 e-mail , ,  
 4) 가 ,  
 PC(Tablet PC)<sup>5)</sup> .  
 PDA (product category collapse) ,  
 .

< 5> PDA

	Window CE	EPOC	PalmOS
	Microsoft	Symbian	Palm Computing
(PDA)	HIPC Palm-sized PC	Psion Series Ericsson C21B	PalmPilot
	<ul style="list-style-type: none"> <li>· PC</li> <li>· Explorer 가</li> </ul>	<ul style="list-style-type: none"> <li>· OS</li> </ul>	<ul style="list-style-type: none"> <li>· User Interface PIMs</li> <li>· PC , E-mail,</li> </ul>
	COMPAQ, SIEMENS, CASIO, HITACHI, HP ERICSSON, LG,	IBM, NOKIA, MOTOROLA, ORACLE, NTT DoCoMo, Sun microsystems, 3Com ERICSSON	IBM, Handspring, Sony, ERICSSON, NOKIA, QUALCOMM, NTT DoCoMo,
JAVA	Yes		Yes
TCP/IP HTML	Yes	Yes	Yes

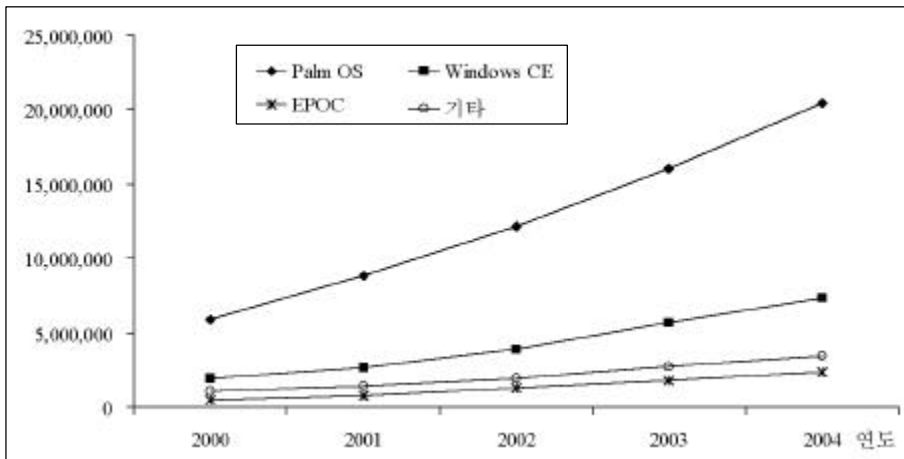
: , “ ”, 2000. 3, ( 2000 11 ).

- 4) CDMA2000 1x IMT-2000, , PC 가 (500 700 ) , GPS, , 가 가 가 .
- 5) PC 가 PDA CPU

가 가 .  
 PDA Window CE, EPOC, Palm OS가 . <  
 5> .6)  
 PDA Palm OS, Window CE EPOC 99 Palm  
 OS가 304 59% , Window CE EPOC  
 22% 5%

[ 1] PDA

( : )



: Dataquest, 2000. 11.

Palm

, PIM . Window CE OS  
 PC

< 7> PDA , 2000 가  
 60%, 19% 80%

6) Window CE 가 , Symbian EPOC  
 . Palm OS



Palm , Windows CE OS PC  
 PDA 2004  
 57%  
 PDA Palm  
 Handspring 가 PDA 가 PC Symbian  
 Nokia, Ericsson Motorola 가  
 , PDA PDA가  
 Symbian EPOC 2004  
 20% 660

< 6> PDA

( : 1,000 , 100 )

		2000	2001	2002	2003	2004
	( )	5,550.4	8,230.2	11,549.0	15,654.4	19,301.1
	( )	1,617.4	2,158.8	2,757.9	3,637.8	4,227.0
	( )	1,760.1	2,513.0	3,463.5	4,790.6	6,626.1
	( )	594.2	781.5	985.9	1,274.5	1,645.6
/	( )	961.3	1,454.1	2,135.1	2,979.3	3,943.6
	( )	324.6	452.2	607.7	792.6	979.4
	( )	992.0	1,365.0	2,014.0	2,709.0	3,943.6
	( )	325.1	398.3	523.4	685.4	866.7
	( )	19.7	149.9	176.3	198.9	212.4
	( )	44.2	44.4	45.2	46.2	46.5
	( )	9,393.5	13,712.2	19,338.0	26,332.2	33,709.2
	( )	2,905.5	3,835.2	4,920.1	6,436.5	7,765.2

: Dataquest, 2000. 11.

