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No records to display.

Skyworks Supplier Barcode Standard

Current

1	Initial released Previously was SQ02-0032 Rev 8	Magda Isabel Parra	04/Oct/2016
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1.0 Purpose

To define Skyworks Solutions Inc supplier requirements for Barcode Labels and to identify specific packaging requirements for selected Level 1 raw materials.

2.0 Scope

The standard for barcode labels is applicable to all Skyworks suppliers and receiving facilities for Level 1 Raw and Production Supply Materials. Sample materials and other non-production items will not necessarily be bar-coded labeled.

3.0 Process Objective(s)

This process will improve Skyworks Receiving, Inventory and Manufacturing processes.

4.0 Internal Applicable/ External Reference Documents (Process Inputs)

EIA Standard	Electronic Industries Association Outer Shipping
EIA –556-A	Container Bar Code Label Standard

5.0 Acronyms / Terminology and Description / Definitions

Acronyms / Terminology

Description / Definition

<i>2D Standard</i>	The 2D barcode stores data along two dimensions and is therefore capable of containing much more information than the 1D barcode (seen on many food products) or the magnetic stripe (seen on credit cards and some drivers' licenses). Specifically, 2D barcodes can hold about 2,000 bytes of data, or enough to encode some text and a compressed image file.
<i>Data Identifier (DI)</i>	It is a 1 to 3-digit alphanumeric code preceding the actual data in the barcode. It's used by the computer system receiving the scanned data to identify which field to populate in the database. The DI used in this procedure is ANSI MH 10.8.2 compatible and must be used as specified. The DI is not part of the data and shall not be shown in the human readable portion, instead it is printed (in parentheses) before the title in each data fields. The DI directly precedes the data in the bar code symbol without spaces, quotation marks or parentheses.
<i>Package Identifier</i>	Data field consisting of two segments. The first segment is the supplier code, and the second segment is the invoice or packing list number. Segments are separated by the separator "+" (plus) character.
<i>Transaction Identifier</i>	Purchase Order or Schedule Agreement number Trace Code / Date Code/ Manufacturing Date Traceability number assigned by the supplier to identify.
<i>Picket Fence</i>	Bar codes oriented with respect to the shorter side of a label
<i>Master Load</i>	Used to define a material shipment that is shipped in response to one Purchase Order / Schedule Agreement and only one item (part number) has been shipped.
<i>Mixed Load</i>	Used to define a material shipment that is shipped in response to one Purchase Order / Schedule Agreement where more than one item (part number) has been shipped.
<i>Master Shipment Label</i>	One Label used for whole shipment. N boxes indicated in one label

Bar Code Standards

Skyworks is able to ask Suppliers about the usage of one determined standard according to specific information requirements per plant:

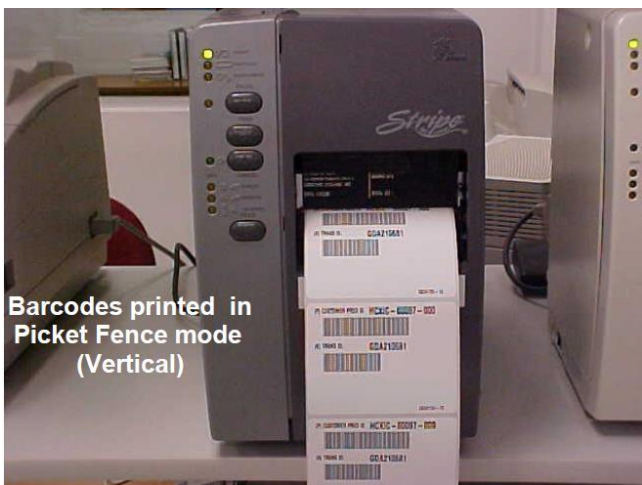
- 1D Standard (Appendix A)
- 2D Standard (Appendix B)

6.0 Appendix A: 1D Standard
6.1 Specifications

<p align="center">Bar Code Characteristics</p>	<p>Supported Codes by Skyworks are:</p> <ul style="list-style-type: none"> - CODE 128: Without check character for Intermediate Container Label, minimum bar code symbol height 0.16 inch. - CODE 39: Minimum bar code symbol height 0.20 inch. <p>There shall be leading and trailing “quiet zones” of no less than 0.25” before and after each bar code used on a label.(except P2) Orientation. Picket Fence mode is required.</p>
<p align="center">Fonts</p>	<p>Human readable data must use a non-serif font like Arial For Intermediate Container Label. Minimum human readable characters shall be 0.1 inches (height)</p> <p>For 3S, 4S and 5S Labels. Minimum human readable characters shall be 0.2 inches</p>
<p align="center">Label Sizes and Materials</p>	<p>For Intermediate Container Label size is minimum 4 x 2” (10.2 cm x 5.1 cm), can be bigger if there is additional information see page 23.</p> <p>For 3S, 4S and 5S Label size is 4” x 6.5” Paper shall be white in color with black printing. Label should be of an adhesive nature that will assure adherence to the package and application should be wrinkle-free. For P2 Label, adhesive must allow for easy removal.</p>

6.2 Label Orientation

Example of Picket Fence (Vertical) orientation



Bar Code Label Requirements

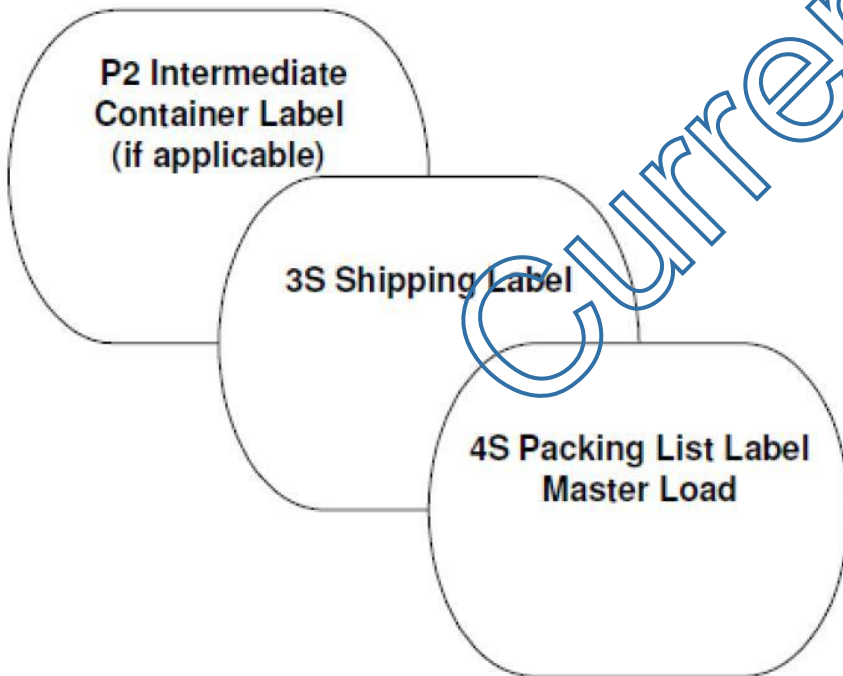
There are four different types of labels described in this document, which are used for shipments to Skyworks Solutions, Inc. the requirements of which depend on the type of container, packaging used and if the material is shipped with or without any lot number classification.

