

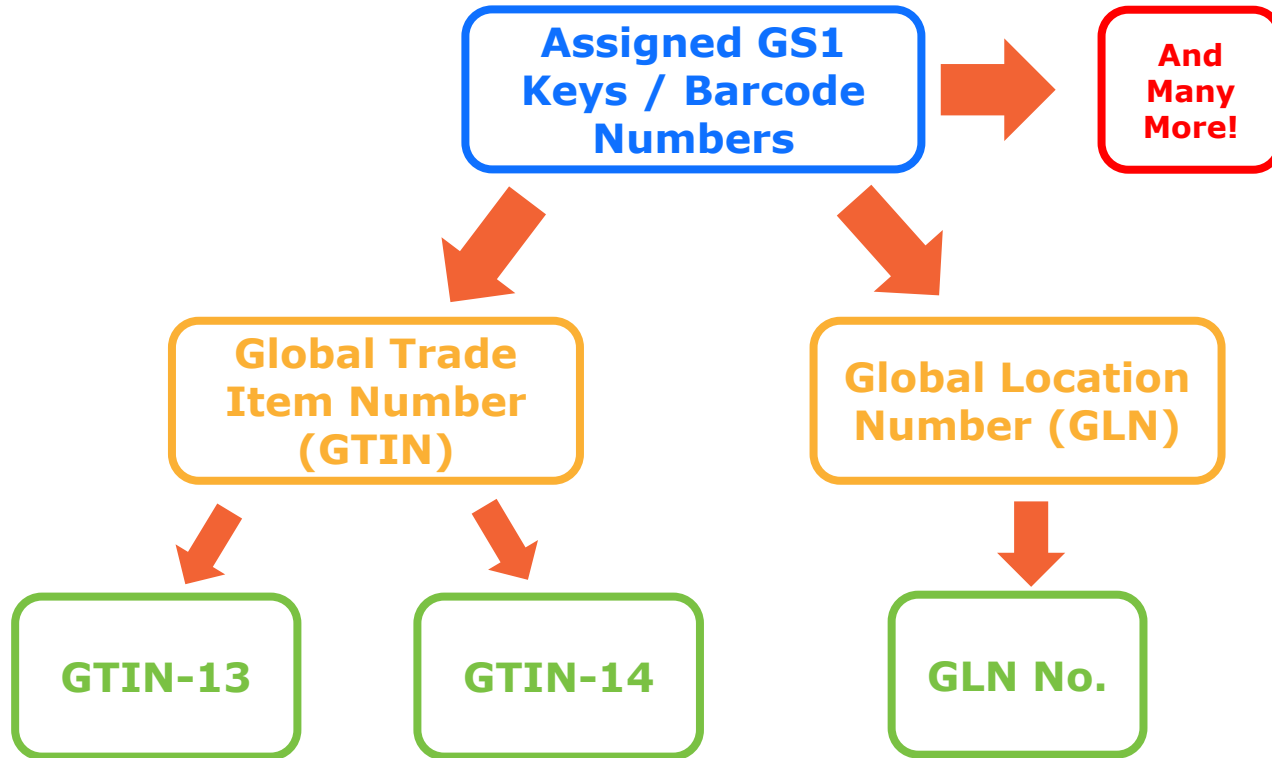
How to assign GS1 barcode numbers

7th Edition

Preface

- This DIY Self Learning Material will provide you with details on:
 - The **Types** of GS1 Identification Keys
 - **Generating** GS1 identifiers
 - **Assigning** GS1 identifiers

