An American Home Furnishings Alliance (AHFA) Convention

(Formally know as the American Furniture Manufacturers Association [AFMA])

For Serialized Labeling of Furniture

Serial Number Technical Workgroup

February 23, 2005

Summary

The "Furniture Industry Conventions" were developed by a technical workgroup sponsored by the American Furniture Manufacturers Association (AFMA) Information Technology Board of Directors in the spring of 2002. John Perry of Century presented them to the Furniture Industry Data Exchange (FIDX) group on May 17, 2002 for discussion and approval. They were approved. They were then approved by the AFMA Information Technology Board of Directors in August of 2002. A presentation summarizing the approved e-Commerce standards and the Furniture Industry Conventions was given to FIDX on September 20, 2002.

Summarized Convention: (This is a sub-set of the conventions)

1. All goods (upholstery as well as casegoods) should be serialized and labeled (on the product).
2. There will be two labels:
   a. The UPC label (as outlined in the UCC/EAN & AHFA Furniture Industry conventions)
      1. UPC is 12 digits
      2. in a UPC font/format
   b. And a serial number label (as outlined in the UCC & Furniture Industry standards)
      1. The serial number is a 20 digit number
      2. in a 128 font/format

Problems:

1. Retailers have become concerned with having to make two (2) scans (two labels).
2. UCC informed us that the serial number label was never meant to stand alone but was supposed to be concatenated with the GTIN.
3. Long, thin labels are extremely hard to handle.
4. Long labels require more expensive readers.
5. Smaller fonts (and the resulting smaller label) introduce read errors.

Resolution:

Because:

1. Serialization is important to the Furniture Industry,
2. The manufacturers present were already dealing with larger labels,
3. The retailer present was already reading larger labels,

It was concluded that we should concatenate the GTIN with the Serial Number.

This decision does not affect the UPC label (it is to be applied to the product) or any of the other conventions.

This will eliminate the double scans for the retailer and bring the industry serial numbering practice into strict compliance with the UCC/EAN standards.

After approval, the technical document will be posted on the FIDX website.

Description

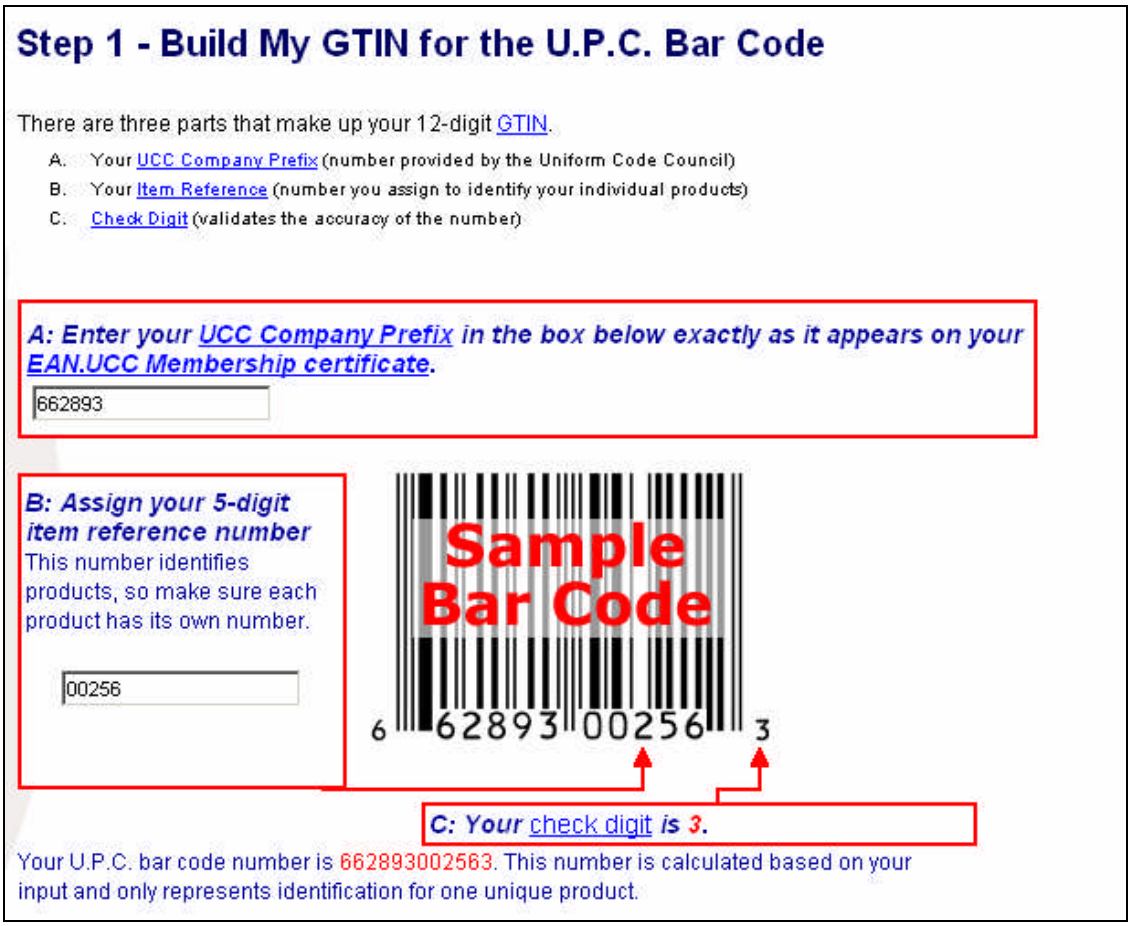
After an extensive look at industry barcodes and Uniform Code Council (UCC) barcode standards, the Information Technology division of the AHFA makes the following recommendations to manufacturers for applying barcodes to their products.

