GS1 US

North American Coupon Application Guideline Using GS1 DataBar™ (RSS) Expanded Symbols

FMI®

GMA
The Association of Food, Beverage and Consumer Products Companies

North American
Coupon Application Guideline
Using
GS1 DataBar™ (RSS) Expanded Symbols

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1 Introduction

As will be described in the next section, the current coupon system has several limitations, and the industry has decided it is time to develop a new system for the creation and processing of coupons. This guideline is intended to meet a set of requirements developed by the (Joint Industry Coupon Committee (JICC) from inputs from a 2002 industry survey.

This document presents a specification for a new coupon system for use in the United States, which will initially be rolled out in the form of paper coupons.

1.1 Purpose

Coupon Project Background

The current U.P.C. Prefix 5 coupon system dates back to 1985. Along the way, there have been significant changes in the system itself, such as the addition of the Coupon Extended Code in 1997. The system today adds up to 500 new manufacturers monthly. On the retail side, the use of scanning has increased and matured in the convenience store, chain drug, mass merchandising, and department store industries, as well as the grocery industry. With over 200 billion coupons distributed in the U.S. annually, coupon processing is a big business in itself. The use of paper coupons is growing globally.

Significantly, along with this expansion, there have been many changes in business needs, driven by technology such as Smart Cards and the Internet, and the GS1 System of standards itself.

A further stimulus is the fact that in 2005, associated with the 2005 Sunrise program, GS1 US began issuing variable-length GS1 Company Prefixes and retailers are expected to accept imported products identified with GS1 Company Prefixes. Both changes will lead to an increasing number of coupon mis-redemptions if the full Company Prefix is not processed. This will impact retailers, manufacturers, and coupon processing agents.

In February 2002, the JICC asked GS1 US to start a joint program to update the coupon system. The first step of the Coupon Re-Engineering Project was to develop a set of business requirements, which was completed in September 2002. The next step, which is now complete, was to fully engage all parties—retailers, manufacturers, processing agents, and the solution provider community—to develop a solution.

1.2 Applicability

New Coupon Solution

This solution provides a new coupon format with a larger number of fields (many of them optional) for specifying the more complex coupon offers in use today. Data encoded in the coupon bar code is used to identify the source (typically a manufacturer) producing the coupon, the conditions for fulfilling the offer and the specific save value offered to the consumer.

The current scope of this specification is limited to paper coupons containing the full offer details. Database look-up of offer information will be defined in a later phase of this project.

The new coupons will be encoded in a variable-length GS1 DataBar (RSS) Expanded bar code. The required coupon data is encoded in 25 to 36 digits. With optional data, the bar code can be as long as 70 digits. In the future, other data carriers, including RFID (Radio Frequency Identification)—that are designed to encode GS1 Application Identifiers and identification numbers—may be specified for encoding coupons.

Since the GS1 Company Prefix is a globally recognized identification number, its use in the new structure provides a path for global users to adopt this coupon system if desired. The U.P.C. Company Prefix (formerly known as the UCC Company Prefix or MIN) is converted to a GS1 Company Prefix with the addition of a leading zero. See A.1. Company Prefix Conversions for more information.

2 Data Requirements

2.1 Coupon Data Elements

The new coupon data will be encoded in a multiple-element identification number with a new Application Identifier defined within the GS1 System and a GS1 Company Prefix. In order to normalize a U.P.C. Company Prefix (formerly the UCC Company Prefix) to a GS1 Company Prefix, add a leading zero in front of the U.P.C. Company Prefix. For National Drug Code (NDC) and National Health Related Item Code (NHRIC) numbers, follow the existing rules to convert to a U.P.C. Company Prefix and then a leading zero in front of the U.P.C. Company Prefix.

The following tables list the required and optional data elements included in the new coupon.

There is additional information encoded in the coupon, not included here, which is used to explicitly describe very detailed offers that involve variable purchase requirements of one or more items and various means of specifying save values. These specific details and encoding methods are described later in this paper.

Required Fields	**Descriptions**
Application Identifier	The GS1 identification number that identifies this identification number as a coupon
Primary GS1 Company Prefix	Identification of the manufacturer or organization making this coupon offer
Offer Code	A six-digit number assigned by the manufacturer to identify this specific offer
Primary Purchase Family Code	A code assigned by the manufacturer to identify the qualifying family of products to be purchased
Primary Purchase Requirement	The quantity that the consumer must purchase to receive the specified Save Value
Save Value	The value of this coupon (“cents off,” or other value as specified)

Optional Fields	Descriptions
2nd Purchase Requirement	Second quantity that consumer must purchase to receive the value of the coupon
2nd Purchase GS1 Company Prefix	Identification of a second manufacturer, used for more complex coupon offers
2nd Purchase Family Code	Identification of a second family code
3rd Purchase Requirement	Third quantity that consumer must purchase to receive the value of the coupon
3rd Purchase GS1 Company Prefix	Identification of a third manufacturer, used for more complex coupon offers
3rd Purchase Family Code	Identification of a third family code
Serial Number	A number assigned by the manufacturer, used to identify a specific region or target consumer population
Retailer GS1 Company Prefix or GLN	Identification of a specific retailer or retailer location where this coupon is to be accepted
Start Date	The date this coupon can first be redeemed
Expiration Date	The date this coupon expires

In addition, there are optional flags used to indicate that the coupon is a store coupon, or that it should not be doubled.

The new coupon design encodes all the information found in current coupons, and much more, as shown below.

2.2 Comparison to Current Coupons

	Current Coupon Fields	GS1 DataBar Coupon Fields	
Rqd	Application Identifier	Application Identifier	Rqd
Rqd	GS1 Company Prefix positions 1-6	Primary GS1 Company Prefix	Rqd
Opt	Offer Code	Offer Code	Rqd
Rqd	Family Code	Primary Purchase Family Code	Rqd
		Primary Purchase Requirement	Rqd

	Current Coupon Fields	**GS1 DataBar Coupon Fields**	
Rqd	Value Code	Save Value	Rqd
		2nd Purchase Requirement	Opt
		2nd Purchase GS1 Company Prefix	Opt
		2nd Purchase Family Code	Opt
		3rd Purchase Requirement	Opt
		3rd Purchase GS1 Company Prefix	Opt
		3rd Purchase Family Code	Opt
Opt	Household ID	Serial Number	Opt
		Retailer GS1 Company Prefix or GLN	Opt
		Start Date	Opt
Opt	Expiration Date	Expiration Date	Opt

3 References

3.1 Normative References

The standards that follow are referenced in this guideline. The relevant provisions contained in the referenced specifications constitute provisions of this guideline.

ISO/IEC 24724 Information technology - Automatic identification and data capture techniques - Bar code symbology specification - Reduced Space Symbology

ISO/IEC 15416 Information technology - Automatic identification and data capture techniques - Bar code print quality test specification - Linear symbols

ISO/IEC 15426-1 Information technology - Automatic identification and data capture techniques - Bar code verifier conformance specification - Part 1: Linear symbols

GS1 General Specifications – Available in the Solutions Center through the GS1 US website at **www.gs1us.org/solutionscenter**

3.2 Informative References

The documents that follow are intended for informational and instructional purposes relative to these guidelines.

Appendix A: Migration Plan

Appendix B: Sample Coupons for Each Migration Phase

Appendix C: Requirements for Scanning Equipment

Appendix D: Shortcomings Addressed by the New Coupon System

Appendix E: Frequently Asked Questions

Appendix F: Implementation Advice

Appendix G: Examples

Coupon Re-engineering Survey is available at:
http://www.zoomerang.com/survey.zgi?p=WEB224JABUQYHW

4 Terms and Definitions

See the GS1 US Glossary available online at **www.gs1us.org/glossary** for information about terms and definitions used in this guideline.

5 Abbreviated Terms

AI	Application Identifier
ACP	Association of Coupon Professionals
EDI	Electronic Data Interchange
GDSN®	Global Data Synchronization Network®
GLN	Global Location Number
GSMP	Global Standards Management Process
GTIN®	Global Trade Item Number®
JICC	Joint Industry Coupon Committee
OCR-B	Optical Character Recognition font B
NACDS	National Association of Chain Drug Stores
NACS	National Association of Convenient Stores
NGA	National Grocers Association
RFID	Radio Frequency Identification
RSS	Reduced Space Symbology (GS1 DataBar)

6 Data Representation

6.1 GS1 DataBar Expanded Stacked Omnidirectional

Data shall be encoded in a GS1 DataBar Expanded Symbol.

Figure 6.1 - GS1 DataBar Expanded Stacked Omnidirectional

6.2 Data Syntax

6.2.1 Coupon Structure in Detail

This section describes the structure of the GS1 DataBar Expanded coupon in full detail. The coupon bar code is constructed by starting with a coupon Application Identifier of 8110, followed by the required and optional data elements, until all desired data is encoded (or the limit of 70 digits is reached).

The following table describes all of the required (shaded in gray) and optional data elements in detail. The coupon is constructed as a single *data record*, containing required and optional *data fields*, each of which contains *data elements*.

Data Element Description	Length		Explanation
	Min	Max	
Application Identifier	4		The AI of 8110 informs the decoding system that this Data Record is a coupon. The following Data Elements (up to Data Field 1) are required
Primary GS1 Company Prefix VLI	1		Variable Length Indicator (VLI) is a single digit that defines the length of the following element. For the GS1 Company Prefix an offset of 6 is added to the VLI to get the actual length. The value of VLI may range from 0 to 6 allowing GS1 Company Prefixes to range from 6 to 12 digits in length. VLI values 7, 8 and 9 are reserved.