P2	Intermediate Container Label
3S	Shipping Label (single box identifier)
4S	Packing List Label. Master Load (one shipment - one P.O/S.A - one part number - n lot numbers)
5S	Packing List Label. Mixed Load (one shipment - one P.O/S.A - n part number - n lot numbers)
Additional Document	When more than one-part number and/or lots are received, the information is placed in an additional document.
Master shipment label	One shipping label for all boxes

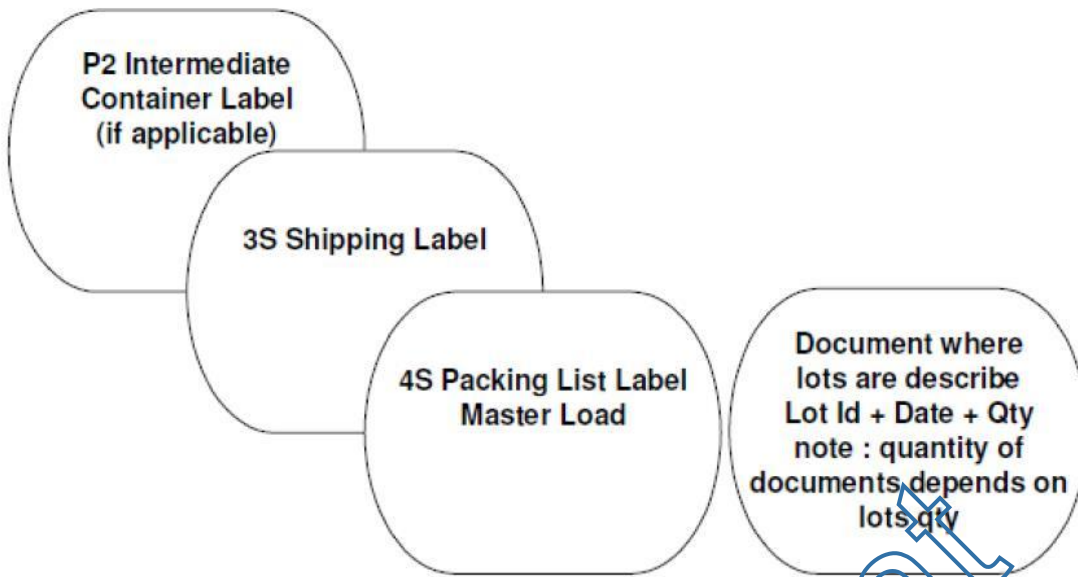
Types of Shipments and labels required:

6.3.1. Master Load

6.3.1.1 One P.O. one item / one lot

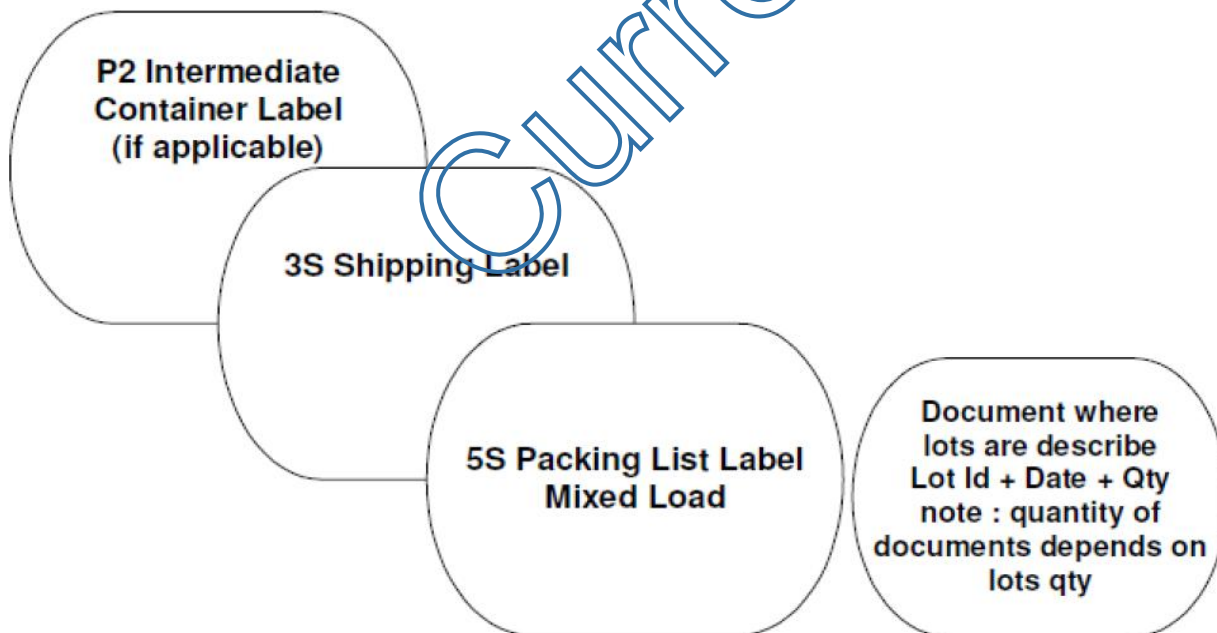


6.3.1.2 One P.O. one item / two or more lots



6.3.2. Mixed Load

6.3.2.1 One P.O. with multiple items / two or more lots



Note: one 5S label per item ship from same P.O.

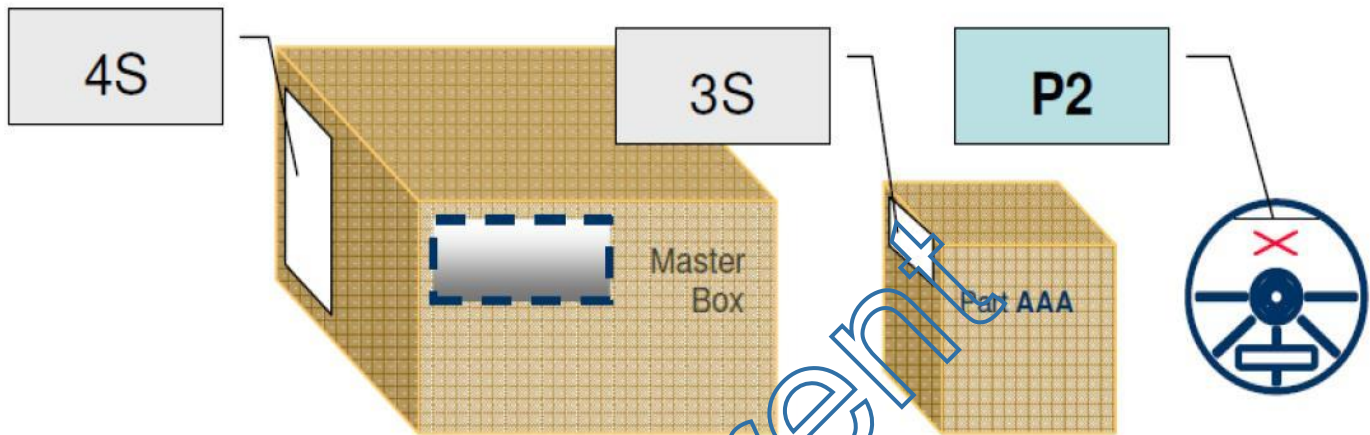
6.3 Intermediate Container Label Description (P2)

Definition

This label is used for tracking purposes and it should be attached to all intermediate containers. Label should be of an adhesive nature that will assure adherence to the package, and application should be wrinkle-free. See the examples of the label format and required fields for each material.