PDA NTT DoCoMo i-mode 가  
 가 PDA  
 / PDA ,  
 PDA 가 / Window CE/  
 Pocket OS PC PC, PDA가

Palm . / 2000 2004 67%  
 360 .  
 PDA 1998 가 3  
 가 .7) PDA  
 , / PDA가  
 . PDA , Hori-  
 zontal Market Vertical Market  
 , Vertical Market , , ,  
 가 .8) PDA  
 가 ,  
 .  
 , e-mail, ,  
 , , , ,  
 . , 가  
 . PDA가 PIMs 가  
 , 가 . PDA ,  
 , PDA ,  
 , WAP ME  
 9)  
 . 2000 7  
 2,700 , 6,000 , 8,600  
 가 , 가 2  
 7) PDA 99 5 가 , 8 가 .  
 PC 5% ,  
 8) , PC PDA, , 2000. 12  
 9) “ , (IA)-PC plus , LG ,  
 2000. 12”

2.5 3 IMT-2000

IMT-2000 가 ,<sup>10)</sup>

,<sup>11)</sup> WAP(Wireless Application Protocol)  
ME(Micro Explorer) 가 .

< 7>

		가
		10 , , , PIMs
	WAP	WAP forum 가 가 WAP
	ME	Microsoft HTML

: , (IA)-PC plus , LG , 2000. 12

,  
WAP  
ME

< 8>

2003 2005

가

10) IMT-2000 가  
가

가

11) Nokia7110, Ericsson R320, Alcatel One touch  
Phone, LG i-plus , Nokia9100 Communicator, Ericsson  
R3800, Kyosera pdQ, LG i-3000, SCH-M1000 .

< 8 >

Allied Business Intelligence	WAP 6 가	2005	1/3
Datacomm Research Inc.	2003	PDA	3 5
Frost & Sullivan	2005	18	
Jupiter Communication	2000 2003	가 가 7,940	가 가 110
Gartner Group	2004	WAP 가 95%	
	2004	Bluetooth가 가 75%	
Ovum	2000 2005	2,100 2 4	, 2002 4,800 ,
Strategy Analysis	2003 tooth	70%가	95%가 WAP 가 , Blue-

: Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, FCC, 2000. 8. 3.

, / , KISDI, 2000. 12

2 (EHOE)<sup>12)</sup>

IDC Embedded<sup>13)</sup> & Handheld Operating Environment (EHOE)

12) (EHOE; PC ) PC EHOE

13) Embedded built-in (OS) 가  
. Linux, WindowCE, RTOS(VxWorks, PSOS)

PC Server Operating Environment (SOE) Client Operating Environment (COE) 가 . SOE  
 WindRiver VxWorks . COE Window CE, Window NT Embedded 4.0,  
 Solaris PalmOS Linux .

< 9> PC (EHOE)

( : 100 , %)

	1997		1998		'97~ '98	1999		'98~ '99
Palm	-	-	20.00	5.2	N.A	75.00	14.3	275.0
Microsoft	8.00	2.7	20.00	5.2	150.0	41.22	7.9	106.1
Lineo	3.45	1.1	1.84	0.5	- 46.7	3.78	0.7	105.4
Green Hills Software	1.45	0.5	2.10	0.5	44.8	2.80	0.5	33.3
Symbian	45.60	15.2	59.00	15.2	29.4	77.00	14.7	30.5
Accelerated Technology	7.20	2.4	9.30	2.4	29.2	12.00	2.3	29.0
Wind River System	65.78	21.9	85.90	22.1	30.6	105.70	20.2	23.1
LynuxWorks	9.33	3.1	13.06	3.4	40.0	15.20	2.9	16.4
IBM	30.00	10.0	33.00	8.5	10.0	36.00	6.9	9.1
QNX Software Systems	16.90	5.6	19.00	4.9	12.4	20.71	4.0	9.0
Mentor Graphics	23.00	7.6	27.00	7.0	17.4	29.00	5.5	7.4
Microware	9.70	3.2	9.80	2.5	1.0	7.50	1.4	- 23.5
Concurrent Computer	5.50	1.8	3.80	1.0	- 30.9	2.50	0.5	- 34.2
	75.05	24.9	84.35	21.7	12.4	94.57	18.1	12.1
	300.96	100.0	388.15	100.0	29.0	522.98	100.0	34.7

: Embedded & Handheld Operating Environment Market Forecast and Analysis, 2000~ 2004, IDC, 2000

EHOE 1997 1999 Palm OS Palm 가 1998  
 2 1999 7 5 275% 가  
 . Window CE Microsoft 1997 8 1998

2 1997 1998 150% 1999 4 1  
 . EPOC Symbian 1998  
 15.2%, 1999 14.7% . ,  
 VxWorks Wind River Systems  
 . EHOE Palm Microsoft  
 .  
 IDC 2000 7 EHOE  
 2004 34% 2004 3  
 22 6 .