Data Element Description	Length		Explanation
	Min	Max	
Primary GS1 Company Prefix	6	12	The Primary GS1 Company Prefix denotes the 6 to 12 digits that is assigned by a GS1 Member Organization. The Primary GS1 Company Prefix indicates the manufacturer that is funding this offer. During the interim this should match the company prefix identified in the UPC-A with the addition of first digit (formerly known as the NSC) of the manufacturer's GS1 Company Prefix. For example Company Prefix 012345 would be included in the UPC-A as 12345 and as 0012345 in the GS1 DataBar (RSS).
Offer Code	6		The Offer Code is a 6-digit number (assigned by the owner of the Primary GS1 Company Prefix) that identifies this offer.
Save Value VLI	1		The Variable Length Indicator specifies the length of the following element.
Save Value	1	5	The Save Value Code, as defined in Data Field 9, defines the format of the Save Value. If Data Field 9 is missing, then the Save Value format defaults to cents off.
Primary Purchase Requirement VLI	1		The Variable Length Indicator specifies the length of the following element.
Primary Purchase Requirement	1	5	The contents of the Primary Purchase Requirement can be 1 to 5 digits. The Primary Purchase Requirement Code defines the format of its contents.

Data Element Description	Length		Explanation
	Min	Max	
Primary Purchase Requirement Code	1		If the Primary Purchase Requirement Code = 0, then the Primary Purchase Requirement = the threshold number of units to purchase 1, then the Primary Purchase Requirement = the threshold cash value of the accumulative total of the qualifying purchase Items (2 decimals) 2, then the Primary Purchase Requirement = the threshold cash value of the total transaction (2 decimals) 3, then the Primary Purchase Requirement = the threshold number of pounds (2 decimals) 4, then the Primary Purchase Requirement = the threshold number of kilograms (3 decimals) 9, then cashier intervention is required
Primary Purchase Family Code	3		The Primary Purchase Family Code is assigned by the owner of the Primary GS1 Company Prefix and used for validation of the qualifying purchase items.
Data Field 1—Second Qualifying Purchase	1		A value of 1 in this position indicates the presence of Data Field 1.
Additional Purchase Rules Code	1		The Additional Purchase Rules Code specifies which items must be purchased to qualify. If this element = 0, then either the Primary Item or 2nd Item or 3rd Item can be used to validate the offer 1, then all items listed, Primary Item, 2nd Item and 3rd Item must be purchased to validate the offer 2, then both the Primary Item and either one of the 2nd or 3rd Items must be purchased to validate the offer 3, then the 2nd Family Code and 2nd Purchase GS1 Company Prefix or 3rd Family Code and 3rd Purchase GS1 Company Prefix can be used to satisfy the Primary Purchase Requirement, and the 2nd and 3rd Purchase Requirements will be ignored
2nd Purchase Requirement VLI	1		The Variable Length Indicator specifies the length of the following element.

Data Element Description	Length		Explanation
	Min	Max	
2nd Purchase Requirement	1	5	The contents of the 2nd Purchase Requirement can be 1 to 5 digits. The format of its contents are defined by the 2nd Purchase Requirement Code
2nd Purchase Requirement Code	1		If the 2nd Purchase Requirement Code = 0, then the 2nd Purchase Requirement = the threshold number of units to purchase 1, then the 2nd Purchase Requirement = the threshold cash value of the accumulative total of the qualifying purchase Items (2 decimals) 2, then the 2nd Purchase Requirement = the threshold cash value of the total transaction (2 decimals) 3, then the 2nd Purchase Requirement = the threshold number of pounds (2 decimals) 4, then the 2nd Purchase Requirement = the threshold number of kilograms (3 decimals) 9, then cashier intervention is required
2nd Purchase Family Code	3		The 2nd Purchase Family Code is used for validation of the offer as defined in the Additional Purchase Rules Code.
2nd Purchase GS1 Company Prefix VLI	1		Variable Length Indicator (VLI) is a single digit that defines the length of the following element. For the GS1 Company Prefix an offset of 6 is added to the VLI to get the actual length. The value of VLI may range from 0 to 6 allowing GS1 Company Prefixes to range from 6 to 12 digits in length. VLI values 7, 8 are reserved; VLI = 9 is used as a flag to indicate that this field defaults to the Primary GS1 Company Prefix.
2nd Purchase GS1 Company Prefix	6	12	The 2nd Purchase GS1 Company Prefix use is based upon the value of the Additional Purchase Rules Code element. This element is optional in this field. If VLI = 9, this field defaults to the Primary GS1 Company Prefix and this field is not populated
Data Field 2—Third Qualifying Purchase	1		A value of 2 in this position indicates the presence of Data Field 2.

Data Element Description	Length		Explanation
	Min	Max	
3rd Purchase Requirement VLI	1		The Variable Length Indicator specifies the length of the following element.
3rd Purchase Requirement	1	5	The contents of the 3rd Purchase Requirement can be 1 to 5 digits. Its contents are defined by the 3rd Purchase Requirement Code
3rd Purchase Requirement Code	1		If the 3rd Purchase Requirement Code = 0, then the 3rd Purchase Requirement = the threshold number of units to purchase 1, then the 3rd Purchase Requirement = the threshold cash value of the accumulative total of the qualifying purchase Items (2 decimals) 2, then the 3rd Purchase Requirement = the threshold cash value of the total transaction (2 decimals) 3, then the 3rd Purchase Requirement = the threshold number of pounds (2 decimals) 4, then the 3rd Purchase Requirement = the threshold number of kilograms (3 decimals) 9, then cashier intervention is required
3rd Purchase Family Code	3		The 3rd Purchase Family Code is used for validation of the offer as defined in the Additional Purchase Rules Code.
3rd Purchase GS1 Company Prefix VLI	1		Variable Length Indicator (VLI) is a single digit that defines the length of the following element. For the GS1 Company Prefix an offset of 6 is added to the VLI to get the actual length. The value of VLI may range from 0 to 6 allowing GS1 Company Prefixes to range from 6 to 12 digits in length. VLI values 7, 8 are reserved; VLI = 9 is used as a flag to indicate that this field defaults to the Primary GS1 Company Prefix.
3rd Purchase GS1 Company Prefix	6	12	The 3rd GS1 Company Prefix use is based upon the value of the Additional Purchase Rules Code element. This element is optional in this field. If VLI = 9, this field defaults to the Primary GS1 Company Prefix and this field is not populated.

Data Element Description	Length		Explanation
	Min	Max	
Data Field 3—Expiration Date	1		A value of 3 in this position indicates the presence of Data Field 3.
Expiration Date	6		This element contains the expiration date of the offer and must match the human readable expiration date on the coupon. It is in the format of YYMMDD
Data Field 4—Start Date	1		A value of 4 in this position indicates the presence of Data Field 4.
Start Date	6		This element contains the start date for the offer and must match the human readable start date on the coupon. It must be earlier than or equal to the expiration date and is in the format YYMMDD
Data Field 5—Serial Number	1		A value of 5 in this position indicates the presence of Data Field 5.
Serial Number VLI	1		The Variable Length Indicator specifies the length of the following element. For the Serial Number an offset of 6 is added to the VLI to get the actual length.
Serial Number	6	15	The Serial Number is a 6 to 15 digit field that can be used to identify any region, group or individual household selected by the owner of the Primary GS1 Company Prefix.
Data Field 6—Retailer Identification	1		A value of 6 in this position indicates the presence of Data Field 6.
Retailer GS1 Company Prefix or GLN VLI	1		The Variable Length Indicator specifies the length of the following element. For the GS1 Company Prefix an offset of 6 is added to the VLI to get the actual length.
Retailer GS1 Company Prefix or GLN	7	13	This data element is the GS1 Company Prefix assigned to a retailer by a GS1 Member Organization, or the entire GLN for a location.
Data Field 9—Miscellaneous Elements	1		A value of 9 in this position indicates the presence of Date Field 9. All or none of Data Field 9 elements should be used. For example: If the store coupon flag is used then all fields listed in Data Field 9 should be included in the bar code.

Data Element Description	Length		Explanation
	Min	Max	
Save Value Code	1		If Save Value Code = 0, then Save Value = cents off qualifying purchase items (default if Data Field 9 is missing) 1, then if Save Value = 0 one qualifying purchase item unit is free, or if Save Value > 0 the one qualifying purchase item unit is free up to maximum amount in Save Value 2, then Save Value = the number of qualifying purchase item units that are free 5, then Save Value = percent off qualifying purchase item 6, then Save Value = cents off final transaction amount (may exceed qualifying item price) For values 1 and 2, the “unit” of the free item (quantity, dollar threshold, pounds, or kilograms) is adopted from the Save Value Applies to Which Item assignment.
Save Value Applies to Which Item	1		This data element only applies when multiple purchase requirements are present (Additional Purchase Rules Codes 1 or 2) and indicates which qualifying item the savings applies: 0, is the Primary Qualifying Item (default if Data Field 9 is missing) 1, is the 2nd Qualifying Item 2, is the 3rd Qualifying Item

Data Element Description	Length		Explanation
	Min	Max	
Store Coupon Flag	1		If > 0 flags this offer as a Store Coupon 0, not a store coupon (default if Data Field 9 is missing) 1, applies to only one qualifying item 2, applies to up to 2 qualifying items 3, applies to up to 3 qualifying items 4, applies to up to 4 qualifying items 5, applies to up to 5 qualifying items 6, applies to up to 6 qualifying items 7, applies to up to 7 qualifying items 8, applies to up to 8 qualifying items 9, applies to all qualifying items in transaction
Don't Multiply Flag	1		If = 1 then this offer must not be multiplied (default is 0 if Data Field 9 is missing)

6.3 Symbol Metrics

The nominal X-dimension for this application shall be 0.0130 inch (0.33 mm). If a specific application requires, the X-dimension may be as small as 0.0100 inch. (0.254 mm) or as large as 0.013 in. (0.33 mm).