Placement or Location

This label shall place at inner boxes and sides of reels opposite sprocket holes, reel bags, Wafer Canisters and bundles. Example if a reel is placed in a bag/box then both the reel and bag/box shall be labeled.



Note1: If the material (component) is ESD sensitive and is inside of a Moisture Barrier Bag, the Intermediate Container Label must be in the Moisture Barrier Bag and also in the reel for better traceability.

Note2: If the material (component in wafer form) is ESD sensitive and is inside of a Moisture Barrier Bag, the Intermediate Container Label must be in the Moisture Barrier Bag and also in the shipping container for better traceability.

Note3: If Supplier or Skyworks require additional information in the Intermediate Label (P2), this information must be added in additional section of the P2 (example see Molding Compound label, page 23).

Data Elements

Contents	Data Identifier	Bar Coded	Definition	Remarks
Long String		YES	Long string with all lot / batch information (Customer Part Number+ Lot Number + Quantity + time stamp	Easy for bar-coded in only 1 step (OPTIONAL depending on Supplier capability) NOT APPLICABLE FOR SKYWORKS INTERNAL SITES
Product ID	P	YES	Customer Part Number	
Supplier ID	1P	YES	Supplier Part Number	
Lot Number	1T	YES	Traceability number assigned by the supplier to identify / trace a unique group of entities (lot number / batch number / etc.)	If Intermediate Container Label is placed on a outer box/bag that contains more than one batch/lot than the Trace Code field is leave empty and Quantity field refers to the total quantity of the box/bag. Lot number is restricted to 10 digits maximum. Lot number should be unique and no repeatable.
Quantity	Q	YES	Unit quantity within the container (Good pieces)	
Supplier Code	1V	YES	Supplier Code provided by SWKS	
Production Date	17D	YES	Manufacturing Date (End of Process)	
Expiration Date	15D	YES	Expiration Date	
Optional	Z	YES	Depend of the Material, Skyworks would request different information.	Optional field
Supplier Logo or Name	Logo/Name	NO	Supplier Logo or Supplier Name	
Qty Strips (Only for PCB)	Q	YES	Quantity of strips per bundle	Used for PCB Bundle to indicate the total qty of strips inside

P2 Label Format Example:



MINIMUM SKYWORKS REQUIRED STRINGS PER MATERIAL:

a) PRINTED CIRCUIT BOARDS (PCB):

- Long String
- (P) Product Id
- (1P) Supplier Id
- (1T) Lot Number
- (Q) Quantity
- (1V) Supplier Code
- (17D) Production Date MMDDYYYY
- Supplier Logo and/or Name
- Qty strips (Optional)

b) EPOXY: (Barcode is Optional)

- (P) Product Id
- (1P) Supplier Id
- (1T) Lot Number
- (1V) Supplier Code
- (17D) Production Date MMDDYYYY
- (15D) Expiration Date MMDDYYYY
- Supplier Logo

c) MOLDING COMPOUND:

- Long String
- (P) Product Id
- (1P) Supplier Id
- (1T) Lot Number
- (Q) Quantity
- (1V) Supplier Code
- (17D) Production Date MMDDYYYY
- (15D) Expiration Date MMDDYYYY
- Supplier Logo

d) WIRE:

- (P) Product Id
- (1T) Lot Number
- (Q) Quantity
- (17D) Production Date MMDDYYYY
- Supplier Logo

e) CARRIER TAPE (Barcode is Optional)

- (1P) Supplier Id
- (1T) Lot Number
- (17D) Production Date MMDDYYYY
- Supplier Logo

f) COVER TAPE (Barcode is Optional)

- (1P) Supplier Id
- (1T) Lot Number

6.4 Shipping Label Description (3S)

Definition

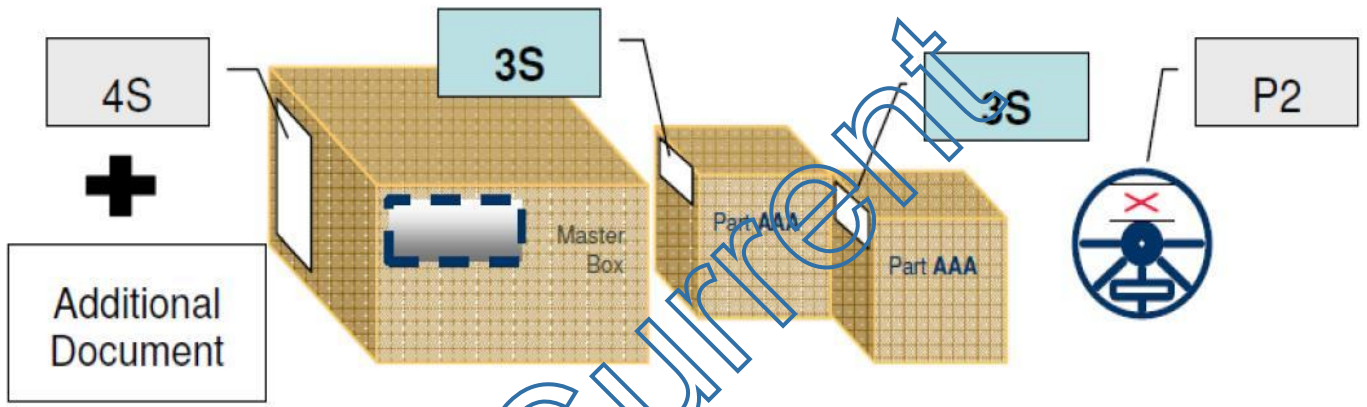
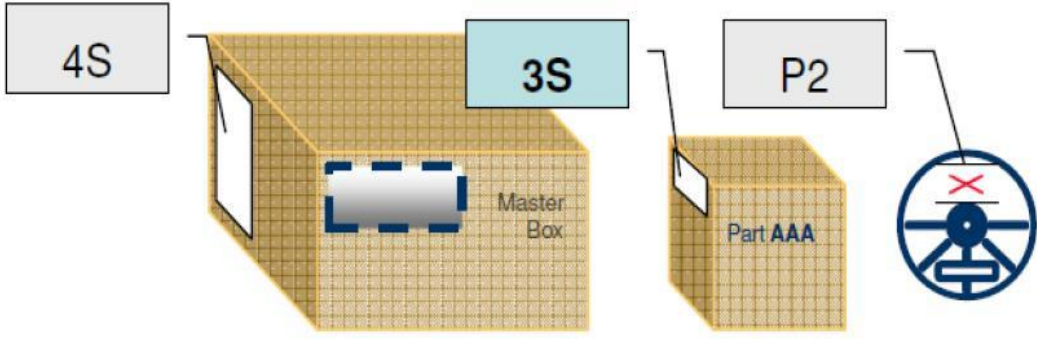
This Label is applied on all outer boxes which may or may not be part of a pallet or other enclosing container and is used to identify a shipment by all parties involved in the shipping / receiving process.