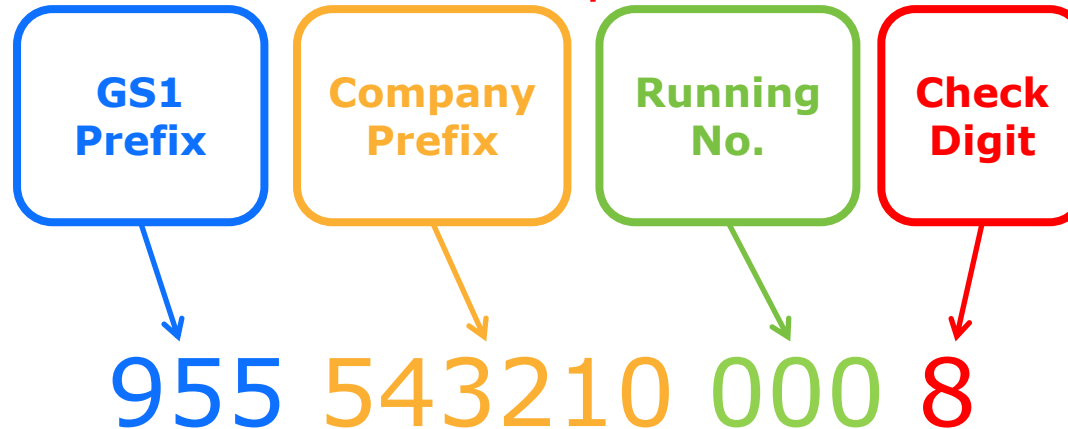
Types of GS1 Identification Keys



Breakdown of a GTIN-13

Global Trade Item Number (GTIN)

Global Company Prefix (GCP)



Breakdown of a GTIN-14



Carton Identifier
(1 – 8) :

Assigned as required by the member. It can use up to 8 separate carton indicators to indicate different carton sizes, as long as they contain the same product unit inside.

Problems Generating your GTINs?

GS1 Malaysia's barcode number generation service can help you generate your barcode numbers for a modest fee:

GTIN-13 (Product-level / SKU)

RM 100.00 for **10** GS1 barcode numbers (**Small Block Only**)

RM 375.00 for **250** GS1 barcode numbers

RM 500.00 for **1,000** GS1 barcode numbers

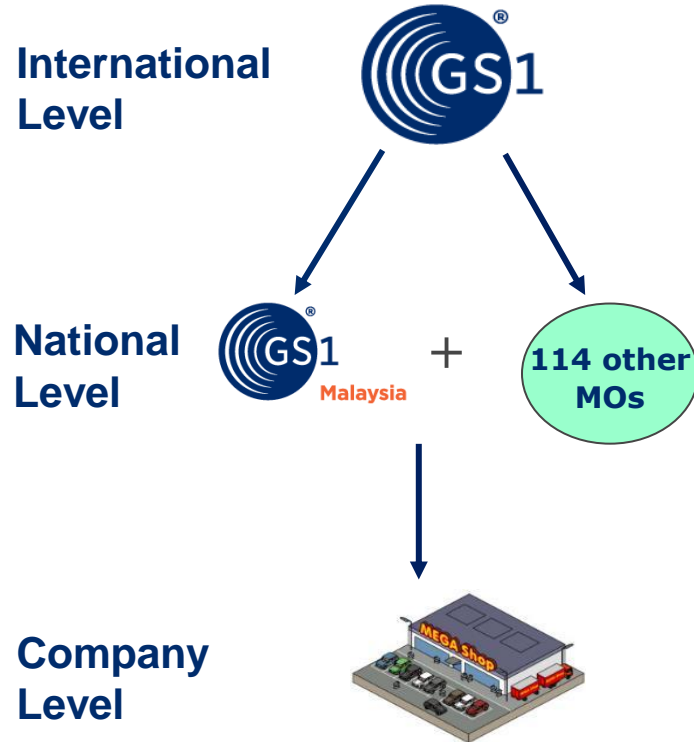
GTIN-14 (Carton / Non-retail level)*

RM 100.00 for **80** GS1 barcode numbers

Note: This service generates numbers only from your allocated GS1 licenses!