The nominal symbol height, as well as the minimum symbol height, may provide a square aspect ratio for each symbol segment. The symbol may be stacked in two to eleven rows. Each row shall be 34X high, and the separator pattern shall be 3X (minimum) high.

	X-Dimension			
GS1 DataBar Symbol	**Minimum**	**Nominal**	**Maximum**	**Quiet Zone**
GS1 DataBar Expanded	**0.0100 inch (0.254 mm)**	**0.013 inch (0.330 mm)**	**0.013 inch (0.330 mm)**	**N. A.**

Figure 6.2 - Symbol X-Dimension

		Symbol Height	
X-Dimension			
		Nominal 34X per row	**Separator Pattern 3X minimum**
Minimum	**0.0100 inch (0.254 mm**	**0.340 inch (8.64 mm)**	**0.030 inch (0.76 mm)**
Nominal	**0.013 inch (0.33 mm)**	**0.442 inch (11.23 mm)**	**0.039 inch (0.99 mm)**
Maximum	**0.013 inch (0.33 mm)**	**0.442 inch (11.23 mm)**	**0.039 inch (0.99 mm)**

Figure 6.3 - Symbol Height

6.4 Human Readable Interpretation

The only human readable digits shown from the GS1 DataBar bar code will be the GS1 Company Prefix and Offer Code separated by a dash. This will allow processors to properly handle a coupon with a bar code that will not scan. Retailers will need to manually verify the product purchase requirements and key enter the coupon value into their point-of-sale (POS) system in the event of a non-scanable bar code.

A clearly legible font shall be used for the human readable digits, and OCR-B as defined in ISO 1073-2 is recommended. This font is referenced only as a convenient standard typeface, and it is not intended that these digits be machine read or verified. Reasonable alternative type fonts and number sizes are acceptable provided the interpretation is clearly legible.

7 Print Quality

The minimum print quality grade for printed symbols shall be a 2.5/06/660 overall symbol grade when measured in accordance with ISO/IEC 15416. The measurement of the quality parameters shall be made by a verifier conforming to ISO/IEC 15426-1 using a 0.006 in. (0.15 mm) aperture at a nominal illumination wavelength of 660 nanometers.

GS1 DataBar Symbol	Minimum ISO Symbol Grade	Aperture	Wavelength (nanometers)
GS1 DataBar Expanded	**2.5**	**0.006 inch (0.15 mm)**	**660 ± 10**

Figure 7.1 – Symbol Quality Requirements

Appendix A: Migration Plan (Informative)

The new coupon system is a major change from today's system, and it will be a challenge to migrate all industry participants to the new system in an orderly manner. A key requirement of the migration plan is that there are no points in time where a group of participants must all change simultaneously. Each change must be allowed to occur over a period of time. To enable this orderly migration, a multi-phased implementation is recommended. All impacted trading partners must develop the specified capability and bring it online within the "start after" and "complete before" date ranges specified for each step.

The first major change is to replace the GS1-128 Coupon Extended Code with the new GS1 DataBar Expanded coupon, creating an interim coupon standard in which the UPC-A and GS1 DataBar Expanded bar codes are both printed on coupons. Before this change, however, coupon processors must update their systems to read and process the GS1 DataBar Expanded bar codes, and retailers must stop reading the GS1-128 bar codes (Few read them today.). Then after manufacturers start printing coupons with the new GS1 DataBar Expanded and the current GS1 bar codes, a period of transition follows when retailers update their systems to read the new GS1 DataBar Expanded coupon, removing the need for the original UPC-A base code. During this period processors will receive and process both current and interim style coupons. And finally, when all industry participants have updated their systems, the UPC-A bar code is retired, leaving only the GS1 DataBar Expanded bar code on printed coupons. Once the UPC-A is retired, the industry will need to determine a date when the U.P.C. Prefix "5" is to revert back to GS1 US for reserve status.

Company Prefix Conversion

US Company Identification Equivalents			Bar Code Implementations			
U.P.C. Company Prefix, *or* **UCC Company Prefix,** *or* **MIN** (Issued before 2005)	**GS1 Company Prefix** (Issued since 2005)	**NDC/ NHRIC Labeler Code** (Issued by FDA)	**Package U.P.C.** 	**UPC-A/EAN-128 Coupon** *(Format 1 shown)* 	**GS1 DataBar Coupon**[1] 	
					GS1 Company Prefix VLI	*GS1 Company Prefix*
014141	**0014141**	N/A	**0 14141** iiiii c	5 **14141** fffvv c (8100) **0** ooooo	1	**0014141**
612345	**0612345**	N/A	**6 12345** iiiii c	5 **12345** fffvv c (8100) **6** ooooo	1	**0612345**
30001	**030001**	**0001**	**3 0001** iiiiii c	5 0**0001** fffvv c (8100) **3** ooooo	0	**030001**
38001	**038001**	**8001**	**3 8001** iiiiii c	5 0**8001** fffvv c (8100) **3** ooooo	0	**038001**
310001	**0310001**	**10001**	**3 10001** iiiii c	5 **10001** fffvv c (8100) **3** ooooo	1	**0310001**
80412300	**080412300**	N/A	**8 0412300** iii c	Not supported.	3	**080412300**

REFERENCES:

i = manufacturer-assigned item number

f = manufacturer-assigned family code

v = two-digit Value Code

c = calculated Check Digit

o = manufacturer-assigned offer code

NDC/NHRIC codes beginning 0 and 8 are four digits. Those beginning 1-7 or 9 are 5 digits.

Note that a company using 4-digit NDC/NHRIC codes use 6 digit item numbers on packaging (not 5).

[1] GS1 Company Prefix is found in four instances in the specification: Primary Purchase, Second Purchase, Third Purchase and Retailer Identification. The VLI is a single digit that defines the length of the following element. For the GS1 Company Prefix an offset of 6 is added to the VLI to get the actual length. The value of VLI may range from 0 to 6 allowing GS1 Company Prefixes to range from 6 to 12 digits in length. VLI values 7, 8 and 9 are reserved.

It is imperative that Manufacturers (or the organizations creating coupons) encode their GS1 Company Prefix in the GS1 DataBar coupon and not their U.P.C. or UCC Company Prefix (see table above). The POS coupon validation of the GS1 Company Prefix will perform item validation using a logical compare process (left to right) for the number of digits represented and contained in the Company Prefix attribute(s) from the coupon. In this logical comparison leading zeros are significant unlike a numeric compare process where leading zeros are not meaningful to the compare outcome. Consequently it is important that the Company Prefix(es) encoded in the GS1 DataBar coupon are properly formed to ensure this compare process is performed accurately.

If you are uncertain as to your GS1 Company Prefix, please contact your GS1 Member organization.

The following is a technical description of the POS Company Prefix compare process. Given the Global Trade Item Number is 13 digits in length excluding the indicator digit and including the Check Digit, the coupon Company Prefix compare against the GTIN/EAN/UPC product code needs to begin starting with the first digit (left most position) of each operand and proceed for the number of digits contained in the coupon Company Prefix. Since U.P.C. format bar codes are 12 digits in length inclusive of the Check Digit, the POS / scanner application will insert a leading zero to create the 13-digit number to enable a consistent and accurate compare across all formats. Hence, the GS1 Company Prefix needs to be aligned in the same manner which then requires the leading zero be added to the U.P.C. Company Prefix. (If the check digit is not used by the POS application, then the lengths above will be reduced by a value of one; e.g. 13 becomes 12 and 12 becomes 11).

Impact on Industry Players

Manufacturers: The Manufacturers (or the organizations creating coupons) lead the way, at least on the timeline, because they must start printing the new GS1 DataBar Expanded bar codes in place of the GS1-128 bar codes. To ease the transition for retailers, the Manufacturers continue printing the base UPC-A bar code until the end of the transition.

Retailers: Assuming that retailers are currently not reading and processing the GS1-128 Coupon Extended Code, they can take their time in changing. If they want to benefit from the improvements enabled by the new system, early adopters may move sooner to add the ability to read and process GS1 DataBar Expanded bar codes. But since the old UPC-A bar code will remain on coupons for a while; they have until the end of the transition period (step 7) to accomplish this change.

Eight detailed steps for this transition are described later. The migration can be summarized by the following key “Sunrise/Sunset” dates (which may be modified after input from industry participants).

Date	Description
01/07	Step 0: New coupon system standards are in place.
06/08	Step 4: GS1 DataBar Expanded completely replaces GS1-128.
6/10	Step 7: The original UPC-A bar code is fully retired.

Detailed Transition Steps

In the following table, assume that all trading partners continue printing, reading, and processing both the UPC-A and GS1-128 components of the current coupon system until specified to stop. The dates recommended in the following table can be adjusted to meet industry needs, but the chronological relationships should not be changed. See the notes below for explanations of the relationships between dates.

Step	Impacts	Description	Start After	Complete Before
0	JICC/GS1 US	Complete standards for new coupon system for the United States	02/05	01/07
1	Processor	Start capability of reading and processing GS1 DataBar Expanded coupon labels	01/07 (1)	01/08 (2)
2	Retailer	Stop depending on data from GS1-128 Coupon Extended Codes	01/07 (1)	01/08 (2)
3	Retailer	Start capability of reading and processing GS1 DataBar Expanded coupon labels	01/07 (1)	01/10 (3)
4	Manufacturer	Stop printing GS1-128 on coupons Start printing GS1 DataBar Expanded on coupons	01/08 (2)	06/08
5	Retailer/Processor	Stop reading and processing GS1-128 Coupon Extended Codes	01/09 (4)	Open
6	Retailer/Processor	Stop depending on information in UPC-A base coupon labels	01/09	01/10 (5)
7	Manufacturer	Stop printing UPC-A labels on coupons	01/10	06/10

Notes:

1. Once the new standard is in place (step 0), all industry players can start development and deployment of new systems.

2. Processors must be able to process GS1 DataBar Expanded coupons, and retailers must stop utilizing GS1-128 Coupon Extended Codes before manufacturers start the switch to printing GS1 DataBar Expanded instead of GS1-128 (step 4).
3. Retailers do not require capability to read GS1 DataBar Expanded labels until manufacturers stop printing UPC-A labels (step 7).
4. Some time after step 4 is complete; there will no longer be a need to process GS1-128 Extended Codes.
5. Retailers and processors must stop using the information in the UPC-A bar code before manufacturers stop printing them (step 7), although they can continue reading older coupons passing through the system.

