



DigiKey ASN Label Quick Reference

Doc Number: GDE-3535

Version: 4

Home Manual: Supplier Quality

Page 1 of 4

1.0 Purpose

This document outlines the requirements and structure of the Advance Ship Notice (ASN) label in accordance with ASN specifications set forth by DigiKey.

2.0 Guidelines

2.1 Label Field Requirements

1. The following fields are required or suggested on the License Plate Number (LPN), or Line Item (LI) label with like attributes. Barcodes require an Application Identifier (AI) or Data identifier (DI)

A. Required Data (10 to 16pt font, unless expressed otherwise)

1. From Address: Vendor's ship from name and address (10 to 12 pt font)
2. To Address: Ship to name and address (10 to 12 pt font)
3. Ship To postal code and barcode GS1-US or ANSI (International Organization for Standardization)
 - a. GS1
 - I. Barcode: GS1-128 symbology
 - II. Data Identifier: 420
 - b. ANSI
 - I. Barcode: Code-128 symbology
 - II. Data Identifier: 31L
4. DigiKey PO Number and Barcode
 - a. Barcode: Code-128 symbology
 - b. Data Identifier: K
5. Vender/Supplier Part Number and barcode
 - a. Barcode: Code-128 symbology
 - b. Data Identifier: 1P
6. ASN number and barcode
 - a. DigiKey Advance Ship Notice – DKASN-18
 - I. Barcode: Code-128 symbology, 18-digit length (excluding DI)
 - II. Data Identifier: 9S
 - b. Serialized Shipping Container Code – SSCC-18
 - I. Barcode: GS1-128 symbology, 18-digit length (excluding AI)
 - II. Application Identifier: 00

B. Optional Data (Shown with red text in label sample, 10 to 16pt font)

1. Shipment Information
 - a. Carrier Name
 - b. Progressive Number (PRO #)
 - c. Bill of Lading Number (B/L Number)
 - d. Carton or Pallet count (Cartons/Pallet)
2. Lot Number, displayed with N/T if Not Traceable
3. Date Code, displayed in 4-digit YYWW format, or N/T if Not Traceable



DigiKey ASN Label Quick Reference

Doc Number: GDE-3535

Version: 4

Home Manual: Supplier Quality

Page 2 of 4

4. Universal Product Code (UPC #)
5. Stock Keeping Unit (SKU #)
6. Carton Quantity – count of individual pieces within carton
7. Manufactured Date (MFG DATE)
8. Expiration Date (MFG Date)

2. DKASN Label:

Ship From: Sample Supplier 1234 Drive BLV That Town, TX	Ship To: Digi-Key Electronics 602 125th Ave S Thief River Falls, 56701
Ship to Postal Code (31L) 56701	Carrier: UPS PRO#: 45346435 B/L Number: 12345234 Cartons/Pallet: 1 of 3
Contents: PO Number: 12345 Vendor Part #: D13V-37Q57 Lot Number: DW88LR16WH23ME94 Date Code: 2345 Carton Quantity: 12	
UPC#: 1234510015671 SKU#: 152641	MFG Date: 16-MAR-2023 Exp Date: 16-DEC-2023
Advance Ship Notice ID (9S) D 08513 1002032001	

Note: Text in red is optional data and may be excluded from label but may be required in the EDI transaction.

3. DKASN ID Data structure

A. The ASN number and barcode is structured as follows:

1. **Data Identifier** (2 characters): 9S to indicate DKASN number.
Note: In certain scenarios, 00 AI may be used in place of 9S.
2. **Barcode Specification** (1 character): D to indicate DigiKey specification.
3. **Supplier/ Vendor ID** (5 digits): A unique number assigned to each supplier or entity doing business with DigiKey. If Vendor ID is less than 5 digits, 0 will be used as leading digit(s).