Layout

The 3S Shipping Label is a 4.0" x 6.5" label consists of eight data elements. Human readable characters shall be a minimum of 0.2" high. Minimum bar code symbol height shall be 0.5".

Placement or Location

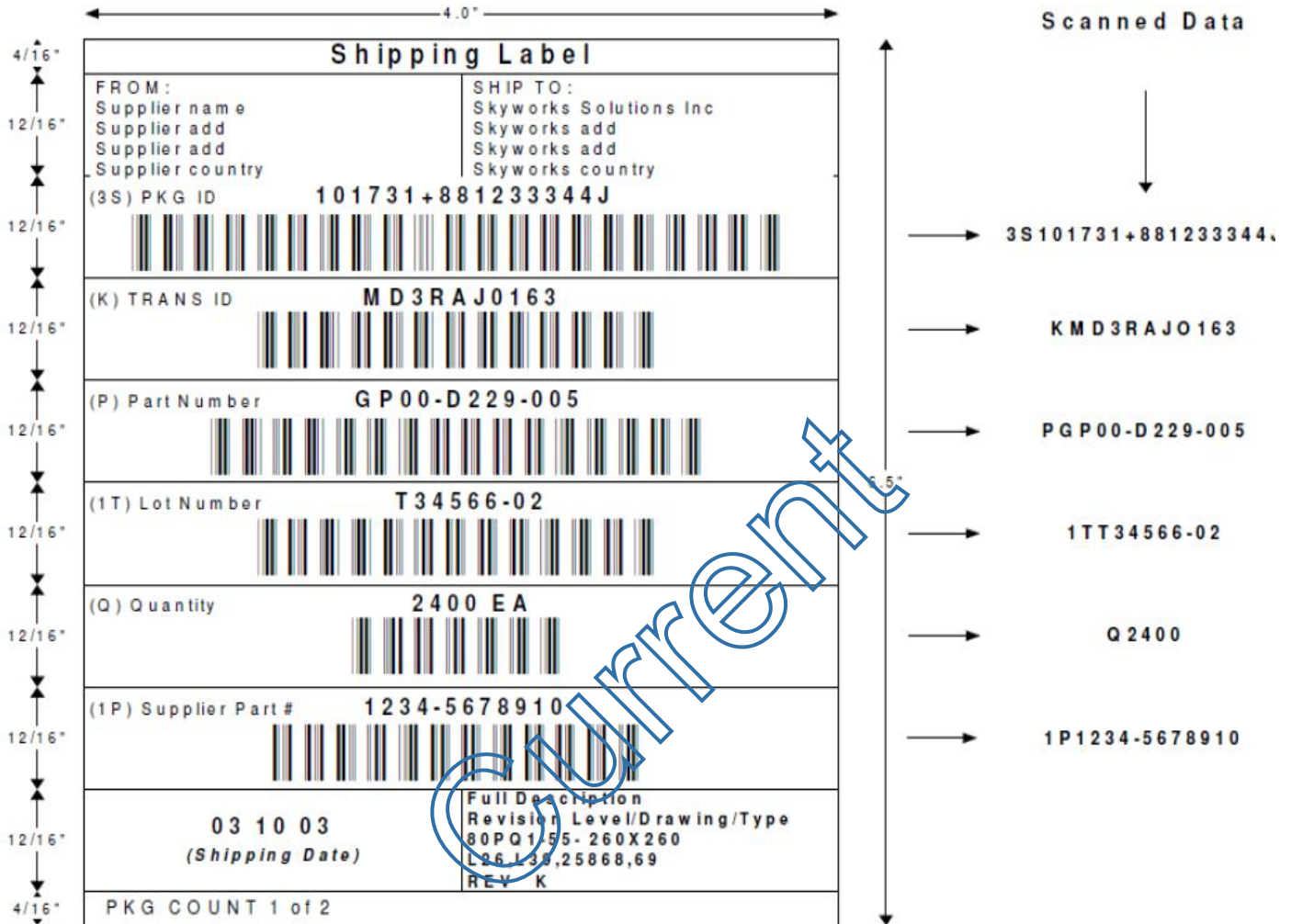
On each outer box placed in the upright position, in the lower right-hand corner of the smallest face of the box.



Data Elements

Contents	Data Identifier	Bar Coded	Definition	Remarks
Label Identifier		NO	Label Identifier	Must read "Shipping Label"
Package Identifier	3S	YES	Supplier Code + Packing Slip or Invoice number	
Transaction Identifier	K	YES	Customer's P.O. / S.A. number	
Part Number	P	YES	Customer's Part Number	
Trace Code	1T	YES	Traceability number assign by the supplier to identify / trace a unique group of entities (lot number / batch number/ etc.)	If Material is not managed by Batch/Lot or box contains more than one Batch/Lot this field is empty.
Quantity	Q	YES	Quantity in the container the label is affixed to	
Supplier Part Number	1P	YES	Supplier Material Identification Code	
Shipping Date		NO	Shipping Date must be formatted MM DD YY	
Full Material description / Revision Level / Drawing / Type		NO	Material Description and other information related to part number shipped.	
Package Count			Box number/Number of boxes in shipment (Total of Cartons)	