Interim Coupon Usage

Some of the more powerful capabilities of the new coupon system to describe offers cannot be fully utilized by all participants, particularly retailers, until the old UPC-A base labels are fully retired (in step 7). However, it is recommended manufacturers and processors utilize the additional GS1 DataBar Expanded attributes as long as the Save Value Types and Amounts are constrained to what can be represented in the existing UPC-A Value Code Table.

This approach will allow manufacturers and processors to develop a single phase training, development, and implementation plan that will encompass all desired capabilities of the new coupon specification while retailers are still providing the consumer value based on the UPC-A coupon bar code. Using this “soft opening” approach should reduce the overall risk and cost to all participants as experience with GS1 DataBar Expanded coupon can be gained in the back end processing steps and therefore minimize the impact of learning curve issues on consumers and retailers.

The following table identifies the features of the GS1 DataBar Expanded coupons that can be utilized during the interim phase of this conversion. Limitations on usage as noted will ensure offers that are compatible with those describable in the current UPC-A coupon bar code, and will not produce offer values that are different between the point-of-sale and the coupon processors.

New Coupon Fields	**Allowed Interim Usage**
Application Identifier	The AI of 8110 informs the decoding system that this Data Record is a coupon. The following Data Elements (up to Data Field 1) are required.
Primary GS1 Company Prefix	The full 6 to 12 digit GS1 Company Prefix must be encoded. Note, however, that only digits 2 through 6 of current GS1 Company Prefix are encoded in the UPC-A label. Careful coordination between Manufacturers and GS1 US will continue — to minimize GS1 Company Prefix conflicts during the interim phase.
Offer Code	Offer Codes can be used as desired by manufacturers, assuming they continue to coordinate their intentions with processors.

New Coupon Fields	Allowed Interim Usage
Save Value	The Save Value must be limited to the equivalent values represented in the 100 Value Codes specified for current coupons.
Primary Purchase Requirement	This field is used to specify purchase quantity requirements. It is not limited to the quantity in the 100 Value Code table however it must match the wording on the coupon. For example – Buy 6 cans and get $1.00 off would be Value Code 13 in the UPC-A. The primary purchase requirement in the interim GS1 DataBar would be 6.
Primary Purchase Family Code	The Family Code should be used as before, except if the 992 Family Code is used on the accompanying UPC-A label, a product-specific Family Code can be used in the GS1 DataBar.
2nd Purchase Requirement	This field may be used.
2nd Purchase Family Code	This field may be used.
2nd Purchase GS1 Company Prefix	This field may be used.
3rd Purchase Requirement	This field may be used.
3rd Purchase Family Code	This field may be used.
3rd Purchase GS1 Company Prefix	This field may be used.
Expiration Date	This field may be used.
Start Date	This field may be used.
Serial Number	This field may be used to encode the Household ID found in current coupons.
Retailer GS1 Company Prefix or GLN	This field may be used.
Data Field 9— Miscellaneous Elements	All or none of Data Field 9 elements should be used. For example: If the store coupon flag is used then all fields listed in Data Filed 9 should be included in the bar code

Note: This table specifies the limitations of usage of the new GS1 DataBar Expanded coupon fields — given the requirement to create offers that are also encodable in the current UPC-A

coupon. Any of the coupon fields described here as “may be used” could be encoded in the GS1 DataBar which will fully encode the GS1 DataBar during the interim phase, but remember to follow UPC-A guidelines and rules on the Value Code.

Appendix B: Sample Coupons for Each Migration Phase (Informative)

Current Standard:

(Step 0; see Appendix D): The current coupons contain an UPC-A code and a required GS1-128 Coupon Extended Code, as shown:

MANUFACTURER COUPON | EXPIRES 12-31-08

Save 90¢

on any 16 oz. Jemay dish soap

Mountain Fresh
Sunny Lemon
Grease Cutting

CONSUMER: This coupon good only on purchase of product indicated. Any other use constitutes fraud. Limit one coupon per purchase.
RETAILER: Jemay, Inc. will reimburse you for the value of this coupon plus 8¢ if submitted in compliance with Jemay, Inc. Coupon Redemption Policy. This coupon is good only when redeemed by you from the consumer at the time of purchasing product indicated. Any other use constitutes fraud. Coupon is void if reproduced or if prohibited, taxed or restricted by law. Good only in the Continental USA, Alaska, Hawaii and Puerto Rico. Cash value 1/20 of 1¢.
Mail to Jemay Inc., 100 Main Street, City, ST, 00000.

Interim Standard:

(Step 4; see Appendix D): The GS1-128 code is replaced with a required GS1 DataBar Expanded bar code, as shown:

MANUFACTURER COUPON | EXPIRES 12-31-08

Save 90¢

on any 16 oz. Jemay dish soap

Mountain Fresh
Sunny Lemon
Grease Cutting

CONSUMER: This coupon good only on purchase of product indicated. Any other use constitutes fraud. Limit one coupon per purchase.
RETAILER: Jemay, Inc. will reimburse you for the value of this coupon plus 8¢ if submitted in compliance with Jemay, Inc. Coupon Redemption Policy. This coupon is good only when redeemed by you from the consumer at the time of purchasing product indicated. Any other use constitutes fraud. Coupon is void if reproduced or if prohibited, taxed or restricted by law. Good only in the Continental USA, Alaska, Hawaii and Puerto Rico. Cash value 1/20 of 1¢.
Mail to Jemay Inc., 100 Main Street, City, ST, 00000.

Final Standard:

(Step 7; see Appendix D): The UPC-A symbol is eliminated, leaving only the GS1 DataBar Expanded bar code, as shown:

MANUFACTURER COUPON	EXPIRES 12-31-08

Save 90¢

on any 16 oz. Jemay dish soap

Mountain Fresh
Sunny Lemon
Grease Cutting

CONSUMER: This coupon good only on purchase of product indicated. Any other use constitutes fraud. Limit one coupon per purchase.
RETAILER: Jemay, Inc. will reimburse you for the value of this coupon plus 8¢ if submitted in compliance with Jemay, Inc. Coupon Redemption Policy. This coupon is good only when redeemed by you from the consumer at the time of purchasing product indicated. Any other use constitutes fraud. Coupon is void if reproduced or if prohibited, taxed or restricted by law. Good only in the Continental USA, Alaska, Hawaii and Puerto Rico. Cash value 1/20 of 1¢.
Mail to Jemay Inc., 100 Main Street, City, ST, 00000.

0014141-012345

Appendix C: Requirements for Scanning Equipment (Informative)

The new GS1 DataBar Expanded coupon labels will be rolled into production in several phases, as described earlier. In each phase printed coupons will contain one or two bar codes, and retailers and coupon processors will require the capability of reading one or both of the bar codes on the coupon. It is critical that bar code scanning equipment be capable of selectively reading the bar code(s) required during each phase of this transition.

As shown earlier, during the transition, coupons will exist that contain:

- Current Application Standard: A UPC-A bar code and a GS1-128 bar code
- Interim Application Standard: A UPC-A bar code and an GS1 DataBar Expanded bar code
- Final Application Standard: Only an GS1 DataBar Expanded bar code

All three standards may be present in the scanning environment at any time, and there are several coupon-reading scenarios that must be supported. Retailers and coupon processors will need to configure their systems in one or more of the following ways.

1. Current Application Standard: Read UPC-A only. This is the current mode for most retailers.
2. Current Application Standard: Read UPC-A and GS1-128. This is the current mode for most coupon processors.
3. Interim Application Standard: Read UPC-A only. This is the expected mode for retailers until they update their software and systems. If retailers have activated GS1 DataBar for scanning produce or other perishable products and are not ready to scan and process GS1 DataBar coupons, they will need to ensure their scanner can be configured to selectively process specific Application Identifiers (AI).
4. Interim Application Standard: Read GS1 DataBar Expanded only. This is the expected mode for coupon processors, who will have to update their systems sooner. And retailers will move to this option after their systems are upgraded to process GS1 DataBar coupons (AI 8110).
5. Final Application Standard: Read GS1 DataBar Expanded. This is the target final mode for both retailers and processors.

The phased changes to the coupon system imply the following specific requirements for bar code scanning equipment.

Decoding requirements:

1. Decode UPC-A.
2. Decode GS1 DataBar Expanded labels.
3. Decode specific GS1 DataBar Application Identifiers in the event GS1 DataBar need to be enabled prior to the having the ability to process the GS1 DataBar Expanded Stacked coupon.
4. Decode GS1 DataBar Expanded Stacked labels up to the full length of 70 digits.
5. Decode GS1-128 labels.
6. Ability to auto-discriminate UPC-A, GS1 DataBar Expanded, and GS1-128 labels.

7. Ability to read (with good performance) full length GS1 DataBar Expanded labels printed with 10 mil features.

Delivery requirements (when multiple bar codes are in the scan volume):

- Current Application Standard: Deliver both UPC-A and GS1-128 components
- Current Application Standard: Detect and deliver UPC-A only (ignore GS1-128)
- Interim Application Standard: Detect and deliver UPC-A only (ignore GS1 DataBar Expanded)
- Interim Application Standard: Detect and deliver GS1 DataBar Expanded only (ignore UPC-A)
- Final Application Standard: Deliver GS1 DataBar Expanded
- Scanner is configurable to reliably detect and deliver labels as required by one or more of these options including the ability to selectively detect specific Application Identifiers (AI's) if required.