**** To use this service, you must provide GS1 with **GTIN-13 barcode numbers** to serve as the **base barcode number** for the GTIN-14 generation.***

GS1 Barcode Prefix Assignment



Malaysia	955
Singapore	888
China	690 - 699
Australia	930 - 939
USA	001 - 019
France	300 - 379
Philippines	480
New Zealand	940 - 949
Ireland	539
Belgium & Luxembourg	540 - 549
Japan	450 - 459 490 - 499
Hong Kong	489
Taiwan	471



Scan for
full list

Data Carrier = Barcode Symbol

What is a Barcode?

A series of dark bars and light spaces on a light background.



Each dark bar and light space arrangement represents a number or character !

Why Use a Barcode?

Fast and accurate capture of information into a computerised system, with little to no human error.

Commonly Used 1D GS1 Barcode Symbols

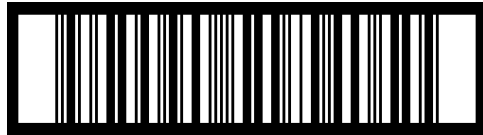


EAN-13

The EAN-13 barcode symbol is generated from a GTIN-13 barcode number.

Used to label products

EAN = European Article Number.



ITF-14

The ITF-14 barcode symbol is generated from a GTIN-14 barcode number.

Used to label cartons and trade items

ITF = Interleaved.



GS1-128

Used for **traceability** of products and trade items, for **inventory and logistical use**. Able to contain additional production information such as batch/lot, expiry date, etc.

Definition of a Retail Unit & Non Retail Unit

Product Level / Retail Unit

- Usually scanned in a retail environment, through a Point of Sale (POS) System.
- Uses **GTIN-13** for identification.
- Standard barcode symbol = **EAN-13**



Carton Level / Non-Retail Unit

- Trade item not intended for sale in a retail environment.
- Created to facilitate operations of handling, storing, shipping and etc. of product units.
- Uses the **GTIN-14** for identification.
- Standard barcode symbol = **ITF-14** or **GS1-128**
- If being traded at retail level, must be allocated with a GTIN-13 barcode number.

