# Product Shelf Life

QRE, GigaDevice

2024

# Background Introduction

GD

This document describes the definition of shelf-life and control standards for the GD packaged products to explain the shelf-life related questions that customers concerned in use.

GD JEDEC JSTD033

It is based on the results of GD's experience and actual evaluation data, in accordance with the JEDEC JSTD033 standard.

**Not Applicable**

KGD

The shelf life and storage requirement of KGD product will be sent along with the shipment

# JSTD033D
# Product Shelf Life Definition of JSTD033D Standard

| Standard# | Standard Title |
|---|---|
| IPC/JEDEC J-STD-033D | Handling, Packing, Shipping and Use of Moisture, Reflow, and Process Sensitive Devices |

**Product Shelf Life**

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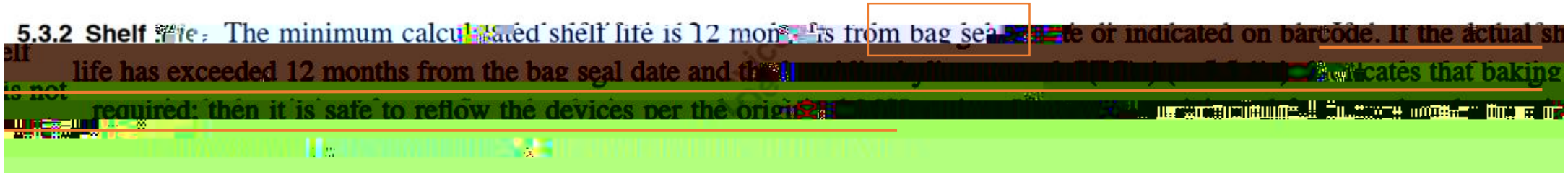
Shelf Life (of a device in a sealed MBB) The allowable time that a dry-packed moisture or reflow-sensitive device can be stored in an unopened moisture-barrier bag (MBB).

- 12 40 90%.

The calculated shelf life for dry-packed SMD packages shall be a minimum of 12 months from the bag seal date, when stored in a non-condensing atmospheric environment of <40 ℃/90% RH.

- ; JSTD033D 5.3.2 MBB HIC baking 12 MSL

This declaration reflects the minimum shelf life calculated under harsh storage conditions ; According to JSTD033D 5.3.2, as long as the MBB is not damaged, the HIC does not show moisture absorption or baking is required, more than 12 months will not be a risk, and the customer may apply the SMT according to the original MSL requirements .



# GD
# GD Product Shelf Life Requirement

GD :

GD Date Code MBB Date Code

GD Product Shelf-life :

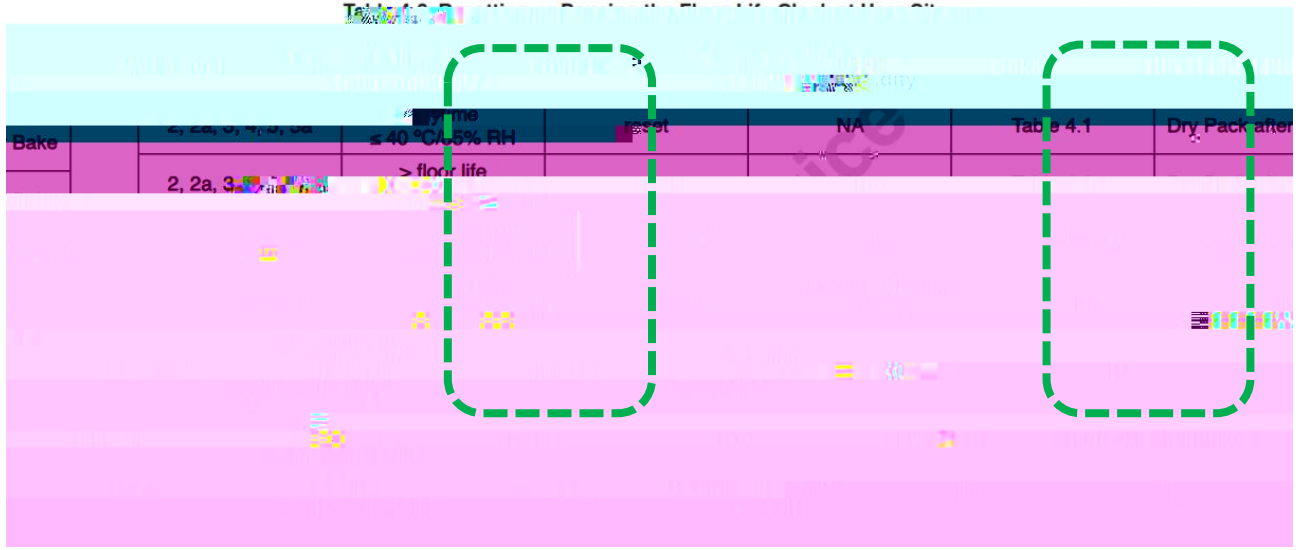
The time between the vacuum packaging date and the date customer unpacking the vacuum package (MBB). However, concerning the industry practice, it is easier to calculate the shelf life from the assembly start date (Date Code) to the date customer unpacking the vacuum package (MBB).