Appendix D: Shortcomings Addressed by the New Coupon System (Informative)

The following shortcomings of the current coupon system have been addressed by the new system.

- GS1 Company Prefixes: The ability to encode the entire GS1 Company Prefix fully meets the requirements for 2005 Sunrise and for global identification of the issuers of coupons.
- Value Codes: Coupon values in any amount up to $999.99 are now possible, not limited to a table of 100 possibilities.
- Offer Descriptions: The new system permits precise descriptions and validation of offers involving specified quantities of one, two, or three purchased items to qualify for the Save Value amount.
- Fraud: Comprehensive definition of Save Values and purchase requirements could deter creation of new offers, and it enables rigorous checking at the time of redemption. Serialization can be used to detect coupon copying.
- Auditing: The Offer Code and purchase requirement information allows validation at the POS T-Log that purchase requirements were met.
- Sales Analysis: The explicit definition of purchase requirements enables POS software to collect accurate information about sales driven by the redemption of coupons.

Benefits of Changing

This new coupon system will require significant investment in change by all trading partners. To motivate the change, a strong business case will be required. Following are some of the key benefits from which the case can be made.

For Retailers

1. Automatic Expiration Date checking.
2. Reduction of 992 bypass validation codes.
3. Double coupon value limit software will work better due to exact purchase requirements.
4. Store (retailer) coupon support – may eliminate some database management requirements.
5. Electronic delivery of manufacturer coupons possible.
6. If the POS software allows, database lookup to correct printing errors. Unique key using Offer Code.
7. Meets variable-length GS1 Company Prefix requirements.
8. Allows prevention of acceptance of coupons only good at a specific retailer.
9. Software may allow acceptance of coupons good at competitors and change to a retailer coupon instead of manufacturer.

For Manufacturers

1. Offer capture done at POS could increase data about the transaction.
2. Reduces problems with simple coupons due to value table elimination – save amounts range from 1 cent to $999.99.
3. Increases capability for more complex offers.
4. Smoothes over issues during transition periods after an acquisition.
5. Allows for date checking at POS to reduce early or late coupon redemption.
6. Can enforce “free up to maximum value” offers.
7. Can require dollar purchase threshold.
8. Can enforce coupon only good at a specific retailer.
9. Better “item movement to purchase requirement” tracking.
10. Improved audit capability for large and small stores due to accuracy of T-Log and related reporting possibilities.

For Coupon Processors:

1. Can offer improved services by:
    a. Recognizing incorrect retailer ID’s.
    b. Accurate Manufacturer GS1 Company Prefixes.
    c. Improved audit capability for large and small stores due to accuracy of T-Log and related reporting possibilities.
2. Single GS1 DataBar Expanded bar code will improve scan rates.
3. Allows for variable length manufacturers GS1 Company Prefixes.

Appendix E: Frequently Asked Questions (Informative)

(JICC, ACP, and Industry Questions and Concerns)

Introduction

This document is designed to address industry questions concerning the Coupon Re-engineering initiative and the use of GS1 DataBar Expanded Stacked as a solution. While the questions and comments are coupon oriented; some of the responses include a wider view of the acceptance and implementation of GS1 DataBar Symbology across several product categories and retailer departments. This is due to the fact that the ROI for GS1 DataBar is dependent not on just its use with coupons but its use in multiple applications i.e. produces, meat, poultry, seafood, the deli, etc. This broader view of GS1 DataBar is needed in order to justify its acceptance and use in addressing various business issues and needs.

New GS1 DataBar information and developments have become available since some of these questions were originally drafted; when appropriate the response / comments incorporate the new information. An example of this new information is retailers' recognition that GS1 DataBar can provide a transition path to Electronic Product Code™ (EPC) applications and data management. While difficult to quantify this cost benefit, retailers realize as they design and build GS1 DataBar applications they will also support EPC-based applications in the future.

Cost and Return on Investment

What are the estimated costs associated with moving to the coupon GS1 Databar bar code, following the proposed two-phase approach, for:

Retailers (hardware / software upgrades / replacements)

- There are many variables depending upon the age and version of the hardware and / or software as well as the maintenance / support agreement the retailer has with its suppliers. Some retailer / supplier agreements include GS1 DataBar upgrades under the normal maintenance terms; in other cases the upgrade maybe a simple activation of the GS1 DataBar functionality already embedded in the equipment. With very old equipment a complete replacement maybe required. In summary, the cost will vary from installation to installation and will need to be determined in each case.
- Recent research reports that the costs to upgrade slot scanners for GS1 DataBar capability range from $100 to $250 for each lane and labor costs can add approximately $10 per lane for training/activation. There are additional costs to develop the logic for GS1 DataBar applications as well as the required Host-to-Store File support**.**

Manufacturers (software / services needed to create GS1 DataBar bar codes)

- There are several factors that determine the cost impact. For manufacturers who create bar codes internally, they will need to ensure their software supports the creation of the desired GS1 DataBar bar codes. There may be costs associated with making the necessary software changes. For those manufacturers who rely on an outside service to produce bar codes, they will need to ensure their suppliers can support the GS1 DataBar bar codes.

- Many outside suppliers are equipped and prepared to print GS1 DataBar symbols and others continue to upgrade their capabilities.

Processors (hardware / software upgrades / replacements),

- There are many variables depending upon the age and version of the hardware and / or software as well as the maintenance / support agreement the processor has with its suppliers. Some include upgrades under the normal maintenance terms; in other cases the upgrade maybe a simple activation of the GS1 DataBar functionality already embedded. With very old equipment a complete replacement maybe required. In summary, the cost will vary from installation to installation and will need to be determined in each case.

Printers (upgrading equipment / hardware / software to create / print GS1 DataBar bar codes),

- Depending upon the age and version of the printing hardware and / or software as well as the maintenance / support agreement the customer has with its suppliers the costs for GS1 DataBar support could vary widely. Many printers are equipped and prepared to print GS1 DataBar symbols and more are preparing to support the anticipated needs in other industries.

Third Parties (upgrading equipment / hardware / software to create, print, scan and/or decode GS1 DataBar bar codes)

- Some Third Parties are equipped, ready, and are supporting printing GS1 DataBar for other industries. As the GS1 DataBar market grows, additional Third Parties will recognize and address the business opportunities offered by GS1 DataBar; these include current and new suppliers to the market.

Has there been an ROI analysis of the impact on retailers, manufacturers, processors, etc? If not, can one be performed?

Nearly every interested party noted cost / ROI as a critical factor. From the hardware standpoint, most affected parties (retailers, processors, third-parties) voiced concern about the quantity of upgrades/replacements required – hundreds of thousands of potential lanes / units affected. Without reasonably accurate cost estimates, participants have been unable to evaluate and/or justify implementation – preventing any further progress. Overwhelmingly, the consensus is that retailers may have little motivation, and in fact, financial disincentives, for upgrading to read GS1 DataBar coupons (re-programming to read / decode coupons – beyond the scope of simply scanning GS1 DataBar). If not implemented by retailers, all other effort is moot. Many cite the failure of the GS1-128 usage.

- As a standalone business case “GS1 DataBar for Coupons” is difficult to support but GS1 DataBar for coupons combined with other GS1 DataBar applications yields a very different result and response from retailers. GS1 DataBar implementations will start with applications other than coupons; as hardware and software are upgraded to support these initiatives GS1 DataBar for coupons will benefit.
- Reference Business Case For Reduced Space Symbology® (RSS®) on Coupons: **www.gs1us.org/coupons**

Bar code Creation/Scanning

What vendors are presently producing scanners

that read the GS1 DataBar Expanded Stacked coupon?

- Reading the bar code symbology and processing or decoding the symbology are different steps in scanning a bar code. Known vendors with equipment capable of reading GS1 Databar Expanded Stacked bar codes (coupons and other) include NCR, PSC, Hand Held Products, and Symbol Technologies. See the question about "What vendors are presently working on front-end processing" below for information on processing the GS1 Databar Expanded Stacked coupon bar code.

that read the UPC-A/GS1 DataBar interim combination?

- Scanners are able to detect and discriminate multiple bar codes in one read pass. Some scanner firmware can be configured to activate GS1 DataBar read capability and for specific application identifiers (AI). Between the scanner hardware / firmware and the processing system, users can configure their environment to read just GS1 DataBar, read just the UPC-A, or read selective GS1 DataBar based on AI's. However, given the age and variety of installed scanners, it is recommended users check with their scanning suppliers to confirm capabilities and status of GS1 DataBar enablement

What vendors are presently producing software

that creates the GS1 DataBar Expanded Stacked coupon?

- Due to the different suppliers and generations of software it is advised that firms check with their individual suppliers. Many firms have acquired the encoding and decoding software for GS1 DataBar to produce stacked GS1 DataBar codes for other uses; however until the formal specifications are approved for coupons, vendors should not be expected to have software to create GS1 DataBar Expanded Stacked bar codes for coupons; check with your software provider regarding their status.

that creates the UPC-A/GS1 DataBar interim combination?

- Check with your software supplier. As stated above this software is dependent on the approved formal specifications.

What vendors are presently working on front-end processing

that decodes the GS1 DataBar Expanded Stacked coupon?

- Known POS suppliers include NCR, IBM and Retalix. As previously stated, until the formal specifications are approved vendors should not be expected to offer software for front-end processing.

that decodes the UPC-A/GS1 DataBar interim combination?

- It is recommended you check with your equipment and software supplier. As stated above software for front-end processing is dependent on the approved formal specifications.