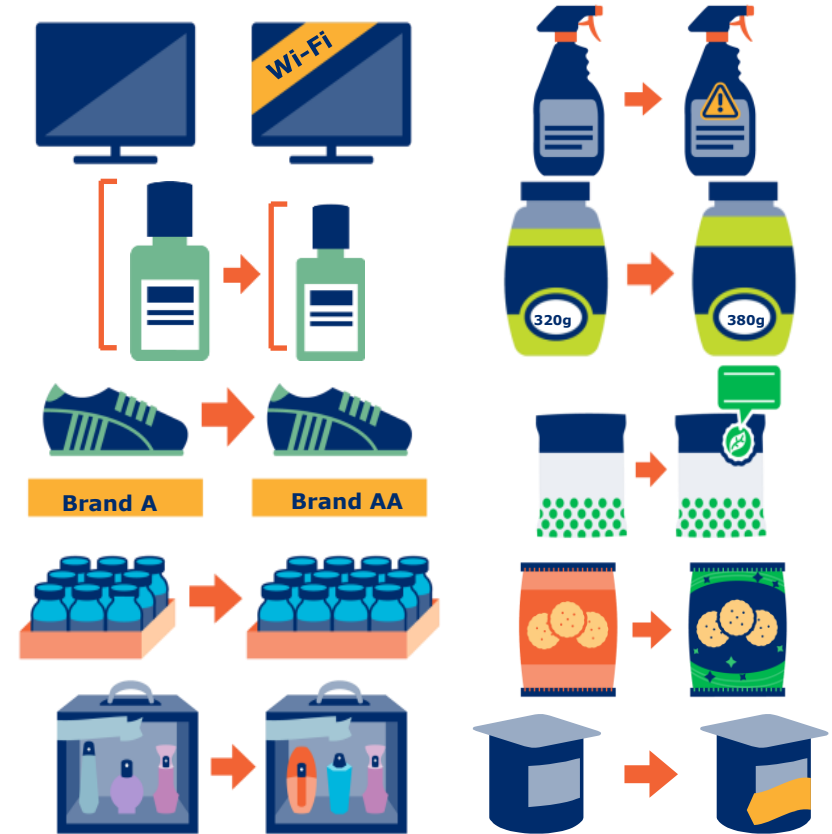


How to assign your Barcode Numbers

Global Trade Item Number (GTIN) Allocation Rules

10 Simple Rules:

1. New Product Introduction
2. New Formulation / Functionality
3. New Net Content
4. Dimension / Weight Change
5. Add or Remove Certification Mark
6. Different Brand
7. Different Pack / Case Quantity
8. Time Critical / Promotional
9. Change in Pre-Defined Assortment
10. Price on Pack / R.R.P.



Most Basic Rule

1 PRODUCT TYPE / VARIANT (SKU) = 1 GTIN

1 Product
cannot
have
more
than 1
barcode
number!



1 barcode
cannot be
assigned
to more
than 1
product
type /
variant!

Carton / Non-Retail Barcode Assignment Rules

1 Assigned by Packing Level



Product level
1 bar of chocolate
955 543210 123 C



Inner Pack / Carton
50 of single bars
1 955 543210 123 C



Outer Carton Case (OCC)
10 boxes of Inner Pack / Carton
2 955 543210 123 C

2 Assigned by Quantity



Product level
1 box of Macaroni
955 543210 123 C



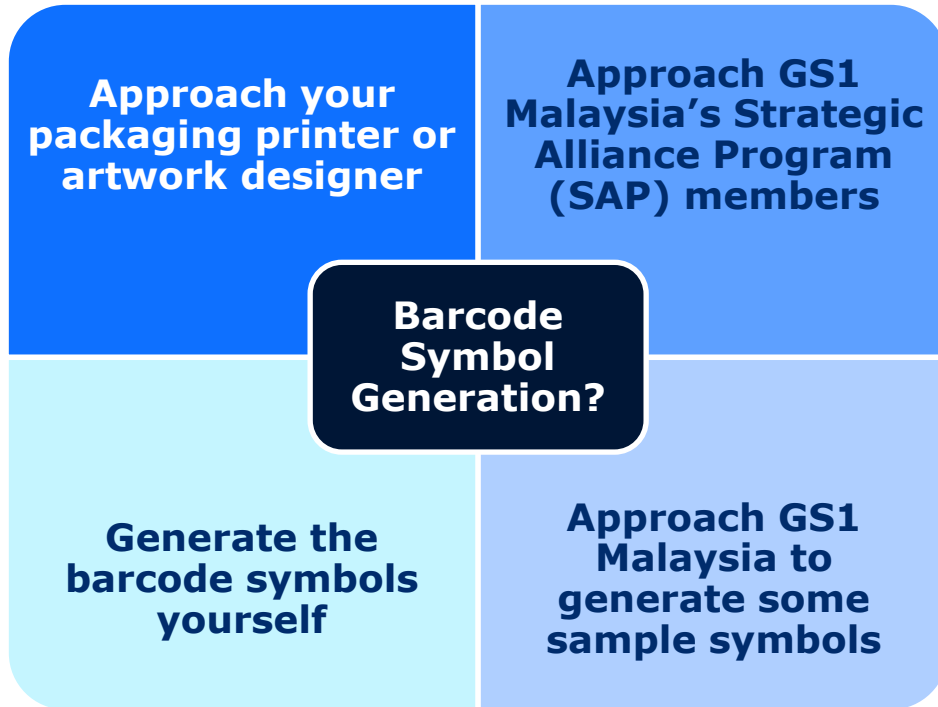
1st Carton Type
20 Box of Macaroni
1 955 543210 123 C



2nd Carton Type
40 Boxes of Macaroni
2 955 543210 123 C

How to generate your Barcode Symbols

How to get GS1 barcode symbols?