**Example
3S Shipping Label**



6.5 Packing List Label Description (4S)

Definition

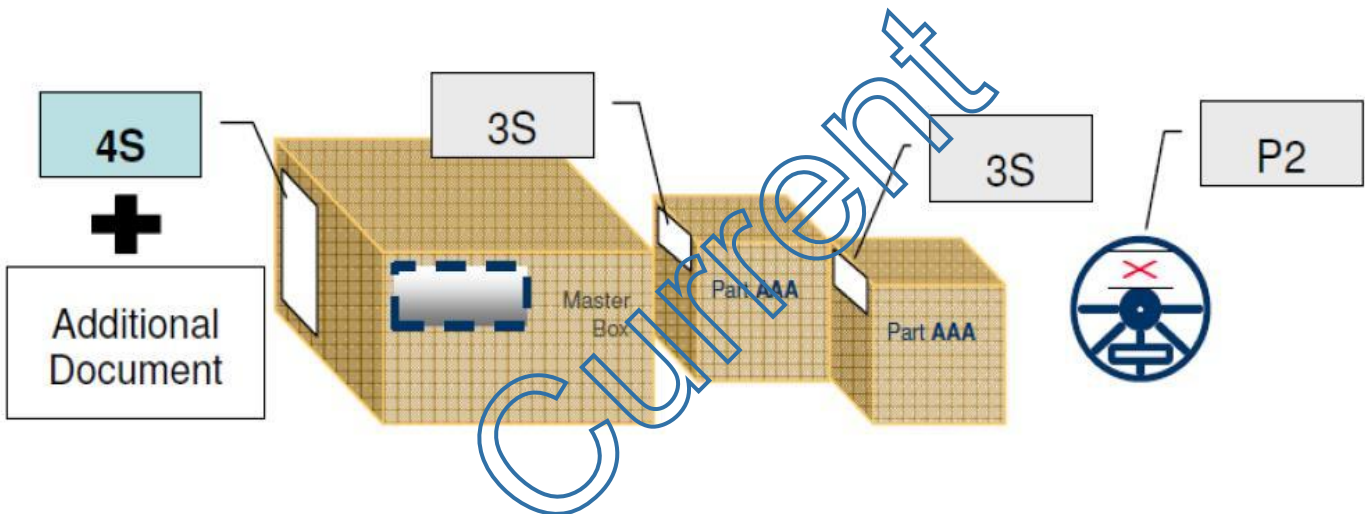
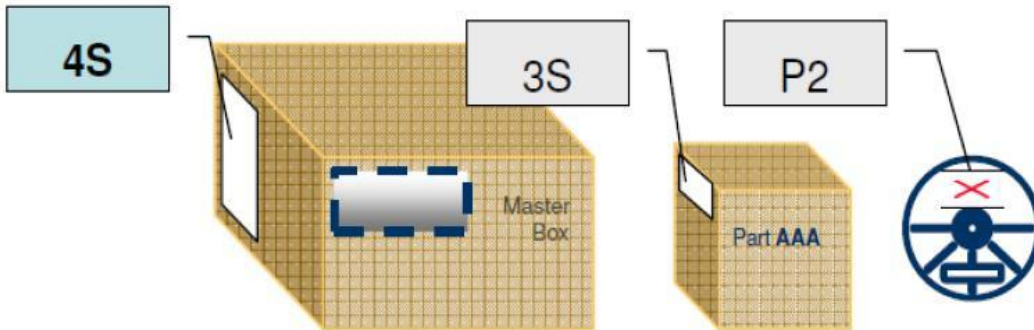
This label is used to identify a shipment by all parties involved in the shipping / receiving process. One 4S label per shipment per part number shall be use when sending only one part number per purchase order or schedule agreement. Material shipped without a batch/lot reference and material that is shipped classified by batch / lot where one batch / lot where only one batch/lot is shipped shall use the 4S Master Load (1 Lot) Label. Material shipped which is classified by batch/lots and the shipment contains two or more batch/lots the 4S Master Load (2+Lots) Label and an additional document where all batch/lots that have being shipped are bar coded, shall be used.

Layout

The 4S Master Load (1Lot) and the 4S Master Load (2+Lot) Label is a 4.0" x 6.5" label that consist of eleven data elements. Human readable characters shall be a minimum of 0.2" high. Minimum bar code symbol height shall be 0.5"

Placement or Location

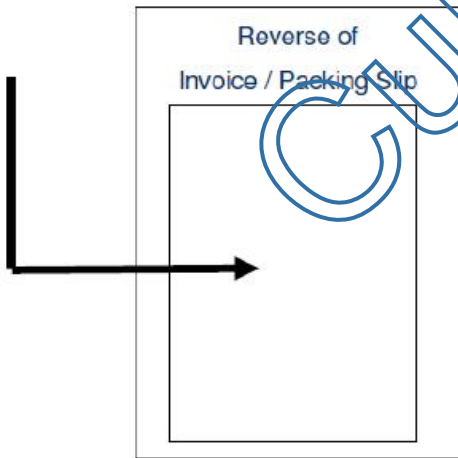
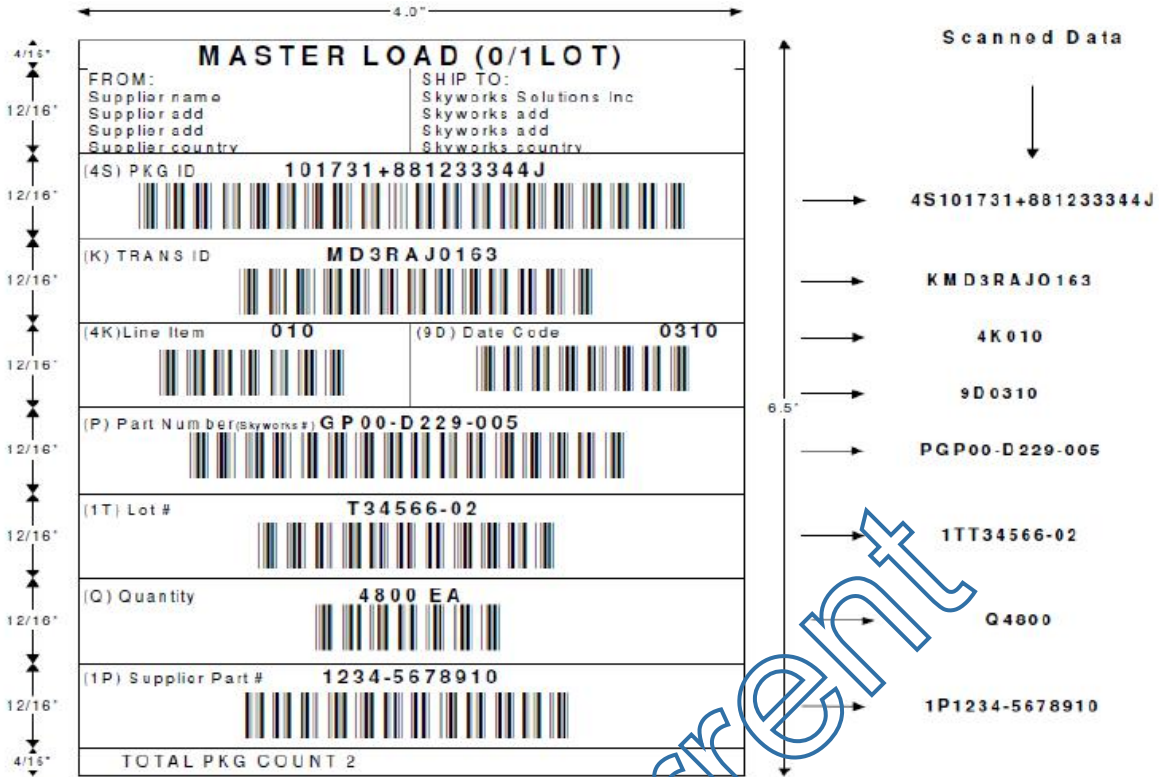
This label is placed in the packing list envelope on the outside of box # 1 of the shipment. If material comes classified by batch/lots and two or more batch/lots are shipped, additional documents required shall come in the packing list envelope.