Is there any software available that generates an GS1 DataBar bar code directly from the GS1 US "code builder" Excel spreadsheet?

No, not today. The JICC supports the creation of such capability for the industry once the GS1 DataBar coupon specifications have been finalized and approved. Access to this utility will need to be controlled and secured to ensure appropriate usage.

How will GS1 DataBar bar codes be printed on thermal printers?

GS1 DataBar shares the same capability as the UPC-A family of symbols; performance will depend on the printer.

What is the accuracy rate of scanners that presently have GS1 DataBar capabilities?

The accuracy rate is very high and reliable; no misreads have been encountered. The GS1 DataBar Symbology has stronger error detection capability than the older UPC-A family of symbols.

How will users (retailers, processors, manufacturers, printers) test bar codes, both for readability and content? How will they determine the source of the problem (bar code, printing, content, scanner)?

It is recommended you check with your verifier supplier for GS1 DataBar enablement. The process is expected to be no different than performed today in the current environment.

What are the exact dimensions of the code?

Minimum and maximum?

- 10 mil to13 mil feature size is recommended, which is the same as the UPC-A symbol. The length of the GS1 DataBar Expanded Stacked coupon bar code is dependent on the number of optional fields used in the bar code.

Does the size vary depending on the number of data elements used?

- Yes, see examples provided below (UPC-A format, GS1 DataBar format of the same, and expanded format)

UPC-A Format

GS1 DataBar Expanded Format (same data as UPC-A above)

GS1 DataBar Expanded Format

How will cashiers handle unreadable bar codes, as there will be no human-readable component (except GS1 Company Prefix and Offer)? Presently, the human-readable number is manually entered.

The process to handle unreadable coupons by retailers will be their business decision as enabled and supported by their POS solutions. Several approaches are available: 1) the cashier can key enter the face value of the coupon and select the appropriate coupon key on the POS system or, 2) the cashier can key enter the GS1 Company Prefix code (that can verify a GS1 Company Prefix match with the products in the customer's order) and key enter the face value of the coupon.

During the interim period, when UPC-A and GS1 DataBar appear, which will have precedence (in the event that an error has resulted in conflicting data)?

For processors who are GS1 DataBar enabled, the recommendation is to use only the GS1 DataBar bar code. If there is a discrepancy between the face value and the GS1 DataBar coded value, the current process that handles this kind of conflict should be utilized as is presently done with the UPC-A format.

For retailers, the recommendation will depend on the level of GS1 DataBar enablement present in the retailer's scanner hardware and POS systems during the interim period. The POS system should only receive and process one bar code from an individual coupon. For those retailers that are prepared with both hardware and POS software to handle the GS1 DataBar coded coupons, the GS1 DataBar format is recommended, as the processors will likely be handling the same format. Otherwise retailers will continue their current practices and use the UPC-A code. Discrepancies between the readable coupon values and bar coded values need to be handled as before with the UPC-A format. In the event that a retailer has activated GS1 DataBar scanning as part of a pilot or early adoption of GS1 DataBar for item registration and is not prepared to process GS1 DataBar coupons, selective GS1 DataBar reading by application identifier will need to be supported by the scanner firmware. Please confirm the desired capability with your scanner supplier.

Coupons carry both UPC-A and GS1 DataBar Expanded symbols; GS1-128 is dropped. Will the scanner pick up both bar codes? Will the scanner or system choose the coupon code that is "valid"?

Retail users will consider both bar codes "valid", and the decision that will be processed will be based on system readiness. Scanners will need to continue to discriminate and read UPC-A and GS1 DataBar format bar codes individually and together when both are present on one coupon. The business rules to discern what bar code to use will be set by the scanner configuration in conjunction with the software capability of the processing or POS solution in concert with the user. Please see the previous question for additional explanation on this topic.

Some retailers are participating in industry testing of GS1 DataBar bar codes for produce and other perishable products. If they are not prepared to process the new GS1 DataBar coupon structure, how do they prevent their scanners and POS application from attempting to process the GS1 DataBar bar code that will start appearing on coupons staring during the interim phase?

Retailers will need to confirm with their scanner manufacturer and their POS application provider that the capability to activate GS1 DataBar read capability for specific Application Identifiers (AI) is available. The GS1 DataBar coupon has a unique AI that is different than the AI used for product registration.

Offer Coding

Many producers voiced concern regarding the complexity of the coding.

How will each of the four 992 scenarios be addressed using the new coding?

Mergers / Acquisitions – offers for items with more than one GS1 Company Prefix).

GS1 DataBar can accommodate up to two additional GS1 Company Prefixes. However the usage of the additional GS1 Company Prefixes is also dependent on the terms of the merger / acquisition and the agreed upon use of the company prefixes. The owner of the primary GS1 Company Prefix is the organization that will be responsible for the coupon liability. Please keep in mind that this capability cannot be fully utilized to remove the 992 coding until the 2010 Sunrise when retailers are able to scan and process the GS1 DataBar bar codes.

Since the coupon specification is designed to handle a maximum of three GS1 Company Prefixes, coupon producers with requirements in excess of this number will need to consider an alternative approach to address this constraint.

Random Weight?

The GS1 DataBar coupon bar code will not address current issues with random weight items. Coupons valid on random weight items cannot be validated to the product at the POS. The product labeling of the random weight item causes this issue. Until the product

bar code is re-designed to contain the company prefix, coupon coding alone cannot solve the problem. The family code of 992 will continue to be needed within the coupon bar code.

Retailer In-Ads?

Retailer-funded offers will use the offered items' GS1 Company Prefix (es) in the purchase requirement segments. The retailer is specifically identified, either at a company or location level, in separate retailer GS1 Company Prefix data segments. Optionally, the retailer can also use s*tore coupon flags* and d*on't multiply flags* as appropriate to the offer.

Scripted Offers? (e.g., $1.00 Off next order; Scripted offers now commonly use 992 coding)

A scripted offer will use the Required Purchase fields to either specify no purchase required, or a minimum order total required, to receive the discount. The funding GS1 Company Prefix will be used, but no family code specification will be needed.

Will / can existing problems with 992 tax/food stamp issues be addressed?

The GS1 DataBar design specification cannot address the intricacies of taxing and eligibility rules for coupons. However, the use of 992 will now be limited to variable weight offers, which will greatly reduce 992 frequency, and may allow retailers to use that information to address some tax issues.

Do the new capabilities allow the coupon to indicate the billed party (e.g., third party, or a Manufacturer whose products may or may not be included in the offer)? There are many companies who share GS1 Company Prefixes and use the same Family Codes – and there is no practical means of preventing this. This could be as simple as adding an "Invoice to" GS1 Company Prefix, or a flag that corresponds to one included on the offer.

Yes. Reference the U.S. Coupon Application Guideline using GS1 DataBar Expanded Symbols Section 2 – Data Requirements

Will there still be a need for 00-Checker Intervention? If so, under what circumstances?

The GS1 DataBar Coupon specification provides for checker intervention through the use of a purchase requirement flag with a value of "9" (not a 00 in the Value Code). However, the use of this setting should be reserved for only those situations where no other means are available to deliver the offer. Cashier intervention impacts the customer, the retailer, and the issuer as an interpretation and action remains an individual judgment.

Will a manufacturer be able to determine redemption by region without dropping separate Offer Codes in different regions?

If manufacturers wish to track regional performance of a coupon they will **still** need to provide unique bar codes for each region to the appropriate coupon distribution company (FSI, Catalina, SSCM etc.). Manufacturers will now be able to decide on one of two methods to track regional responsiveness;

- Continue to use separate Offer Codes as is done today;
- use serial numbers within GS1 DataBar and advise the processing agents to capture this data and develop reporting to support this feature.

How will the various “free” coupon values work?

The GS1 DataBar Coupon specification provides for free product and free up to a maximum save value. Retailers will still need to ensure the free value provided to the customer is written on the coupon. JICC and the industry will also need to provide workable guidelines based on the new specifications.

Are EDI transaction sets compatible with the new structure? If not, has anyone begun working on this?

Yes, it is anticipated EDI (Electronic Data Interchange) transactions will support the new structures but the standards will need to be defined, approved, and implemented under the GSMP (Global Standards Management Process).

Can POS systems opt out of processing “optional” fields? If the “optional” data elements are not captured, many of the benefits of the new coding are lost.

This is a business decision of the individual user; the industry should recommend that users not opt-out of using these fields.

The Additional Purchase Rules Codes (Data Field 1) are confusing. Can these be clarified?

The Additional Purchase Rules Code specifies which items must be purchased to qualify for the coupon discount. The Code's values indicate some combination of the items defined by Primary Item (the Primary GS1 Company Prefix, Primary Family Code, and Primary Purchase Requirement), 2nd Item (having the 2nd GS1 Company Prefix, 2nd Family Code, and 2nd Purchase Requirement) or 3rd Item (having a 3rd GS1 Company Prefix, 3rd Family Code, and 3rd Purchase Requirements).

An offer must have at least a Primary Item (defined by the Primary GS1 Company Prefix, Family Code, and Purchase Requirement), but 2nd and 3rd Items are optional.

If the Additional Purchase Rules Code is 0, then at least one of up to the three definable items must be purchased to qualify.(e.g., if only a Primary Item is defined, it will be the only validating purchase.)

If the Additional Purchase Rules Code is 1, then all of the up to the three definable items must be purchased to qualify. (e.g., if the Primary and 2nd Items are defined, those two purchases are required to qualify.)

Note that if only a Primary Item is defined, Code 0 has the same effect as Code 1.

If the Additional Purchase Rules Code is 2, then the Primary Item and either the 2nd or the 3rd Item must be purchased. Effectively, the Primary Item is a required purchase, and the customer can choose between the 2nd or 3rd item to complete the requirements. (e.g., Buy 1 Dish Soap, and 2 Sponges or 3 Brushes, and Save $1.00. "1 Dish Soap" is the Primary, "2 Sponges" is the 2nd Item and "3 Brushes" is the 3rd Item.)

