Build a GS1 GTIN Into a GS1 DataBar for Produce

U.P.C. barcodes uniquely identify products for retail checkout. While they only encode the GS1® Global Trade Item Number® (GTIN®), they have defined size requirements. The GS1 DataBar® Stacked Omni-directional barcode was developed for hard-to-mark consumer goods, like loose produce, to provide product information in less space than the U.P.C. can.

The GS1 DataBar benefits your business by:
• Improving your product quality management efforts
• Allowing more products to be automatically identified at point of sale
• Reducing packaging and improving inventory controls
• Facilitating self-checkout
• Supporting your traceability requirements

Now, how do you create GS1 DataBar barcodes to share product information with your trading partners? All you need is a GS1 Company Prefix to get started.

Understanding Your Global Trade Item Number (GTIN)

GTIN-12 in a GS1 DataBar Stacked Omni-directional barcode is always 14 numeric digits.

0 0 6 1 4 1 4 1 0 0 7 3 4 6

**HOW TO:**

**Pad Zero**  
Use zero to fill for 14-digit GTIN format.

**GS1 Company Prefix**  
NOTE: Add a zero in front of the U.P.C. Company Prefix to convert your U.P.C. Company Prefix to a GS1 Company Prefix.

**Item Reference Number**  
Assigned by the owner of the GS1 Company Prefix.

**Calculated Check Digit Reference**  
Calculation based on previous 13 digits to ensure global uniqueness.

Example of a GS1 DataBar Stacked Omni-Directional Barcode Encoding a GTIN

NOTE: The GS1 DataBar Stacked Omni-directional barcode and PLU Code will coexist on loose produce labels.
Creating Your GS1 DataBar Barcode

To create your GTIN-12 in a 14-digit format and encode it into a GS1 DataBar Stacked Omni-directional barcode for loose produce, follow these simple steps:

**STEP 1: ASSIGN A PAD ZERO**
Use zero to pad for 14-digit GTIN format.

**STEP 2: IDENTIFY YOUR GS1 COMPANY PREFIX**
If you do not have a GS1 Company Prefix, you can learn more or start the application process at: www.gs1us.org/getstarted.

**STEP 3: ASSIGN YOUR ITEM REFERENCE NUMBER**
Assign your Item Reference Number based on the length of your GS1 Company Prefix. Remember, as a brand owner, you create your own Item Reference Number.

**Note:** The total number of digits from Steps 1, 2, and 3 must equal thirteen.

*An Application Identifier (AI) is a field of two or more digits at the beginning of an element string that uniquely identifies the format and meaning within the GS1 System of Standards. The AI (01) indicates that the GS1 AI data field contains a GTIN. This AI is fixed in length and encodes 14 numeric digits.

**STEP 4: CALCULATE THE CHECK DIGIT**
Calculate the Check Digit, which will go at the end of your new number. We recommend using the GS1 US Check Digit Calculator, available on our website at: www.gs1us.org/checkdigitcalculator.

**STEP 5: PRINT**
That's it! You are now ready to print your GS1 DataBar Barcode. There are many ways to print a GS1 DataBar barcode. We suggest engaging a Solution Partner by visiting our list of Certified Solution Partners at: www.gs1us.org/solutionpartners.