

# Contactless Smartcard





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# Mifare UID Decimal formats

Example:

Sector 0 Block 0 Data:     7D 88 04 00 88 98 00 20 00 00 00 F8

## Single size UID (4-byte)

UID "in order" (Big Endian):    

UID "in reverse bytes order" (Little Endian/Intel):    

Decimal: 3605450112

References:

- <https://www.starnfc.com/mifare-1k-uid-number-format>
- <https://www.mifare.net/support/forum/topic/mifare-uid-number>

# Contactless Smartcard Document Directory

- [Proxmark's document directory for different contactless smartcard standards](#)

# FeliCa

FeliCa Related information

# FeliCa Guide and IC Card Info

## FeliCa System Code and Known service code list

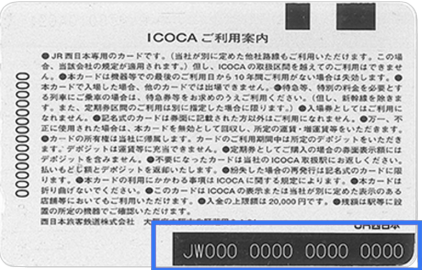
Product	SysCode	Known Service Code
<i>Wildcard</i>	0x__FF	
<i>Wildcard (for Polling)</i>	0xFF__	
IC Card - ⅢⅢICⅢⅢ	0x0003	<ul style="list-style-type: none"> <li>Balance - Ⅲ 0x008B</li> <li>Usage - 0x090F ⅢⅢ</li> <li>Gate entry/exit history - ⅢⅢⅢⅢⅢⅢⅢⅢ 0x108F</li> <li>SF info - SF Ⅲ 0x10CB</li> </ul> <a href="#">More info</a>
nicepass	0x040F	
ⅢⅢEdy	0x04C0	No services. (to be confirmed, from WDIC)
<i>NDEF (NFC Data Exchange Format)</i>	0x12FC	
<i>HCE-F (Host Card Emulation)</i>	0x4__	
Shenzhen Tong (1st Gen)	0x8005	
Omi Railway and Bus Card	0x8074	
IruCa	0x80DE ? 0xDE80	

Product	SysCode	Known Service Code
IC e-card (Iyo Railway)	0x80E0	
CI-CA, Randen (?)	0x8157	
Rapica	0x8194	
NicoPa	0x8287	
ecomyca passca	0x832C	
Waon	0x852B	
itappy	0x862C	
PASPY	0x8592	
SAPICA	0x865E	
Suica	0x86A7	
FeliCa Lite	0x88B4	
NORUCA	0x8B43	
Randen	0x8B98	
Kartu Multi-Trip	0x90B7	
Hayakaken	0x927A	
MRT Jakarta	0x9373	
JIS X 6319-4:2016	0xAA__	
FeliCa Networks Common Area Edy IC Card	0xFE00	
FeliCa Plug	0xFEE1	




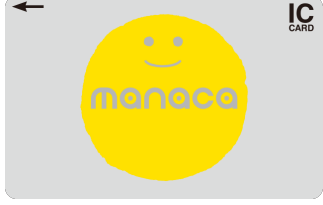
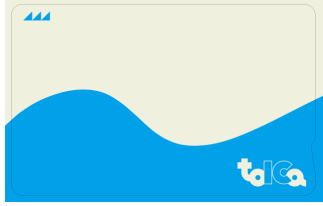



Product	SysCode	Known Service Code
Edy	0xFE00	<ul style="list-style-type: none"><li>Balance - 0x1317</li><li>Number - Edy 0x110B</li><li>History - 0x170F</li></ul>
nanac	0xFE00	<ul style="list-style-type: none"><li>Balance - 0x5597</li><li>Number - 0x558B</li><li>History - 0x564F</li></ul>
WAON	0xFE00	<ul style="list-style-type: none"><li>Balance - 0x6817</li><li>Number -WAON 0x684F</li><li>Points - 0x684B</li><li>History - 0x680B</li></ul>
IC	0xFE00	<ul style="list-style-type: none"><li>Balance - 0x50D7</li><li>Coop info - 0x50CB</li><li>History - 0x50CF</li></ul> <p><a href="#">More info</a></p>
Octopus	0x8008	<ul style="list-style-type: none"><li>Balance - 0x0117</li></ul> <p><a href="#">More info</a></p>

# 0x003 Transport Card Information IC

The backside of IC card contains a "Laser Number", the first two characters represent the card issuer.



Prefix	Product	Card Face	Issuer
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JH	Kitaca ■■■		JR Hokkaidō
JE	Suica ■■■		JR East (Tokyo & E Japan)
PB	PASMO ■■■		non-JR operators in Tokyo
TP	manaca ■■■		Nagoya City Transportation Bureau Development Organization & MIC
JC	TOICA ■■■		JR Central
SU	PiTaPa ■■■		Surutto Kansai
JW	ICOCA ■■■		JR West (Kansai)
NR	nimoca ■■■		Nishi-Nippon Railroad (Fukuoka)



JK	SUGOCA ■■■		JR Kyūshū
SK	icsca ■■■		Sendai City Transportation Bureau
FC	Hayakaken ■■■■		Fukuoka City Transportation Bureau

FeliCa

# FeliCa Parts

Reader and Reader Enclosure Manufacturer

- [Daitron](#)