DigiKey ASN Label Quick Reference

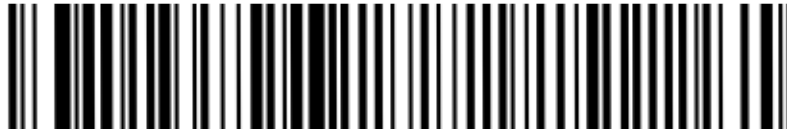
Doc Number: GDE-3535
Version: 4

Home Manual: Supplier Quality

Page 3 of 4

- 4. **Serial or Shipment Reference:** The number allocated to identify a logistic or shipping unit. This number would be assigned by the supplier.

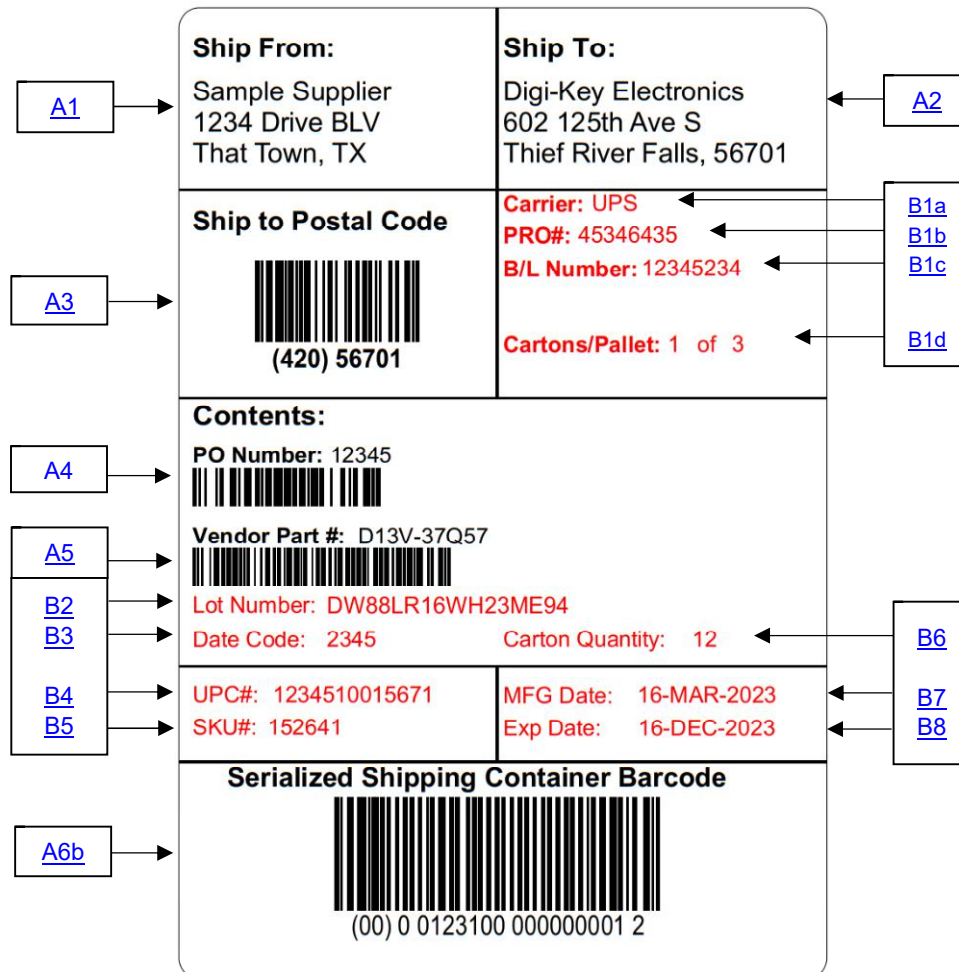
B. DKASN-18 Example



(9S) D 08513 100203200101

- 1. Barcode Scan should read: 9SD08513100203200101

4. SSCC Label:



Note: Text in red is optional data and may be excluded from label but may be required in the EDI transaction.

5. SSCC ID Data structure

A. The SSCC number and barcode is structured as follows:

- 1. **Application Identifier** (2 digits): 00 to indicate an SSCC ID.
- 2. **Extension Digit** (1 digit, 0-9): Used to increase capacity of the Serial Reference.