< 10> EHOE( PC )  
 ( : 100 , %)

	1999	2000	2001	2002	2003	2004	1999~2004
	523	711	960	1,277	1,699	2,259	34.0
	34.7	36.0	35.0	33.0	33.0	33.0	

: Embedded & Handheld Operating Environment Market Forecast and Analysis, 2000~ 2004,  
 IDC, 2000

## . PC

### 1.

PC . PC ,  
 , 가 PC PC 가  
 .  
 2000 PC 13% 가 , 2011  
 38% 가 , 2002 PC PC  
 Dataquest . 가 2000  
 2003 가 14) PC 166% ,  
 14) 1999 PC 1999 가  
 가 가 , 2000 2003  
 가 .

< 11 >

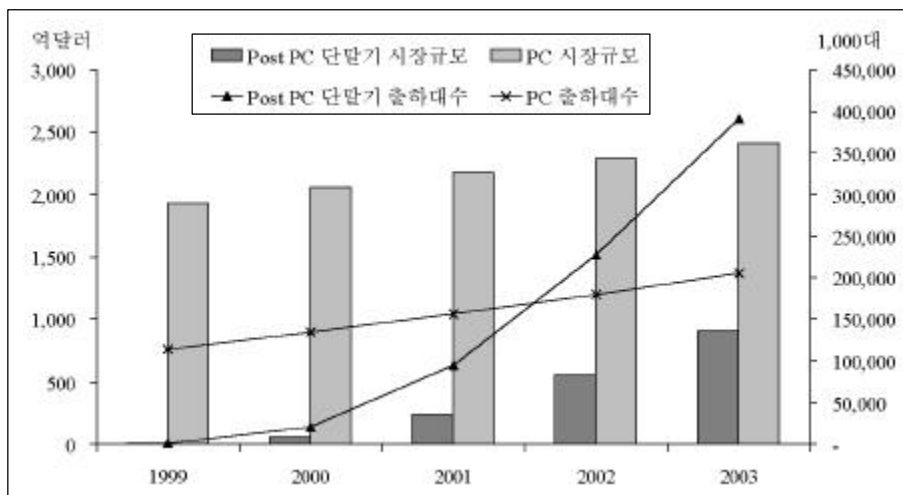
( : 1,000 , , %)

			1999	2000	2001	2002	2003	가 *
PC	PC		1,281	15,550	78,165	190,591	319,416	174
			398	1,408	5,224	10,331	23,917	157
		TV	-	52	371	1,395	4,125	330
		(Coded)	101	521	1,066	2,189	4,125	99
			-	3,166	10,036	14,648	17,894	78
		39	79	811	8,333	21,391	547	
	PC (A)	1,819	20,776	95,673	227,487	390,868	166	
	PC (C)	5	56	244	558	912	153	
PC	PC	114,894	134,869	156,328	180,355	205,973	15	
	PC	1,928	2,057	2,175	2,290	2,408	5	
	(B)	116,713	155,645	252,001	407,842	596,841	57	
	(D)	1,933	2,113	2,419	2,848	3,320	16	
	(A/B)	1.56%	13.35%	37.97%	55.78%	65.49%	70	
	(C/D)	0.3%	2.7%	10.1%	19.6%	27.5%	118	

: \*2000 2003 가

: Dataquest (2000. 4. 24), , PC Dataquest, PC IDC/LG

[ 2 ] Post PC PC



PC 15%  
 2000 56 PC 2.7%  
 , 2001 244 5 가  
 PC 가 2003 27%  
 PC 가  
 , 가 118%  
 70%

