

ICS 25.040
CCS N 10



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

GB/T 48027-2026

**Digital logistics system for electronic product manufacturing
process - Design requirements**
(English Translation)

Issued on: August 28, 2026

Implemented on: March 1, 2027

Issued by: State Administration for Market Regulation

Table of Contents

Foreword
1 Scope
2 Normative references
3 Terms and Definitions
4 Abbreviations
5 Design Requirements for Digital Logistics Systems
5.1 Digitalization Requirements
5.2 Network Requirements
5.4 Visualization Requirements
5.5 Intelligentization Requirements
5.6 Labeling Requirements
5.7 Material container requirements
5.8 Environmental Requirements
6 Digital Logistics System Architecture Design
6.1 Digital Logistics System Architecture
6.2 Network Architecture of Digital Logistics System
6.3 Digital Logistics System Integration Architecture
7 WMS System Design Requirements
7.1 System Architecture
7.2 System Management
7.3 Business Applications
7.4 Statistical Analysis
7.5 Data Structures
8 WCS System Design Requirements
8.1 System Architecture
8.2 Functional Applications
9 RCS System Design Requirements
9.2 Functional Applications
10 Warehouse Equipment Design Requirements
10.1 Composition of Warehouse Equipment
10.2 Storage devices
10.3 Sorting Equipment

10.4 Transportation Equipment

References

Foreword

This document conforms to GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting is scheduled.

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 by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Industrial Process Measurement, Control and Automation (SAC/TC 124).

1 Scope

This document outlines the digital logistics system architecture for the electronic product manufacturing process, specifying the digital logistics system for electronic product manufacturing.

The general requirements for the design of warehouse management systems, warehouse control systems, robot control systems, and warehouse equipment.

This document applies to the engineering design, development, implementation, operation, and maintenance of digital logistics systems for electronic product manufacturing enterprises.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are listed below.

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 37977.51-2023 Electrostatics - Part 5-1.General requirements for electrostatic protection of electronic devices

3 Terms and Definitions

The following terms and definitions apply to this document.

Identification

A label consisting of a set of regularly arranged graphics or data, used to represent certain information.

Note: Divided into graphic markings and electronic codes.

Logistics

Based on actual needs, the basic functions of transportation, storage, loading and unloading, handling, packaging, distribution processing, delivery, and information processing are organically integrated.

[Source. GB/T 18354-2021, 3.2] 3.3 Distribution Within an economically reasonable area, we perform tasks such as picking, processing, packaging, dividing, and assembling goods according to customer requirements, and deliver them on time.

Logistics activities to reach designated locations.

[Source. GB/T 18354-2021, 3.3, with modifications] 3.4 Warehouse management system (WMS) Calculation for comprehensive management of goods receiving, issuing, inventory and other related warehouse operations, storage facilities and equipment, warehouse areas and locations.

Machine information system.

[Source. GB/T 18354-2021, 6.22] 3.5 load carrier A device for assembling goods into a standardized unit that facilitates loading, unloading, handling and transportation.

Note: This is a general term for containerized transport containers, transport pallets, and transport trolleys.