Data Elements for 4S Master Load (1Lot) and 4S Master Load (2+Lot)

Contents	Data Identifier	Bar Coded	Definition	Remarks
Label Identifier		NO	Label Identifier	Must read for zero or 1 batch/lot : "MASTER LOAD (1 LOT)" For 2 or more lots : "MASTER LOAD (2+LOT)"
FROM		NO	Address from which the shipment was shipped	
SHIP TO		NO	Address to which the shipment is being shipped	
Package Identifier	4S	YES	Supplier Code + Packing Slip or Invoice number	
Transaction Identifier	K	YES	Customer's P.O. / S.A. number	
Line Item	4K	YES	Line item number of material at P.O. or S.A.	
Date Code	9D	YES	Date Code of material within the container	1. If Material is not managed by Batch / Lot or if it is shipped in two or more batch/lot this field is empty 2.If Material is shipped in just one Lot/Batch the Date Code is Bar Coded in this area
Part Number	P	YES	Customer's Part Number	
Trace Code	1T	YES	Traceability number assigned by the supplier to identify / trace a unique group of entities (lot number / batch number/ etc.)	1. If Material is not managed by Batch/Lot this field is empty 2. If Material is shipped in just one Lot/Batch the Trace is Bar Coded in this area 3. If Material is shipped in two or more batch/lots then the message "TO RECEIVE SCAN OVER ADDITIONAL DOCUMENT" appears in this area NOT Bar Coded
Quantity	Q For zero or one Batch/Lot QT For two or more Batch/Lot	YES	Quantity in the container the label is affixed to	
Supplier Part Number	1P	YES	Supplier Material Identification Code	If the Supplier has EDI (Electronic Data Interface) please use the Supplier Part Number field to provide the Advanced Shipping Notice.
Total Package Count		NO	Total box count	

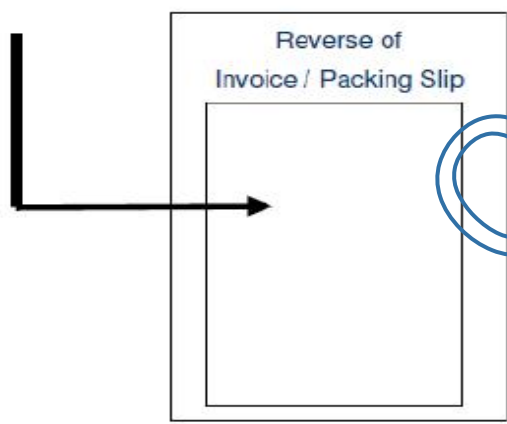
Example
 4S Packing List Label. Master Load (1 LOT)



Note:
 The 4S Label shown in this example is for Pack Slips with one Batch Number.

4S Label (Single Batch)

4S Packing List Label. Master Load (2+LOT)



Note:
 The 4S Label shown in this example is for Pack Slips with multiple Batch Numbers, in order to receive each batch it is necessary to attach an additional document.

4S Label (Multiple Batch)

6.6 Packing List Label Description. Mixed Load (5S)

Definition

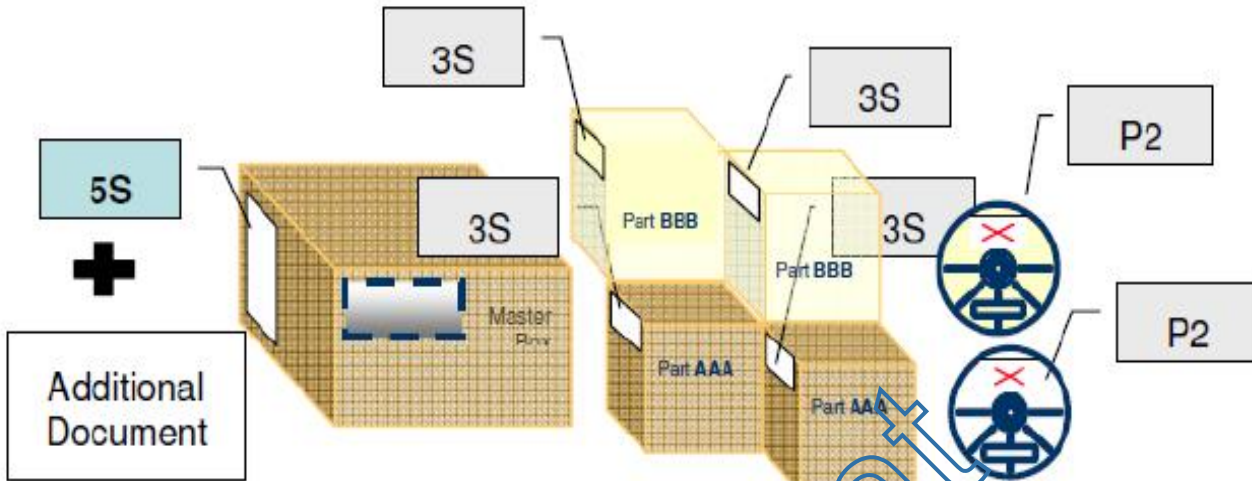
This label is used to identify a shipment by all parties involved in the shipping / receiving process. One 5S label per shipment per part number shall be used when sending two or more part numbers per purchase order or schedule agreement.

Layout

The 5S Mixed Load (1Lot) and the 5S Mixed Load (2+Lot) Label is a 4.0" x 6.5" label that consist of eleven data elements. Human readable characters shall be a minimum of 0.2" high. Minimum bar code symbol height shall be 0.5".

Placement or Location

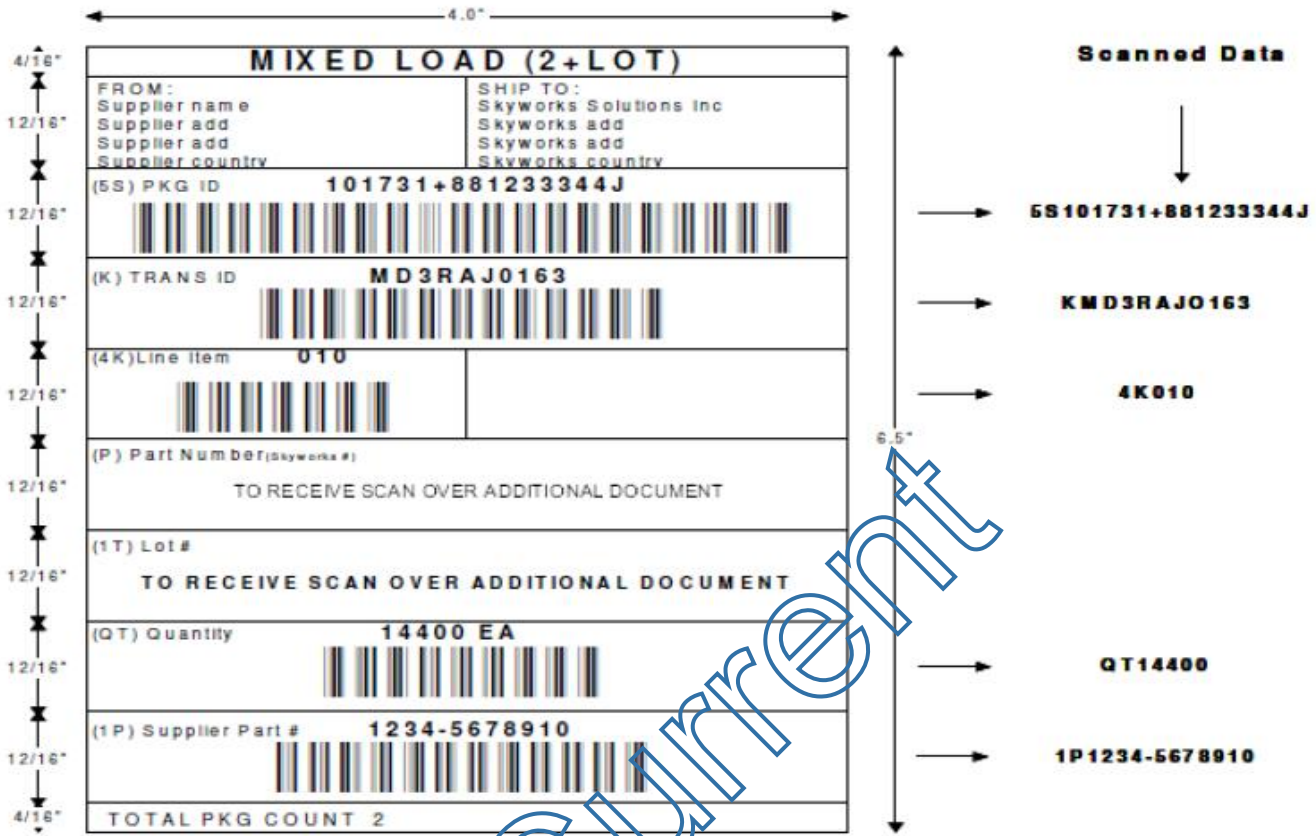
This label is placed in the packing list envelope on the outside of box # 1 of the shipment. If material comes classified by batch/lots and two or more batch/lots are shipped, additional documents required shall come in the packing list envelope.