2 가

PC PC 가  
 . PC PC 가 1999 5.1  
 가 2003 4.2

PC 가 1999 2003 9.1% , PC  
 가 4% PC 가 PC 가  
 , 가 1 : 4

PC PC 가 ,  
 PC PC 가 가  
 , PC 가 PC PC  
 , PC , PC

< 12> PC PC 가

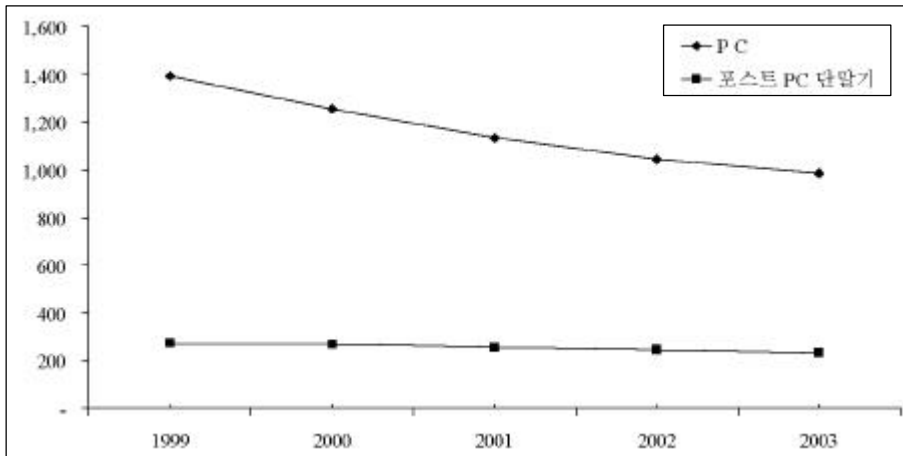
	1999	2000	2001	2002	2003	
PC(A)	1,394	1,253	1,136	1,046	985	9.1%
PC *(B)	273	269	255	245	233	4.0%
가 (B : A)	1 : 5.1	1 : 4.7	1 : 4.4	1 : 4.3	1 : 4.2	-
가	-	9.6%	4.6%	4.3%	1.0%	-

: \*PDA 가 ( )  
 : PC Dataquest, PC IDC , LG ,



가 PC 가 가  
PC

[ 3] PC PC 가



가

가

PC 가 15)

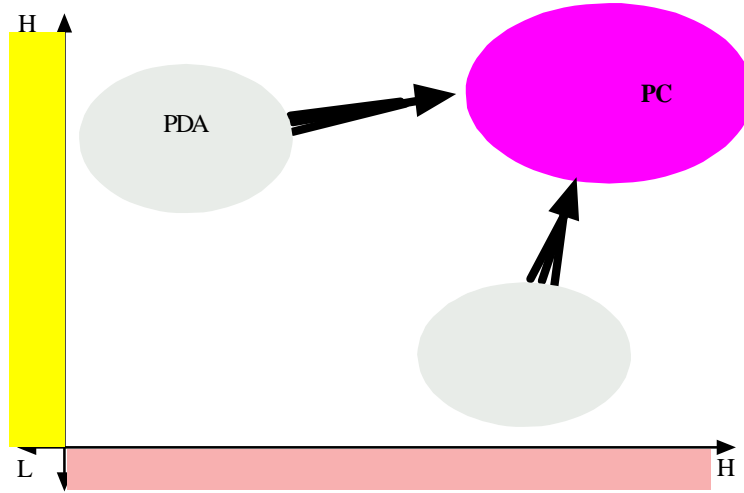
PC 가

15) HP(Hewlett-Packard)  
(Siemens )

Packet Radio System)  
GSM GPRS

‘3GSM World Congress’  
PDA ‘Jornada’  
, (Jornada) PDA GPRS(General  
WAP ,

[ 4] PDA



PC  
 , 가  
 PC  
 , IT , PC ,  
 가  
 , 가 PC, IT 21 가  
 PC  
 PC 가 PDA  
 PDA  
 PC가

가  
가  
가  
가  
PC  
가

- [1] , “ (IA) - PC Plus ”, LG , 2000. 12
- [2] , “ , PDA ‘Scotty’”, MOBILECom eNews, 2000. 2. 22., (<http://www.mobilecomi.com/news/eread.asp?sort=&num=2682&x=2001-02-22>)
- [3] , “ PC , 가? ”, , 2000. 12
- [4] , “PC PC ”, , [KISDI IT FOCUS], 2000.
- [5] , “ PC PDA ”, , 2000. 12
- [6] , “HP, PDA( ) ”, MOBILECom eNews, 2001. 2. 22., (<http://www.mobilecomi.com/news/eread.asp?sort=&num=2680&x=2001-02-22>)
- [7] . . . , ‘ / ’, KISDI, 2000. 12(ETRI )
- [8] , ‘ : 21 ’, 1999. 12
- [9] , ETRI
- [10] , KISDI
- [11] ZDNet Korea, “1000 1GHz PC ”, 2001/2/12, (<http://www.zdnet.co.kr/servlet/newsprint?id=34132>)
- [12] Dataquest, ‘Wireless Data: Ready for Take off’, 1999. 3. 15
- [13] FCC, ‘Annual Report and Analysis of Competitive Market, Conditions with Respect to Commercial Mobile Services’, 2000. 8. 18

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- [14] IDC, Embedded & Handheld Operating Environment Market Forecast and Analysis, 2000~2004, 2000
  - [15] IDC, 'Shopping on the Go: Wireless mCommerce Market Forecastin' and Analysis 1999~2004, 1999
  - [16] Informa telecoms group, 'Mobile Communications', 2001. 1. 23
  - [17] The Strategis Group, World Cellular/PCS & 3G Markets, 2000. 7