Note: Kindly refer to the GS1 barcode symbol specifications here when you generate your barcode symbols:





<https://gs1my.org/sites/default/files/Topic%20-%20-%20GS1%20DIY%20Self-Learning%20-%20GS1%20Barcode%20Specifications2.pdf>



Want to learn more?

Attend GS1 Malaysia's
**Capacity Building & Implementation
Program**
to find out more!


GS1 MALAYSIA CAPACITY BUILDING FREE BRIEFINGS

<p>(1) Fulfilling Market & Regulatory Guidelines Using GS1 Standards</p>	<p>(2) GS1 2D Standards and VbG & GACSS Fulfil Sustainability & Circularity</p>	<p>(3) GS1 Malaysia 2D Repository Platform</p>	<p>(4) The Impact of GS1 Global Location Numbers (GLN) on Business, Social, Regulation & Customer</p>
<ul style="list-style-type: none"> • Understand why GS1 Standards & Keys is widely recognised and accepted • Learn why GS1 Standards & Keys protects product identity integrity and improves the Customer Buying Experience. 	<ul style="list-style-type: none"> • Learn how GS1 supports the growing Green movement's calls for sustainability & circularity through GS1's for greater product visibility, traceability, and authentication. 	<ul style="list-style-type: none"> • Experience how 2D track & trace works with the GS1 Malaysia 2D Repository Platform! • An intermediary repository before the future National Pharmaceutical Track & Trace system. 	<ul style="list-style-type: none"> • Supporting compliance to EU directives such as EUDR, ESPR, CEAP, etc. on Sustainability and Circularity using GS1 unique identification (GLN) • Fulfil Digital Product Passport (DPP) requirements
<p>3.00pm to 4.00pm (Every Monday & Wednesday) Zoom Link: https://us06web.zoom.us/j/89614519211</p>	<p>11.00am to 11.45am (Every Thursday) Zoom Link: https://us06web.zoom.us/j/89770665451</p>	<p>3.00pm to 4.00pm (Every Tuesday) Zoom Link: https://us06web.zoom.us/j/82513900764</p>	<p>11.00am to 11.45am (Every Friday) Zoom Link: https://us06web.zoom.us/j/86884634932</p>
			

* GS1 Malaysia reserves the right to adjust the sessions based on availability & minimum attendance.

GS1 MALAYSIA PREMIUM CAPACITY BUILDING TRAINING SCHEDULE

Premium Capacity Building Training Sessions

Industry Focus Forums (Chargeable)			In-House Training & Business Consultation (Chargeable)	
Topic 1	Topic 2			
Supply Chain Optimisation and Regulatory Fulfilment using Global Location Number (GLN) and GS1 Services	Meeting Global Healthcare and UDI Guidelines using GS1 Standards		<ul style="list-style-type: none">• Training is <i>tailored</i> to company's requirements• Can be conducted at <i>company's premises of choice</i> or via <i>Zoom</i>• Full day session includes <i>quiz activity</i>• <i>Travelling charges</i> will be incorporated into the training fees	
<ul style="list-style-type: none">• Comply with <i>Retail Merchandising Principles</i>• Fulfil <i>Global Regulatory Compliance</i>• Track & Trace using GS1 Traceability guidelines and 2D Datamatrix.	<ul style="list-style-type: none">• Achieve compliance with international and country-specific directives on Healthcare Products, such as <i>US FDA GUDID, EU EUDAMED, China NMPA, UAE BrandSync, etc.</i>			
1-3 pax: RM 500.00	4-6 pax: RM 800.00	7-10 pax: RM 1,500.00	Scan the QR for in-house session fee breakdown	

Contact GS1 Malaysia at **gs1malaysia@gs1my.org** to arrange for a session.

* GS1 Malaysia reserves the right to adjust the sessions based on availability & minimum attendance.

Official GS1 Communications Channels

Official GS1 Malaysia WhatsApp

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(Membership, Services & Support)

+6011-1616 8228

(Membership, Services & Support)

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(Strictly for Payment Only)

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