If the products are repacked, the shelf life should start from the actual MBB seal date instead of the Date Code to reflect the resetting of the shelf life.

, 2 Date Code

Based on the results of GD 'experience and actual evaluation data, GigaDevice Semiconductor Inc. guarantees the shelf life of the products with an assembly date code can be prolonged to 2 years. The

# Product Shelf Life Resetting

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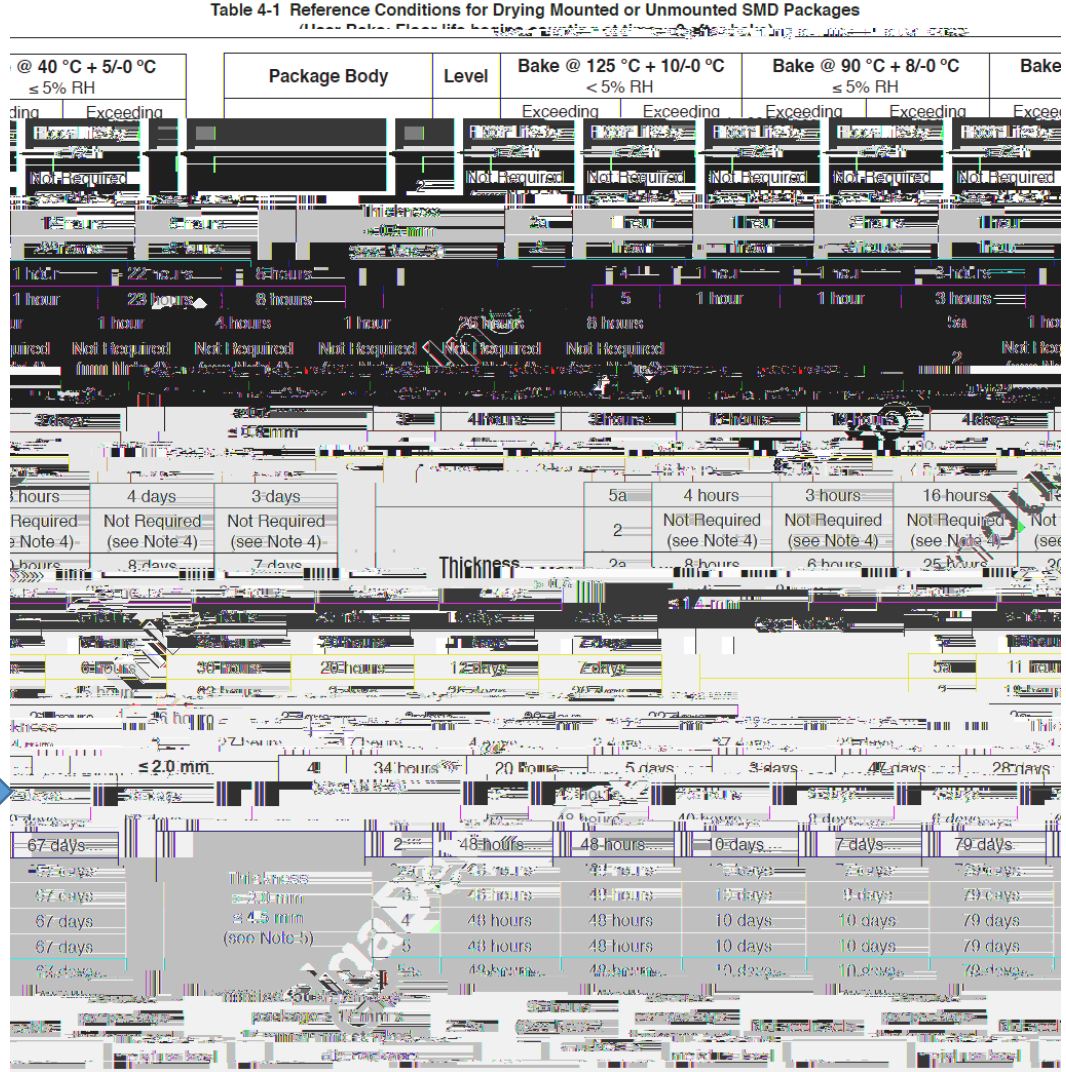
  Data Sheet)

- Drying options for various moisture sensitivity levels and ambient humidity exposures are given. Drying per an allowable option resets the floor -life clock. If dried and sealed in an MBB with fresh desiccant, the shelf life is reset. Refer to the datasheet for the package information



# Product Shelf Life Q&A

**Q** **What is the definition of the product shelf life of GD?**

A JEDECJ-STD-033D “ ”

12 24

In accordance with JEDECJ-STD-033D "Handling, Packaging, Transportation and Use of Humidity, reflux and process Sensitive Devices", GD provides appropriate MBB and desiccant . The calculated shelf life for dry-packed SMD packages shall be a minimum of 12 months can be prolonged to 24 months from the bag seal date, when stored in a non-condensing

# DECLARATION

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- GigaDevice Semiconductor Inc.(

# THANK YOU