

RFID/USN

A Trend Analysis of RFID/USN Industry

<p>& RFID/USN</p> <p>.....</p> <p>. RFID/USN</p> <p>. RFID/USN</p> <p>. RFID/USN</p> <p>.</p> <p>.</p>	<table border="1"> <tr> <td>(S.J. Kim)</td> <td>RFID/USN</td> <td></td> </tr> <tr> <td>(S.J. Park)</td> <td></td> <td></td> </tr> <tr> <td>(J.E. Ku)</td> <td></td> <td>UST</td> </tr> <tr> <td>(N.S. Kim)</td> <td>RFID/USN</td> <td></td> </tr> </table>	(S.J. Kim)	RFID/USN		(S.J. Park)			(J.E. Ku)		UST	(N.S. Kim)	RFID/USN	
(S.J. Kim)	RFID/USN												
(S.J. Park)													
(J.E. Ku)		UST											
(N.S. Kim)	RFID/USN												

RFID/USN , RFID/USN , RFID/USN

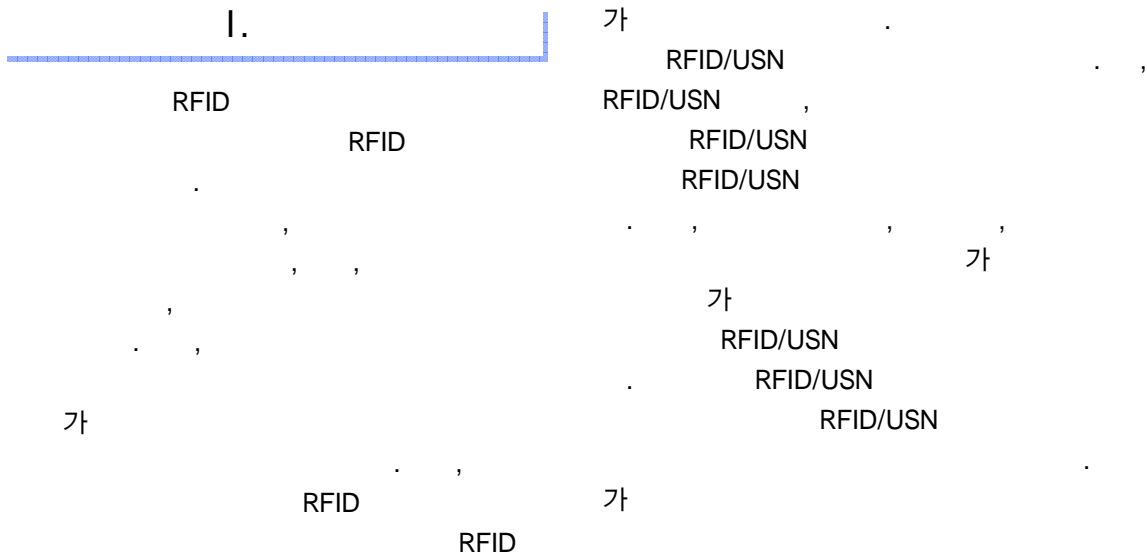
RFID/USN , RFID/USN

USN .

RFID/USN 가 . 가

RFID/USN ,

RFID/USN .

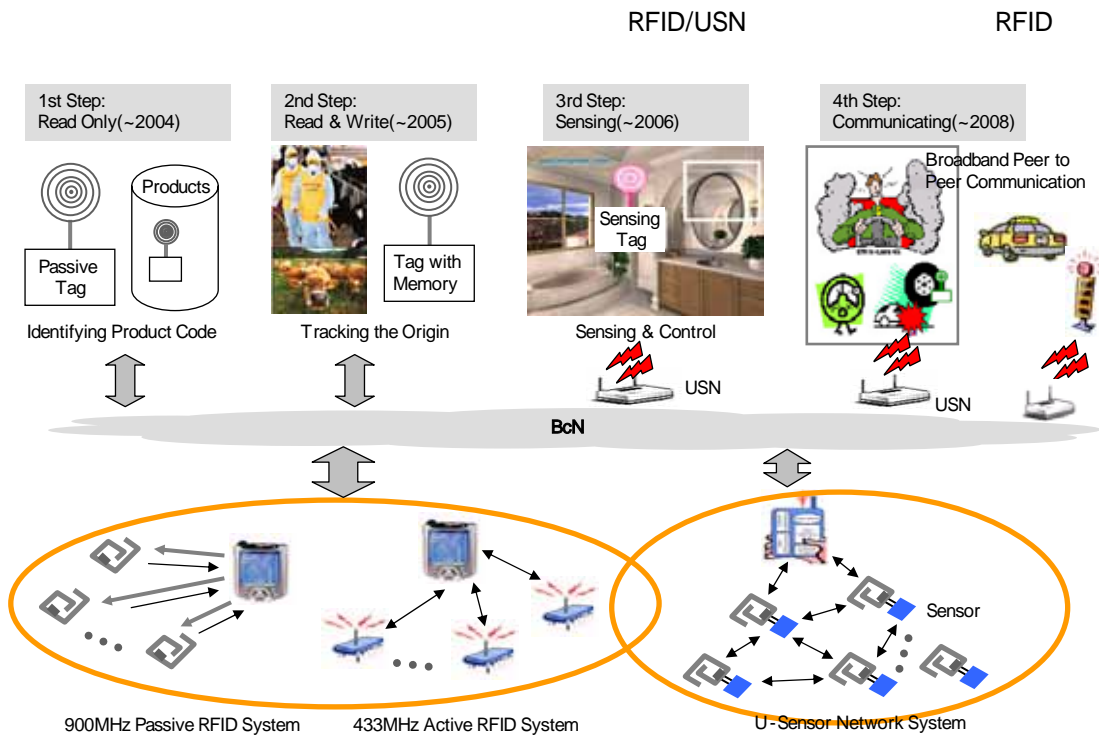


IT839

가

RFID/USN

1. RFID/USN



(1) RFID/USN

/ RFID/USN

RFID 가가

. RFID/USN

RFID

가

RFID/USN

RFID

가

[1].