Manufacturers should apply the following two labels to the product:

1. UPC/GTIN Label which is applied to the item during the production process
2. A concatenated GTIN and Serial Number Label which is applied to the carton and to the item.

UPC Labels

What manufacturers have always referred to as a UPC code is now called a Global Trade Identification Number (GTIN). The GTIN is 14 characters long and if your UPC is a 12 digit or smaller number, these are still called GTINs. If accepting GTINs from suppliers your database structure needs to handle the 14 characters even though many still use the 8 or 12 digit format. Membership to the UCC by purchasing a manufacturer ID gives you access to the available industry standards and additional information on creating barcodes and other labels. Here is an example from the UCC website on how to build a UPC barcode.



source: http://www.uc-council.org/ean_ucc_system/membership/

Combined GTIN and Serialization Barcode

To create a unique identifier for individual objects, the GTIN should be combined with a serial number into a single code 128 barcode, which is uniquely assigned to each item for specific identification. The combination of GTIN and a unique serial number is called a Serialized GTIN (SGTIN).

The SGTIN consists of the following information elements:

The *Company Prefix*, assigned by EAN or UCC to managing entity. The Company Prefix is the same as the Company Prefix digits within an EAN.UCC GTIN decimal code.

The *Item Reference*, assigned by the managing entity to a particular object class. The Item Reference for the purposes of EPC encoding is derived from the GTIN by concatenating the Indicator Digit of the GTIN and the Item Reference digits, and treating the result as a single integer.

The *Serial Number*, assigned by the managing entity (ie..manufacturer) to an individual object. The serial number is not part of the GTIN code, but is formally a part of the SGTIN. The SGTIN-96 will allow for only a 12 character (alpha/numeric) serial number field.

The GTIN / Serial Number label for non-RFID barcodes is made up of 34 characters, the 14 digit UPC/GTIN and the 20 character Serial Number.

*****The RFID Serial Number field in the SGTIN is only 12 character numeric in format. Therefore, it is suggested that manufacturers plan for the future transition to RFID by limiting themselves to serial numbers of 12 characters or less and use only numeric characters.**

<u>Example of the GTIN and Serial Number Label</u>

1A34567B901C3456D89012E45678F01234

Code 128, 5 mil, numeric
4.5” wide

Conclusion:
As an industry, we will need to plan on providing 2 barcodes on our products. The GTIN (UPC) barcode to still be placed on the product and a 128 code barcode which contains both the GTIN and a unique product serialization number. Industry changes currently taking place suggest that in the near future, we may need to consider RFID and the SGTIN-96 barcode which is used with RFID. To plan today for the RFID conversion we should limit the size of our product serial number to 12 numeric characters.