If the Additional Purchase Rules Code is 3, then the items defined by the 2nd or 3rd Company Prefix / Family Code combinations can be used to satisfy the Primary Purchase Requirement instead of the Primary Item. The Purchase Requirements for the 2nd and 3rd Items are ignored. For example, "Buy Any Three Snacks, Save $1.00" can be valid on items with up to three different Company Prefix / Family Code combinations. The Purchase Requirement of three units could be satisfied with one of each GS1 Company Prefix / Family Code, or three of one GS1 Company Prefix / Family Code, or some combination in between.

Code 3 is particularly useful for those companies who have acquired or merged product lines that are still packaged with multiple GS1 Company Prefixes.

Execution / Implementation

What plans are there for industry-wide education and awareness? There are many companies who are completely unaware that any changes to coupon bar codes are being considered. There are many more that know of it, but have no further information and are presently taking no steps to change.

General GS1 DataBar awareness is higher now versus several years ago; but education, information sharing and promotion must continue. In 2006, key retailers conducted live GS1 DataBar tests in item registration for perishable categories. This raised industry awareness and interest in GS1 DataBar since its developments were watched closely by the industry.

What is the current timeline? Is it realistic, given the state of un-readiness on the part of most key suppliers? What critical dependencies have been built-in to the timeline (e.g., readiness of GS1 DataBar scanners)?

See the first question in the next section below for the current recommended timeline. A definite timeline will be determined and announced pending the finalization of the specification and its approval through the JICC, ACP and GS1 US Board of Governors. It is expected that there will be further developments in the fall of 2007. Based on the implementation approach and other industry activity with GS1 DataBar adoption, it is expected the projected sunrise dates will address all critical dependencies.

What is the plan for testing the GS1 DataBar coding standards? What manufacturers / retailers / processors will be included? Who will be responsible for “signing off” on testing?

An overall test strategy has been developed by the JICC that will require participation by all the key stakeholders. Test scenarios and results will be made available to the industry for review and own validation testing. Results from the Phase 0 coupon GS1 DataBar tests conducted late in 2005 are available at: http://www.pinpoint-data.com/GS1 DATABARTest0

Other GS1 DataBar tests are underway in labs and in-store for GS1 DataBar applications. While the initial in-store tests will focus on non-coupon applications; their results will influence GS1 DataBar for coupons.

How will non-compliance affect the overall implementation plan (e.g., retailers who do not upgrade)? At what numbers does this halt the initiative? What contingencies are in place?

It is expected that once the specifications have been approved by the JICC and ratified by the GS1 US Board, sufficient industry support has been obtained to ensure success. There are concerns about smaller retailers and those retailers relying upon older equipment. Important partners will be NACS (National Association of Convenient Stores), NGA (National Grocers Association), NACDS (National Association of Chain Drug Stores), and others to communicate the details of the developments.

How will retailers without upgraded POS systems handle GS1 DataBar coupons?
It is likely that smaller independent stores may not ever justify the cost of upgrading their systems. Will they essentially go backward and start to manually enter coupon values?

For those who do not scan coupons, they can continue to process as they do today. For those who do scan, it remains a business decision by the retailer whether to upgrade or not. It is expected the other uses of GS1 DataBar may provide sufficient benefit to support the upgrade costs.

Will standards indicate that POS and Processor systems should always continue to read UPC-A and UPC-A / GS1-128 formats to ensure that "old" coupons are always readable?

The industry recommendation is that the UPC-A / GS1-128 functionality should be retained to handle the no expiration date coupons that remain in distribution well past any specified sunrise date. This will allow both retailers and coupon processors to electronically process those "old" unexpired coupons that may still remain in circulation.

Other Industry Questions

In 2000 GS1 US started issuing longer company prefixes. It is said that the GS1 US asks organizations when they request a GS1 Company Prefix, if they plan on couponing. Does that mean they are assigned a shorter number and / or the number can be truncated?

GS1 US does not ask a new member if they plan to coupon or not; this procedure was stopped several years ago. The assignment of GS1 Company Prefixes is driven by an applicant's company size and the number of GTINs and GLNs they plan to assign.

Specific migration dates must be determined, agreed upon and then followed across the industry. How does the GS1 US see this happening? What would be the process?

The Joint Industry Coupon Committee will provide recommended transition dates; then the JICC and GS1 US will work together to promote these dates to the industry. A key driver will be GS1 DataBar recommendations and decisions coming from the GS1 US Board; as these are worked through target dates can be established.

Coupons carry both UPC-A and GS1 DataBar Expanded symbols (GS1-128 is dropped). Will the scanner pick up both bar codes? Will the scanner or the system choose the coupon bar code that is 'valid'?

The scanner will pick up only one of the symbols; GS1 DataBar will be the first choice.

"Provides foundation for electronic clearing of coupons"; the current coupon has the GS1 Company Prefix and the offer code. How will the GS1 DataBar bar code and structure do more for electronic clearing than the current bar code and structure?

GS1 DataBar can accommodate the longer GS1 Company Prefixes while the current system cannot. Using GS1 DataBar will eliminate any possible overlap of 5 digit and longer GS1 Company Prefixes; the identification of the coupon issuer will be definite and discrete.

Appendix F: Implementation Advice (Informative)

Comments / Suggestions

Re-examine the two-phase approach, and extend the timeline. Respondents understand why the phased-in approach has been proposed, but have concerns about its feasibility. Specifically the question of timelines and cost:

Complicates timelines

When does one phase truly end – based on readiness, not the calendar – and the next begin? It seems likely that in reality, the interim phase UPC-A / GS1 DataBar coupon would last indefinitely, as it could never be assured that the UPC-A is safe to drop. With no downside, why would anyone run the risk?

Costly

The development, test and release cycles are doubled.

What other alternatives are there? Or, what modifications can be made to the existing plan to alleviate these issues? The implementation timeline, given the requirements of the current guideline, does not appear to be realistic for most of the participants. A one to two year extension seems more plausible, but should be determined when the accepted proposal is found.

- The recommended timeline below has been developed and needs to be reviewed and approved by the industry stakeholders. This recommended three-year time frame is designed to allow the processors, Manufacturer, and retailers to achieve readiness within the designated windows and avoids large-scale simultaneous conversions. Given the constraints in the UPC-A coupon structure, relief of these constraints for all industry participants will not be fully realized until the full retirement of the UPC-A coupon.

Date	Description
01/07	Step 0: New coupon system standards are in place.
06/08	Step 4: GS1 DataBar Expanded Stacked completely replaces GS1-128. *Interim standard* starts.
06/10	Step 7: The original UPC-A bar code is fully retired. *Final standard* starts – *interim standard* is retired.

- The two-phase approach has been reviewed extensively and been determined to be the most workable solution for the industry. This approach will not result in duplicative development and test cycles. The Manufacturers and coupon processors will only have one development and test cycle to enable the GS1 DataBar coupon on or before the implementation of the *interim standard*. Retailers will only have one development and

test cycle to enable the GS1 DataBar coupon on or before the implementation of the final standard.

Expand fields

Expand fields that today pose duplication or other limitations with current sizes.

Family Code

Expand from 3, to 4 digits; this will allow Manufacturers to better accommodate growth; help larger Manufacturers to handle greater number of product groups within single GS1 Company Prefix. Could be phased in by padding the field with a left zero and implemented by each manufacturer on an as-needed basis.

- Because of the limited space available in the overall coding, the three instances of Family Code will be kept at three digits. Also, there would be significant impact to all industry stakeholders (Manufacturers, retailers, coupon processors, POS vendors, EDI / GDSN (Global Data Synchronization Network)) as the Family Code field is a key attribute managed in numerous operational systems.

Offer Code

Expand from 5, to 6 digits; this will alleviate existing problems with duplication; will help move toward the long-term goal of a unique GS1 Company Prefix -Offer Code identifier.

- The current guideline indicates a six-digit offer code.

Expiration Date

- The current guideline indicates YYMMDD. Consideration was given to a Julian date format (YYDDD) to reduce the number of digits required, but not accepted due to concern of potential mismatches between the human readable date in MM/DD/YY format and the Julian date encoded by GS1 Databar.

Serial Number

Desire has been expressed to expand beyond the defined length of 8 digits to 12 or more digits; perhaps up 17 digits in length.

- The specification has been revised to reflect if the Serial Number is used, the minimum length will be six (6) digits and a maximum length of 15 digits. An offset of 6 is added to the VLI of the Serial Number to represent the actual length of this field.

Reduce the number of elements available in the GS1 DataBar bar code

While it certainly is prudent to make such an initiative as all-inclusive as possible to accommodate growth and future requirements, most Manufacturers feel that the offer complexity supported by the guideline is well beyond what could or should be used in practice. Such complex offers create consumer confusion – a concern of both

Manufacturers and retailers. Another downside of the robustness is that a given offer can be coded several ways (some less desirable than others) – leading to confusion for the creators and more room for error. A less-complex offer structure will simplify POS validation requirements, reducing costs and implementation time. At the same time, many of the new options have been long desired and offer many benefits. A balance between flexibility and more simplicity needs to be found.

- The flexibility in the design was a collaboration of the industry participants. The offer complexity is the decision of the coupon issuer. Best practice and guidelines for usage documents will be created to assist the industry in appropriate usage of this new capability.

Reconsider the use of the stacked bar code

A single-bar GS1 DataBar could make implementation more viable from both a time and cost factor (more scanners already capable, replacements / upgrades cheaper, higher accuracy). If the number of offer elements is reduced (see above), the stacked bar code may not be necessary. The combination of less complexity and a single-line GS1 DataBar bar code could greatly accelerate acceptance by all parties.

