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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GA 490-2004

**Specifications for machine-Readable information in resident
identity card
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GA 490-2013 "Resident Identity Card Machine Readable Information Specification". Compared with GA 490-2013, the main changes are as follows.

-Amended to a recommended standard.

Please note that some elements of this document may involve patents. The issuer of this document is not responsible for identifying these patents.

This standard is proposed by the Public Security Administration of the Ministry of Public Security.

This standard is under the jurisdiction of the Computer and Information Processing Standardization Technical Committee of the Ministry of Public Security.

1 Scope

This standard specifies the representation method of the machine-readable information of the People's Republic of China ID card.

This standard applies to the production, testing, management and application of resident identity cards.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

GB/T 2261.1 Classification and codes of personal basic information Part 1. Human gender code GB/T 3304 Roman alphabet spelling and codes for names of various ethnic groups in China GB 11643 citizenship number GB/T 13000 Information Technology Universal Multi-octet Coded Character Set (UCS) GA/T 449 Resident ID Terms GA/T 2000.16 Public Security Information Code Part 16. Resident Card Validity Period

3 Terms and definitions

The terms and definitions defined in GA/T 449 apply to this document.

4.1 Machine-readable information composition

Machine-readable text information file, machine-readable photo information file, machine-readable fingerprint information file, additional address information file and card body management number Piece composition. The composition of machine-readable information is shown in Table 1.

Table 1 Composition of machine-readable information

File name	File capacity (bytes)	Description
the machine-readable text information file	256	stores machine-readable text information. Machine-readable text information adopts UTF-16 standard of GB/T 13000 Quasi-storage the defined data items in the machine-readable text message occupy 220 bytes, and the remaining 36 bytes are Reserved area each data item is a fixed length, and spaces are added for the short part (0x0020)
Machine-readable photo information file	1024	Stores machine-readable photo information
Machine-readable fingerprint information file	1024	stores fingerprint characteristic data
Additional address information file	280	to store address change information
Additional address information file		is stored in UTF-16 standard of GB/T 13000 each data item is a fixed length, and spaces are added for the short part (0x0020)
Card body management number file	24	Stores the serial number of the ASIC and card serial number of the resident identity card

4.2 Machine-readable text message file

The data structure of the machine-readable text information file is shown in Table 2.

Table 2 Data structure of machine-readable text message file

Sequence data item name	Byte number	identifier	Description
1 Name	30	xm	
2 Gender code	2	xbdm	meets the requirements of GB/T 2261.1
3 National Code	4	mzdm	Complies with GB/T 3304
4 Date of Birth	16	csrq	Year. YYYYMMDD

5 Address 70 dzmc

6 Citizenship number	36	gmsfhm	complies with GB 11643
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7 Issuing authority 30 qfjgmc

8 Validity period start date	16	yxqqsqrq	The valid period of the resident ID card meets the requirements of GA/T 2000.16
9 Validity deadline	16	yxqjzrq	Resident ID's validity deadline meets the requirements of GA/T 2000.16
10	36		Reserved area

4.3 Machine Readable Photo Information File the data structure of the machine-readable photo information file is shown in Table 3.

Table 3 Data structure of machine-readable photo information file

Sequence data item name	Byte number	identifier	Description
1 Machine Readable Photo	1024	jdxp	WLT file stored as a binary number, which can be Generate a JPG or BMP file with a decoding algorithm

4.4 Machine Readable Fingerprint Information File the data structure of the machine-readable fingerprint information file is shown in Table 4.

Table 4 Data structure of the machine-readable fingerprint information file

Sequence data item name	Byte number	identifier	Description
1 Fingerprint	1	_fingerprint	characteristic data
2 Fingerprint two		_Fingerprint	characteristic data

4.5 Add Address Information File the data structure of the additional address information file is shown in Table 5.

Table 5 Data structure of additional address information file

Sequence data item name	Byte number	identifier	Description
1 Machine Readable Additional Address	1	70 jdzjzz1	

2 Machine Readable Additional Address 2 70 jdzjzz2

3 Machine Readable Additional Address 3 70 jdzjzz3

4 Machine Readable Additional Address 4 70 jdzjzz4

4.6 Card body management number file the data structure of the card body management number file is shown in Table 6.

Table 6 Card body management number file data structure

Sequence	data item name	Byte number	identifier	Description
1	Resident ID card serial number	8	jmsfzzyjcdlxlh	
2	Resident ID card serial number	16	jmsfzzkxlh	