

ICS 35.040

CCS L 71



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

GB/T 26237.2-2011

**Information technology -- Biometric data interchange formats --
Part 2: Finger minutiae data**

信息技术 生物特征识别数据交换格式 第2部分：指纹细节点数据

(English Translation)

Issued on: December 30, 2011

Implemented on: June 1, 2012

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China**

Table of Contents

Preface	
Introduction	
1 Scope	
2 Compliance	
3 Normative reference document	
4 Terms and definitions	
5 Abbreviations	
6 Fine point extraction	
6.1 Purpose	
6.2 Detailed point description	
6.3 Fine point type	
6.4 Fine point positioning	
6.5 Fine point direction	
6.6 Location of the central and triangular points	
6.7 Multi-byte numerical code	
7 Fingerprint detail point format type	
7.1 Overview	
7.2 Record Format	
7.3. Biometric characterization on card	
8 Finger detail point record format	
8.1 Overview	
8.2 Recording format	
8.3 Recording head	
8.4 Single finger recording format	
8.5 Extended data	
9 Fingerprint detail point on the biometric characterization format	
9.1 Use	
9.2 Card Biometric Feature Matching Format	
9.3 The number of fine points, the details of the sort order and cut	
9.4 Sorting of detail points	
9.5 Use of Card Format Additional Features	
10 Registration Format Type Identifier	

Appendix A (Normative Appendix) Record Format Block Diagram

Appendix B (informative) Data Record Example

Appendix C (informative) Fingerprint detail operation of point card format

Appendix D (informative) Detailed description of the location, direction, and type of fingerprint detail points

Reference

Foreword

GB/T 26237 "Information technology biometric identification data exchange format" is divided into the following 14 parts.

- Part 1. Framework;
- Part 2. Fingerprint detail data;
- Part 3. Fingerprint spectrum data;
- Part 4. Fingerprint image data;
- Part 5. Face image data;
- Part 6. Iris image data;
- Part 7. Signature/signature timing data;
- Part 8. Fingerprint skeleton data;
- Part 9. Biometric identification of blood vessels;
- Part 10. Hand contour data;
- Part 11. processed signature/signature dynamic data;
- Part 12. Face shape data;
- Part 13. Sound data;
- Part 14. DNA data.

This part is part 2 of GB/T 26237.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This section refers to ISO/IEC JTC1/SC37FCD "Information technology Biometrics data exchange format Part 2.

Fingerprint detail data "and ISO/IEC JTC1/SC37N2249" Information technology Biometrics data exchange format Part 2 Points. Fingerprint detail data Appendix E "and developed.

Introduction

GB/T 26237 is used to support interoperability and data exchange between biometric applications and systems. The standard details of the understanding the application of biometrics in the identification of personal identification systems, whether applied in an open system environment or by a single application Closed system completed. Additional information on this standard is available in GB/T 26237.1-2010.

In order to implement the interoperable biometric system, this part establishes the data exchange format of the detail point. It is with the generation Management, and detailed data processing of the system or unit. The use of detail points as fingerprint data is a representation in many applications Domain widely used technology.

This section defines the details of extracting key points (referred to as fine nodes) from the fingerprint ridge pattern. This includes identifying fine points the description of the type, the method of locating the minutiae on the image, the definition of the coordinate system used, and the angle calculation method associated with each detail point.

Information technology - Biometrics data exchange format Part 2. Fingerprint detail data

1 Scope

This part of GB/T 26237 specifies the concept and data format used in the fingerprint-based fingerprint representation of GB/T 26237.

This part is also generic and can be used in areas involving automatic fingerprint recognition. GB/T 26237 also contains the relevant terms of the set How to determine the description of the details of the point, for the general use and card to use the required data format and compliance information. In the appendix to this section Provides the steps, values, and decision parameters for matching.

Although the fingerprint and palmprint image data are included in GB/T 26237.4, this part only includes fingerprints and does not apply to palm prints.

2 Compliance

Biometric records that meet the following regulatory requirements comply with this part of GB/T 26237.

- a) The relationship between the data structure, the data value, and the data element is defined by Chapter 8 (Finger Detail Record Format) and Chapter 9 (Fingerprint detail point card on the biometric feature comparison format) to define;
- b) The relationship between the data values and the biometric input data generated from the biometric data records is defined by Chapter 8 (Hand Refers to the detail node record format) and Chapter 9 (Fingerprint Fingerprints on the biometric feature comparison format)

to define.

If the output of the biometric data record conforms to this part (as defined above) and is consistent with the execution of the system the system that generates biometric data records will follow this section. The system does not have to have all the possibilities to cover this part of the cover Aspects of the biometric data record, only need to generate the implementation of the Declaration of Conformity (ICS) supported by the record. The implementation of the declaration of conformity should be made this is supplemented by a template provided by ISO/IEC 29109-2 (Compliance Test Method for Biometric Identification Data Exchange Records).

3 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document.

GB/T 26237.1 Information technology - Biometrics data exchange format - Part 1. Framework (GB/T 26237.1-2010 ISO/IEC 19794-1.:2006, MOD) ISO/IEC 7816-11.:2004 Identification circuit cards with contacts - Part 11. Body based on biometrics Identification cards-Integrated circuit cards-Part 11. Personal verification through biometric methods ISO/IEC 19785-3 Information technology - Public biometrics identification interchange format framework - Part 3. Entity format specification (Information technology-Common biometric exchange formats framework-Part 3. Patron format specification)

4 Terms and definitions

The following terms and definitions apply to this document.