- GS1 DataBar Expanded Stacked is most efficient for scanning in this application environment. The initial testing already conducted has demonstrated acceptable read rates of the stacked bar codes. Single-line GS1 DataBar bar codes for coupons using the expanded capabilities may be more difficult to read due to the length of the resulting bar code. Also placement of this long bar code on the physical coupon may present additional challenges for layout and artwork.

Develop an implementation plan

That includes promoting awareness, educating trading partners and providing implementation support.

Begin a promotional campaign to raise awareness that the change is occurring.

Make a website and other resources available to all parties as reference throughout the implementation period. This should also provide a forum for feedback from any party that would like to provide input. Provide a “help line” during the implementation period.

- As the requirements are defined and approved the promotional campaign can begin. As noted earlier, the GS1 DataBar symbol should have high visibility in Q4 2007 in other applications; the coupon application can leverage this increased visibility and promote its use with coupons. The model used for the GTIN 2005 Sunrise awareness will be considered for use in this awareness campaign.
- Agreed, this will be important to success and should be included in the rollout plan. Guidelines for usage and best practices documents will be included.

In 2000, GS1 US started issuing variable length company prefixes. It is said that the GS1 US asks organizations when they request a GS1 Company Prefix, if they plan on couponing. Does that mean they are assigned a shorter number and / or the number can be truncated?

GS1 US does not ask a new member if they plan to coupon or not; this procedure was stopped several years ago. The assignment of GS1 Company Prefixes is driven by an applicant's company size and the number of GTINs and GLNs they plan to assign.

Appendix G: Examples (Informative)

Example 1 - Save $1.50 on any size item A when you buy either item B or item C. This offer has an Expiration Date of December 31, 2010.

Element	Data
Application Identifier	8110
Primary GS1 Company Prefix VLI	1
Primary GS1 Company Prefix	614141
Offer Code	654321
Save Value VLI	3
Save Value	150
Primary Purchase Requirement VLI	1
Primary Purchase Requirement	1
Primary Purchase Requirement Code	0
Primary Purchase Family Code	120
Data Field 1 - 2nd Qualifying Purchase	1
Additional Purchase Rules Code	2
2nd Purchase Requirement VLI	1
2nd Purchase Requirement	1
2nd Purchase Requirement Code	0
2nd Purchase Family Code	140
2nd Purchase GS1 Company Prefix VLI	9
2nd Purchase GS1 Company Prefix	N/A
Data Field 2 - 3rd Qualifying Purchase	2
3rd Purchase Requirement VLI	1
3rd Purchase Requirement	1
3rd Purchase Requirement Code	0
3rd Purchase Family Code	256
3rd Purchase GS1 Company Prefix VLI	1
3rd Purchase GS1 Company Prefix	12666
Data Field 3 - Expiration Date	3
Expiration Date	101231

Data encoded: **8110**10614141654321315011012012110140921102561001266631012 31

0614141-654321

Example 2 - Save $0.50 on one bundle pack of item A or three boxes of item A. This offer has an Expiration Date of December 31, 2010.

Element	Data
Application Identifier	8110
Primary GS1 Company Prefix VLI	1
Primary GS1 Company Prefix	614141
Offer Code	1234
Save Value VLI	2
Save Value	50
Primary Purchase Requirement VLI	1
Primary Purchase Requirement	1
Primary Purchase Requirement Code	0
Primary Purchase Family Code	650
Data Field 1 - 2nd Qualifying Purchase	1
Additional Purchase Rules Code	0
2nd Purchase Requirement VLI	1
2nd Purchase Requirement	3
2nd Purchase Requirement Code	0
2nd Purchase Family Code	850
2nd Purchase GS1 Company Prefix VLI	9
2nd Purchase GS1 Company Prefix	N/A
Data Field 3 - Expiration Date	3
Expiration Date	101231

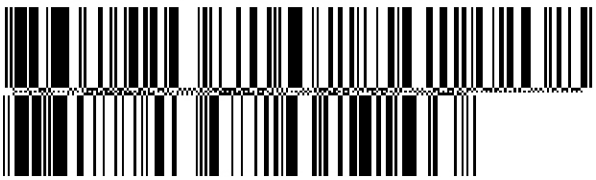
Data encoded: **8110**10614141001234250110650**1**0130850**3**101231

Example 3 - Free item A when you buy item B and item C. This offer has an Expiration Date of December 31, 2010.

Element	Data
Application Identifier	8110
Primary GS1 Company Prefix VLI	1
Primary GS1 Company Prefix	614141
Offer Code	1247
Save Value VLI	1
Save Value	0
Primary Purchase Requirement VLI	1
Primary Purchase Requirement	1
Primary Purchase Requirement Code	0
Primary Purchase Family Code	760
Data Field 1 - 2nd Qualifying Purchase	1
Additional Purchase Rules Code	1
2nd Purchase Requirement VLI	1
2nd Purchase Requirement	1
2nd Purchase Requirement Code	0
2nd Purchase Family Code	850
2nd Purchase GS1 Company Prefix VLI	9
2nd Purchase GS1 Company Prefix	N/A
Data Field 2 - 3rd Qualifying Purchase	2
3rd Purchase Requirement VLI	1
3rd Purchase Requirement	1
3rd Purchase Requirement Code	0
3rd Purchase Family Code	860
3rd Purchase GS1 Company Prefix VLI	9
3rd Purchase GS1 Company Prefix	N/A
Data Field 3 - Expiration Date	3
Expiration Date	101231
Data Field 9 - Miscellaneous Elements	9
Save Value Code	1
Save Value Applies to Which Item	0
Store Coupon	0
Don't Multiply Flag	0

Data encoded: **8110**10614141001247101107601**1**11085092**1**10860**3**10123**9**1000

0614141-001247



Example 4 - One item A free (up to $0.89) with purchase of two item B or four item C. This offer has an Expiration Date of December 31, 2010.

Element	Data
Application Identifier	8110
Primary GS1 Company Prefix VLI	1
Primary GS1 Company Prefix	614141
Offer Code	123456
Save Value VLI	2
Save Value	89
Primary Purchase Requirement VLI	1
Primary Purchase Requirement	1
Primary Purchase Requirement Code	0
Primary Purchase Family Code	120
Data Field 1 - 2nd Qualifying Purchase	1
Additional Purchase Rules Code	2
2nd Purchase Requirement VLI	1
2nd Purchase Requirement	2
2nd Purchase Requirement Code	0
2nd Purchase Family Code	850
2nd Purchase GS1 Company Prefix VLI	1
2nd Purchase GS1 Company Prefix	48000
Data Field 2 - 3rd Qualifying Purchase	2
3rd Purchase Requirement VLI	1
3rd Purchase Requirement	4
3rd Purchase Requirement Code	0
3rd Purchase Family Code	256
3rd Purchase GS1 Company Prefix VLI	1
3rd Purchase GS1 Company Prefix	48000
Data Field 3 - Expiration Date	3
Expiration Date	101231
Data Field 9 - Miscellaneous Elements	9
Save Value Code	1
Save Value Applies to Which Item	0
Store Coupon	0
Don't Multiply Flag	0

Data encoded:

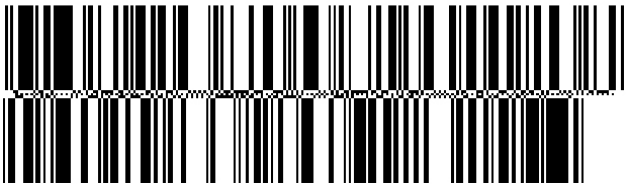
811010614141123456289110120**1**2120850100480002140256100480003101231**9**1000

Example 5 - Save $1.50 on any size item A when you purchase item B or item C. This offer has an Expiration Date of December 31, 2010.

Element	Data
Application Identifier	8110
Primary GS1 Company Prefix VLI	1
Primary GS1 Company Prefix	614141
Offer Code	543210
Save Value VLI	3
Save Value	150
Primary Purchase Requirement VLI	1
Primary Purchase Requirement	1
Primary Purchase Requirement Code	0
Primary Purchase Family Code	120
Data Field 1 - 2nd Qualifying Purchase	1
Additional Purchase Rules Code	2
2nd Purchase Requirement VLI	1
2nd Purchase Requirement	1
2nd Purchase Requirement Code	0
2nd Purchase Family Code	140
2nd Purchase GS1 Company Prefix VLI	9
2nd Purchase GS1 Company Prefix	N/A
Data Field 2 - 3rd Qualifying Purchase	2
3rd Purchase Requirement VLI	1
3rd Purchase Requirement	1
3rd Purchase Requirement Code	0
3rd Purchase Family Code	256
3rd Purchase GS1 Company Prefix VLI	1
3rd Purchase GS1 Company Prefix	12666
Data Field 3 - Expiration Date	3
Expiration Date	101231

Data encoded: **8110**10614141543210315011012012110140921102561001266631012 31

0614141-543210



Example 6 - Buy item A and receive $5.00 off your order (item only costs $1.00). This offer has an Expiration Date of December 31, 2010.

Element	Data
Application Identifier	8110
Primary GS1 Company Prefix VLI	1
Primary GS1 Company Prefix	614141
Offer Code	654321
Save Value VLI	3
Save Value	500
Primary Purchase Requirement VLI	1
Primary Purchase Requirement	1
Primary Purchase Requirement Code	0
Primary Purchase Family Code	0
Data Field 3 - Expiration Date	3
Expiration Date	101231
Data Field 9 - Miscellaneous Elements	9
Save Value Code	6
Save Value Applies to Which Item	0
Store Coupon	0
Don't Multiply Flag	0

Data encoded: **8110**10614141654321350011000**3**10123**9**6000

0614141-654321

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