Food Industry Guidance for Streamlining Your Logistics Labels

How to apply the Serial Shipping Container Code (SSCC) within a GS1 Logistics Label in conjunction with an Advance Ship Notice (ASN)

A **logistic unit** is defined as an item of any composition established for transport and/or storage that needs to be managed through the supply chain. It is identified with a Serial Shipping Container Code (SSCC). To help avoid confusion, a trade item is defined as any item (product or service) upon which there is a need to retrieve predefined information and that may be priced, ordered, or invoiced at any point in any supply chain and is identified with a Global Trade Item Number[®] (GTIN[®]).







Identify | Serial Shipping Container Code (SSCC)

A GS1 identification number used to identify a logistic unit. This unique identifier is comprised of an Extension Digit, a GS1 Company Prefix, a Serial Reference, and a Check Digit (see SSCC structure below).

| Extension Digit | Co | | S1 1y Pr | | | | | | | | | | ← Serial Reference | | | | Check Digit |
|--------------------|----------------|----------------|-----------------------|------------|----------------|------------|------------|----------------|------------------------|-----------------|-----------------|-----------------|------------------------|-------------|------------------------|------------------------|------------------------|
| N ₁ | N ₂ | N ₃ | N ₄ | N 5 | N ₆ | N 7 | N 8 | N ₉ | N ₁₀ | N ₁₁ | N ₁₂ | N ₁₃ | N ₁₄ | N 15 | N ₁₆ | N ₁₇ | N ₁₈ |

Capture | GS1-128 Barcode

Used to encode logistic unit information for pallets that are not intended to pass through retail point-of-sale (POS). The use of this barcode helps to support fast and accurate data capture and inventory tracking, adding visibility to the supply chain.

Share | Advance Ship Notice

The Advance Ship Notice (ASN) is an Electronic Data Interchange (EDI) 856 transaction that provides the receiving company with advance data on shipments to better plan workloads and receipt processing. In the implementation of the transaction, the ship notice may be created at the time of the shipment. In practice, the ship notice must arrive before the shipment. For **logistic units**, including boxes, totes, and even pallets, trading partners need to share information with each other for effective shipping and receiving operations in support of supply chain visibility.

Industry best practice is to share this information with a GS1-128 barcode encoded with **only** an SSCC on a GS1 logistics label. The SSCC detail can be shared within the Advance Ship Notice (EDI 856*) or the Shipping Event through Electronic Product Code Information Services (EPCIS).

Considerations for Implementing Logistics Labels

It is recommended that logistic units (often pallets) be identified with a unique 18-digit SSCC. Read more about SSCC in An Introduction to the GS1 Serial Shipping Container Code (SSCC) for Foodservice available on www.gs1us.org or the GS1 Logistic Label Guideline available at www.gs1.org.

Streamline Your Logistic Unit Identification Identify Capture Share 7 Serial Shipping Container GS1-128 Barcode Advance Ship Notice Share detailed data (beyond what's on the label) relevant to the shipment with an ASN. HL*2*1*O~ • SN1*4*PL • PRF*PO123456~ • HL*3*2*T~ • SN1*12*CA~ sscc 006141411234567890 •MAN*AA*006141411234567890~ • PAL*4~ • HL*4*3*P~ LIN*001*UK*12345678901234*LT*Lot12345~ • SN1*25*CA~ • PO4*N*25*LB~ • PKG*EU*01-Jan-2020~ REF*PD*OrganicVegetablesl~ • MAN*AI*(01)12345678901234(10)Lot12345~ • DTM*036*20191120~ • DTM*405*20190618~ • DTM*510*20190620~ The use of a barcode and an identification number contains all the necessary information for managing logistic units in transport. The use of the SSCC in an ASN enables sharing the detailed information we see on logistic unit labels (often on pallets) today.

* Source: All references to ASN or EDI 856 refer to X12's Supply Chain Transaction Standards. For more information, refer to x12.org/products/transaction-sets

Content on the Label

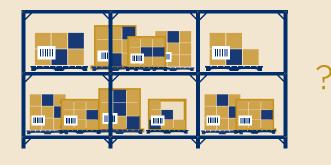
- The barcode type must be a GS1-128, previously known as UCC/EAN-128. Generic Code 128 does not meet industry requirements using the GS1 System of Standards and its use is not recommended.
- Parentheses around any AI must not be encoded into the barcode, but must be visible in the text under the barcode (called human readable information, HRI).
- Calculate the check digit in the SSCC correctly at www.gslus.org/tools/checkdigit-calculator.

Note: Realize when you concatenate data in the barcode, you can confuse reading systems and expand the size of the barcode beyond size limitations of the label.

The Placement and Appearance of the Pallet Label

- There should be a certain margin to the left and right of the barcode (also known as "the quiet zone") in which no lines or characters are permitted. Barcode should be between 16" and 32" from the floor on the labels.
- The dark bars of the barcode must appear clearly on a light background.
- Place the label on a smooth surface without creases.
- The recommended minimum size of the logistics label using just the GS1-128 barcode with the SSCC encoded is 4" x 2" with two identical GS1-128 barcode labels placed on two adjacent sides of the logistic unit (often pallet), as shown in the figure on page 2.
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For more details on barcode creation and placement, see GS1 General Specifications Section 5.12 (Barcode production and quality assessment), Section 6.6 (GS1 Logistic Label design), and Section 6.7 (Barcode placement used in general distribution).



Should you have existing implementation questions about transitioning to this best practice, please contact your trading partners for a migration plan.

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