Data Elements for 5S Mixed Load (1Lot) and 5S Mixed Load (2+Lot)

Contents	Data Identifier	Bar Coded	Definition	Remarks
Label Identifier		NO	Label Identifier	Must read for zero or 1 batch/lot : "MASTER LOAD (1 LOT)" For 2 or more lots : "MASTER LOAD (2+LOT)"
FROM		NO	Address from which the shipment was shipped	
SHIP TO		NO	Address to which the shipment is being shipped	
Package Identifier	5S	YES	Supplier Code + Packing Slip or Invoice number	
Transaction Identifier	K	YES	Customer's P.O. / S.A. number	
Line Item	4K	YES	Line item number of material at P.O. or S.A.	
Date Code	9D	YES	Date Code of material within the container	1. If Material is not managed by Batch / Lot or if it is shipped in two or more batch/lot this field is empty 2.If Material is shipped in just one Lot/Batch the Date Code is Bar Coded in this area
Part Number	P	YES	Customer's Part Number	
Trace Code	1T	YES	Traceability number assigned by the supplier to identify / trace a unique group of entities (lot number / batch number/ etc.)	1. If Material is not managed by Batch/Lot this field is empty 2. If Material is shipped in just one Lot/Batch the Trace is Bar Coded in this area 3. If Material is shipped in two or more batch/lots then the message "TO RECEIVE SCAN OVER ADDITIONAL DOCUMENT" appears in this area NOT Bar Coded
Quantity	Q For zero or one Batch/Lot QT For two or more Batch/Lot	YES	Quantity in the container the label is affixed to	
Supplier Part Number	1P	YES	Supplier Material Identification Code	If the Supplier has EDI (Electronic Data Interface) please use the Supplier Part Number field to provide the Advanced Shipping Notice.
Total Package Count		NO	Total box count	

**Example
 5S Packing List Label. Mixed Load (2+LOT)**



6.7 Master Shipment label

This unique label is used for whole shipment to Mexico for avoid delays in customs brokers and customs audits

This can contain all bar code or QR code that must include Skyworks Part number, Quantity of all shipment & Origin country (COO). Preferently should include QR code with all part numbers in the shipment, could be one part number or several part numbers. It must be placed in top side of the upper box (if piled boxes) or in upper side of box 1/x of main PN of shipment.

Check examples below, that we can use.

Master Shipment Label			Master Shipment Label			Master Shipment Label		
From: Supplier Name Address:		Ship to: Skyworks Solutions Address:	From: Supplier Name Address:		Ship to: Skyworks Solutions Address:	From: Supplier Name Address:		Ship to: Skyworks Solutions Address:
(4S) PKG ID 10635+028454 (K) PO Number MD1Y45254454		(4K) Line Item: 010 (17D) Prod.Date: 07282011	(4S) PKG ID 10635+028454 (K) PO Number MD1Y45254454		(4K) Line Item: 010 (17D) Prod.Date: 07282011	(4S) PKG ID 10635+028454 (K) PO Number MD1Y45254454		(4K) Line Item: 010 (17D) Prod.Date: 07282011
Skyworks PN	Quantity	COO	Part Number	Quantity	COO	Part Number	Quantity	COO
7851598-007	500000	SGP	7851598-007	500000	SGP	7851598-007	500000	SGP
7851598-008	500000	SGP						
7851598-009	500000	SGP	7851598-008	500000	SGP	7851598-008	500000	SGP
7851598-010	500000	SGP						
7851598-011	500000	SGP	7851598-009	500000	SGP	7851598-009	500000	SGP
7851598-012	500000	SGP						
7851598-013	500000	SGP	7851598-010	500000	SGP	7851598-010	500000	SGP
7851598-014	500000	SGP						
7851598-015	500000	SGP	7851598-011	500000	SGP	7851598-011	500000	SGP
7851598-016	500000	SGP						
7851598-017	500000	SGP	7851598-012	500000	SGP	7851598-012	500000	SGP
7851598-018	500000	SGP						
7851598-019	500000	SGP	7851598-013	500000	SGP	7851598-013	500000	SGP
7851598-020	500000	SGP						
7851598-021	500000	SGP	7851598-014	500000	SGP	7851598-014	500000	SGP
Shipping Date: MMDDYYYY	Package Count: 5 Label 1 of 1		Shipping Date: MMDDYYYY	Package Count: 5 Label 1 of 2		Shipping Date: MMDDYYYY	Package Count: 5 Label 1 of 2	

6.8 Additional Document two or more batch/lots

Definition

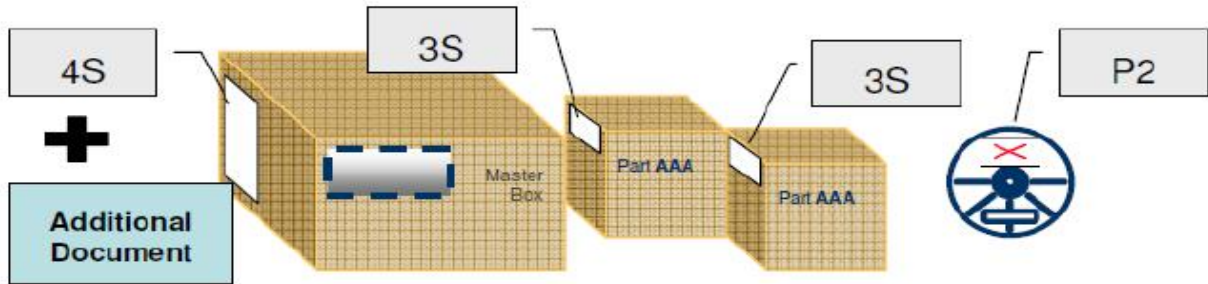
This document shall be used when a shipment contains two or more batch/lots per material and is use for receiving purposes.