DigiKey ASN Label Quick Reference

Doc Number: GDE-3535

Version: 4

Home Manual: Supplier Quality

Page 4 of 4

3. **GS1 Company Prefix:** A globally unique number issued to a GS1 member company. This is assigned through the GS1 US application. ([See section 4](#))
4. **Serial Reference:** The number allocated to identify a logistic or shipping unit.
5. **Check Digit:** A modulo 10-digit used to check for input errors. ([See section 3.C](#))

B. SSCC-18 Example



(00) 0 0042273 000000113 1

1. Barcode Scan should read: 00000422730000001131

C. Check Digit Calculation

1. The check digit is calculated using the following steps:
 - a. Multiply the numbers in positions one, three, five, seven, nine, eleven, thirteen, fifteen, and seventeen by 3, then add together.
 - I. Using the above example: $0+0+6+21+0+0+0+3+9=39$
 - b. Add the numbers in positions two, four, six, eight, ten, twelve, fourteen, and sixteen.
 - I. $0+4+2+3+0+0+0+1 = 10$
 - c. Add the results of step a and step b.
 - I. $39+10 = 49$
 - d. The Check Digit is the smallest number needed to round the result from step c up to a multiple of 10.
 - I. $49+1 = 50$, thus check digit is 1
 - e. This can be confirmed by setting up a table with 18 columns, 1 column for each digit within the sequence and the 18th column reserved for the check digit.

Position:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
SSCC ID	0	0	0	4	2	2	7	3	0	0	0	0	0	0	1	1	3	√
	0		0		6		21		0		0		0		3		9	
Step a	Multiply values in positions 1, 3, 5, 7, 9, 11, 13, 15, 17, then add values (example: 39)																	
		0		4		2		3		0		0		0		1		
Step b	Add values in positions 2, 4, 6, 8, 10, 12, 14, 16 (example: 10)																	
Step c	Add steps a & b (example: $39+10 = 49$)																	
Step d	Step c result rounded up to the nearest multiple of 10, minus step d result (example: 49 rounded up to 50 , $50-49 = 1$)																	1

Note: Barcoding software capable of GS1-128 SSCC barcodes have the capability to calculate the check digit automatically.

6. GS1 Company Prefix

- A. The GS1 Company prefix is assigned through the GS1 application site. An overview of the GS1 US Serial Shipping Container Code (SSCC) can be [found here](#).
 1. Alternatively: <https://www.gs1.org/standards/id-keys/sscc>



DigiKey ASN Label Quick Reference

Document Number : GDE-3535

Version : 4

Home Manual : Supplier Quality

Author: Dustin Berg
Document Category: Guide
Document Status: Current
Date Approved: Mar 13, 2024
Expiration Date:

Approval History

Name of Approver	Approval Date	Approval Notes
Derek Haas	Mar 13, 2024	
Wynn Klamm	Mar 13, 2024	

Controlled Document Record Activity

Activity	Created By	Created Date	Comment
checkin	Dustin Berg	Mar 12, 2024	1. Updated document title and Purpose Statement 2. 2.1.1.A.6 - restructured naming conventions under ASN Umbrella. Added term for DigiKey ASN Number - DKASN 3. Added example label for DKASN 4. removed "text in blue text is required as applicable" from notes 5. 3.A.1 - added note for Application Identifier (AI). 6. moved SSCC label example by SSCC structure and breakdown. See section 4. SSCC Label.
checkout	Dustin Berg	Mar 12, 2024	
submitforapproval	Dustin Berg	Mar 12, 2024	
approveapproval	Eric Reinhardt	Mar 12, 2024	
rejectapproval	Derek Haas	Mar 12, 2024	Please remove supplier reference in the spec document.
checkout	Dustin Berg	Mar 12, 2024	
checkin	Dustin Berg	Mar 12, 2024	Removed 3rd party company details from document.
submitforapproval	Dustin Berg	Mar 12, 2024	
approveapproval	Wynn Klamm	Mar 13, 2024	
approveapproval	Derek Haas	Mar 13, 2024	
release	Derek Haas	Mar 13, 2024	

Reference

No records to display.