가

USN

RFID/USN

RFID/USN

((1)) [1].

RFID/

USN

(BcN)

가 가

. USN

RFID

(SI)

[3].

Ad-hoc

3.

[2].

RFID/USN

2. RFID/USN

RFID/USN

가

(reader),

/

가

IT

(tag),

< 1> RFID/USN

가
/
/
, 가 , 가
/ , 가



< 1 >

가

NITRD

LSM

, SII

가

(産學官)

CENS NSF

. RFID/USN

1. RFID/USN

(NTIA)

RFID

RFID/USN

DARPA

(NIST)

HP,

가

IBM, MS

MIT, CMU,

HCI

가

, RFID

RFID

MIT

Auto

[1],[4],[5].

(UCC),

ID (1998)

가.

RFID/USN

DARPA

(IPTO)

(NSF),

UC Berkeley

'Smart

(DARPA)

Dust'

MIT UCC, P&G

75

NSF

가

'Auto ID'

가

10

IT

RFID

1mm²

(mote)

"

, MEMS,

" " "

, wireless broadband 10

, 'Auto ID'

"

"Smart Tag"

", " "

. DARPA

[4].

. EU .

' 6 , , 가 , IPv6, 가

, 가 ' e-Japan' 'u-Japan'

“ ”,

“ ” , 가

(IST) ID

(FET) 'The Dis- (2003 3)

appearing Computer', IST TRON

'Improving Risk Management', Mu-Chip

“ ” pilot test . 2001

(CPA)

'Sensor Technologies & Applications'

RFID/USN IST

(FET) ' (RFID /

(disappearing computing initia- tive)' 16 " 가

“ ”

RFID

가 , , RFID , TRON

'Smart-Its' 가 ,

RFID "Smart-Its"

“ ” NTT "i-mode"

가 "ITRON"

[4].

. Grocer RFID USN

가 u- " " " " , , "

Paper+++ 가 " , " 3가 13가

[4],[5].



20 3 2005 6

CNS, Alien • , Texas Instruments

. KT

UHF

. KTF LG

2005

RFID

, 2006

RFID

LAB 13.56MHz

[1],[3],[5].

[3],[5].

ERP

, ,
RFID

가

, EPCglobal

RFID

RFID

EPC Solution

IBM,

, EXE

2004 7

, SAP

, EPC Solution,

RFID

SAVI

RFID

[3],[5].

EPC
RFID
Net”

“Things-
“JEUS”

(SI)

. 2004 8 IBM
(B2B)

RFID가

SI

“IBM

가

SI

SDS, LG

V5”

CNS, SK C&C,

I&C, CJ

RFID

[5].

RFID

[1],[3],[5].

. USN

SK

, IEEE 802.15.4/

KTF, LG

KT

RFID

ZigBee

가

. SK

RFID

RFID

, MICA

가

가 , RFID

TinyOS

USN .

가 track & traceability

가 가 .

가 .

가 .

1980 . , USN

가 SCM

RFID

ETRI

가 .

ZigBee, IEEE802.15

MEMS

USN CENS

가

가 . NIST /

() 1

2 SDI, LG , , 3 가

SKC 가

ZigBee

USN

[1].

4. RFID/USN

가.

Wal-Mart RFID

9.11 가 LA

[1].

/ RFID/USN

RFID 2010 5.2 6.1
2006 2.13
5.2% 가 , RFID/USN
2010 39.9

[1]. RFID/USN /

[4].

RFID/USN

2007~2008

RFID/USN

2008~2010

가 < 2>

RFID/USN

, RFID/USN

가 RFID/

가

USN

가

RFID/USN

mo-

chipless

mobile RFID(mRFID)

, 1

가

. mRFID

chipless

RFID/USN

2007

mRFID

가

RFID/USN

< 2>

가

[9].

IT839

IT

RFID/USN

RFID/USN

[10].

RFID/USN

USN

RFID/

RFID/USN



RFID/USN RFID/USN

RFID/USN

USN 가 RFID/ 가

가 RFID , RFID/USN 가

가 [3],[5]. RFID/USN RFID/USN

가 가 가 IT RFID/USN

, RFID/USN 가 가 가

가 RFID/USN RFID/USN

USN RFID/USN RFID/ 가

가 가 가 가

가 가 가

IT RFID, RFID/

USN		TRON	The Real-time Operating System Nucleus
,	IT	SII	Scalable Information Infrastructure
	IT	UCC	Uniform Code Council
가		UHF	Ultra High Frequency
		USN	Ubiquitous Sensor Network

BcN	Broadband convergence Network
CENS	Center for Embedded Networked Sensing
CPA	Cross Programme Actions
DARPA	Defense Advanced Research Projects Agency
FCC	Federal Communications Commission
FET	Future and Emerging Technologies
HCI	Human Computer Interface
IPTO	Information Processing Technology Office
IST	Information Society Technologies
LSM	Large Scale Networking
MEMS	Micro-Electro-Mechanical Systems
MRE	Meals, Ready to Eat
NIST	National Institute of Standards and Technology
NSF	National Science Foundation
NTIA	National Telecommunications and Information Administration
RFID	Radio Frequency Identification
SCM	Supply Chain Management
SI	System Integration

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