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

**GB/T 46687.3-2026**

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**Expression of machine language for standards - Part 3:  
Expression method of feature elements**

标准机器语言表达 第3部分：特征要素表达方法

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## Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document is Part 3 of GB/T 46687 "Standard Machine Language Expressions". GB/T 46687 has the following parts published.

1. Basic Architecture and General Requirements for Element Representation;

---Part 2: XML-based Standard Document Content Markup Guidelines;

3. Methods for expressing feature elements. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the National Standards Digitalization Standardization Working Group (SAC/SWG29). This document was drafted by: China National Institute of Standardization, Zhejiang Laboratory, China Machinery Research Institute of Standards and Technology (Beijing) Co., Ltd., and Beijing Municipality. Institute of Analysis and Testing, Science and Technology Research Institute (Beijing Physical and Chemical Analysis and Testing Center), Beijing State Grid Information & Communication Accenture Information Technology Co., Ltd. Beijing Xinnover Information Technology Co., Ltd., Shandong Provincial Institute of Standardization, China Telecom Digital Technology Co., Ltd., China Jiliang University, Wuhu City Standardization Research Institute, Guangzhou Nansha Mingxi Testing Service Co., Ltd., and China Communications Infrastructure Maintenance Group Co., Ltd. The main drafters of this document are: Sun Zhaoyang, Sui Yuan, Gao Yongmei, Wang Zhiqiang, Liu Xiaona, Liu Yong, Wang Sining, Sui Wenling, Li Jingsheng, and Zhang Yu. Li Huijie, Li Chao, Xu Xinsheng, Chen Huibing, Chen Shuangquan.

Standard machine language expressions are the core content of standard digitization and the foundation supporting application digitization. Standard machine language expressions originate from... Reconstructing standard content from a machine-readable perspective, and presenting the rules and characteristics carried by the standard in machine language, can improve the efficiency of standard knowledge utilization and enhance... Enhance adaptability to digital scenarios. GB/T 46687 "Standard Machine Language Expressions" is proposed to be divided into the following parts, which have different focuses but are also interconnected.

1. Basic Architecture and General Requirements for Element Expression. The aim is to establish a framework for drafting digital standards using machine language as the expression form. The general requirements that need to be followed, and the basic framework of the corresponding digital standards.

2. Guidelines for Standard Document Content Markup Based on XML. The aim is to provide organizations and institutions with guidelines on using XML tags to mark up document content. The standard document content is marked to provide reference and suggestions.

3. Feature Element Representation Methods. The aim is to provide a modeling and representation method for feature elements in standard machine language for various organizations and institutions. To express or use the methods of expression that provide the basis for the application.

4. Specifications for using XML-based standard content structure tags. The purpose is to

provide a framework for organizations and institutions to use XML. Tags provide rules that regulate the use of XML tags. This document further refines the requirements for the representation of feature elements in the general model and supports Part 1. Standard machine language expression Part

## 1 Scope

GB/T 46687.3-2026 is the Chinese national standard covering expressing the feature elements of a standard in machine language - the characteristics, their permissible values, units and tolerances, and the conditions under which each requirement applies. Part 3 of the series, first edition, 17,500 words. It was issued on 28 January 2026 and has been in force since 1 August 2026, as a first edition. The document is under the responsibility of the Standardization Administration of China. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document establishes the feature element model in the general model of digital standards expressed in machine language, and specifies the feature element model. The general requirements for type representation, as well as the requirements for object, attribute, relation, and instantiation representation. This document applies to the modeling of digital standard feature elements and the expression of objects, attributes, and relationships.

## 2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 46687.1-2025 Standard Machine Language Expression Part

## 3 Terms and Definitions

The terms and definitions defined in GB/T 46687.1-2025 apply to this document.

## 4 General Requirements

4.1 Neutral Format The expression of feature elements should meet the following requirements.

---Adopting a neutral format independent of specific programming languages ensures its

universality and portability, adapting to different fields and application scenarios. need;

---This implements conversion from standard machine language neutral formats to common formats such as XML and JSON;

---Ensure semantic consistency between different formats to avoid semantic loss or ambiguity caused by format conversion.

4.2 Modular Design The expression of feature elements should have modular characteristics to facilitate expansion and reuse.

4.3 Clear semantics The method of expression should ensure semantic clarity and avoid ambiguity.

4.4 Scalability The expression method should support custom extensions to adapt to the specific needs of different fields.

4.5 Tool Support Standardized tools (such as converters and parsers) should be used to achieve conversion and interoperability between different formats.