Layout

This document is a Paper Size Letter 8 1/2" x 11" sheets that consist of thirteen data elements. (Size could be A4).

Placement or Location

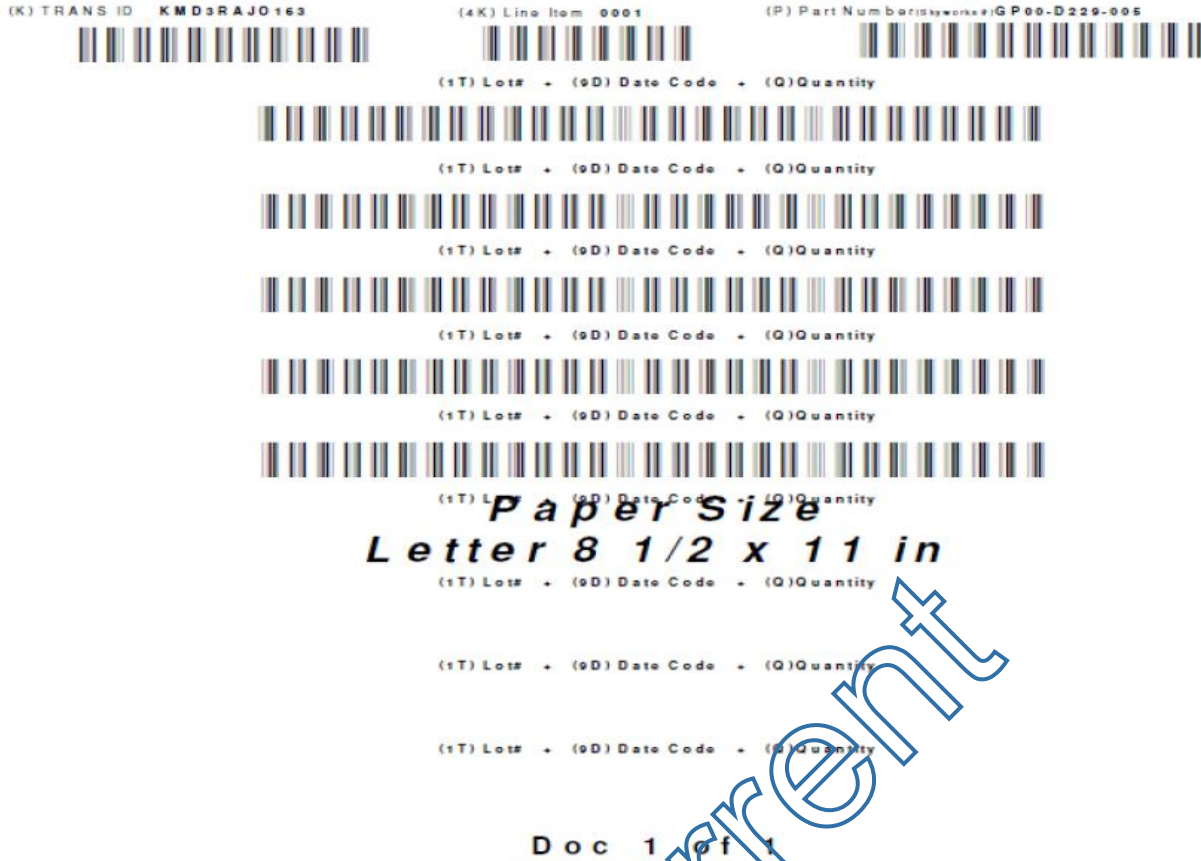
This document is placed in the packing list envelope on the outside of box # 1 of the shipment attach to the 4S or 5S Label.



Data Elements

Contents	Data Identifier	Bar Coded	Definition	Remarks
Transaction Identifier	K	YES	Customer's P.O. / S.A. number	
Line Item	4K	YES	Line item number of material at P.O. or	
Part Number	P	YES	Customer's Part Number	
Part Number P Yes Customer's Part Number Trace Code + Date Code + Quantity	1T +9D + Q	YES	Traceability number assigned by the supplier to identify / trace a unique group of entities (lot number / batch number/ etc.) + Date Code of material within the container Quantity per Batch/Lot	Each document 8 1/2" x 11" sheet could manage up to nine rows with a Trace Code + Date Code + Qty data combination
Document Count (per material)		NO	Document number/Number of documents with Batch/Lot data for a material	

Example (not to scale)



7.0 Appendix B: 2D Standard

The 2D Barcode must use a matrix code. The code of choice is PDF417. PDF417 can decode any number, letter, or character. Each character shall consist of 4 bars and 4 spaces in a 17 module structure. PDF stands for "Portable Data File" and "417" determines the module structure. Each PDF417 symbol will consist of at least: 3 to 90 stacked rows and will be surrounded by a quiet zone on all four sides. Each row will have a leading quiet zone, start pattern, left row indicator character, then one to thirty characters, a right row indicator character, stop pattern, and trailing quiet zone. This matrix code PDF417 supports text compaction, numeric compaction, and byte compaction this correlates the mapping between the codeword values and decoded data. PDF417 accommodates 340 characters per square inch with a maximum of 1850 text characters. X dimension must support at least 11.7 mil. Human readable data contained within the 2D code must be included on the label whenever possible. Labels must be black in color and thermal printed. Label adhesive must allow for easy removal. Suggested Software: Bartender Label Printing Edition: Enterprise, Version 7.71 This label must contain the minimum strings depending on the material. (Described from Pag.9).

Example of 2D Barcode



8.0 Quality Records (Process Outputs)

There are not quality records associated with this specification.

9.0 Document Responsibilities

Who	What
MXLI Sourcing Manager	Approve changes to this document
Sourcing Director	Approve changes to this document
Corp. Customer Service	Approve changes to this document
Corp Production Control	Approve changes to this document
MXLI Supplier QualityManager	Approve changes to this document

Associated Documents

Document Number	Document Title
SQ02-0020	Supplier Quality Manual

Reason for Change

<i>Number shall match Doc Header</i>	<i>When was the change promoted?</i>	<i>Who is promoting the change?</i>	<i>Describe the change made to this document</i>	<i>Explain what triggered the change</i>	<i>Identify positive or negative consequences to the organization</i>	<i>How do you plan to deploy this change and what will be the impact to associated documents?</i>	<i>What group will be responsible to execute this change?</i>
Revision	Date	Initiator	Change Description	Change Purpose	Potential Consequences	Deployment Strategy	Impacted Function
3	8/25/2021	Victor Morales	Add master shipment label	Unique label is used for whole shipment to Mexico for avoid delays in customs brokers and customs audits	Avoid fines or penalties in cross border due to incorrect manual entry	Electronic	SQE

Current