



# Labeling and Packaging

## *Specifications*

This document describes all the labels used on duagon products.  
Furthermore, it describes how the products are packed for shipment.

**duagon AG**  
Riedstrasse 12  
CH-8953 Dietikon  
Phone +41 44 743 73 00  
Fax +41 44 743 73 15

[www.duagon.com](http://www.duagon.com)

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# 1. Labels

## 1.1 Introduction

Labels are used for easy identification of products and materials. Therefore, duagon introduced a labeling system.

For different use, different labels are used. These are as follows:

- Production label for tracing the products during the manufacturing.
- Product identification label for tracing the products and their configuration in the field.

Furthermore, there is an additional identification number on PCBs to allow a full traceability, which is for duagon internal use only (see chapter 1.4).

In the following chapters, the meaning of the labels is explained.

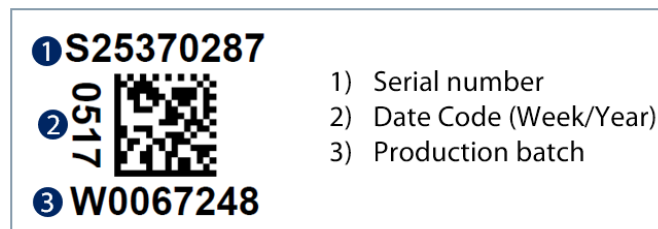
## 1.2 Production label

Each device has its own, unique serial number. This is an 8 digit number, following to the prefix “S”. Normally this number is placed on the top side (solder side) of the board.

The latest version of sticker/ bar code contains the serial number in a bar code – format, which allows to scan all the boards rapidly.

Example of sticker/ bar code:

Latest Version:



Additionally, the production label contains the manufacturing order which start with prefix “W”. This number will be used for the internal traceability as well.

Please note that due to internal processes the number of manufacturing order (W0008605) might be missing on some labels.

Furthermore, also the date code of the product has been integrated which displays the date of manufacturing.

## 1.3 Product identification label

Each duagon product has a product identification label. Depending of the dimension of products and the available space following product identification labels will be used:

- Small product identification label for products with limited space e.g. D017M, D017E, D013, D015M, etc. (see figure 1).
- Product identification label for products with sufficient space e.g. D113, D215, D429, D50x etc. (see figure 2).

Please note that the small product identification label will be used as a standard for all duagon deliveries. However, customers may choose also the product identification label as shown in figure 2 for their deliveries, if sufficient space on the product is available.

**Small product identification label**

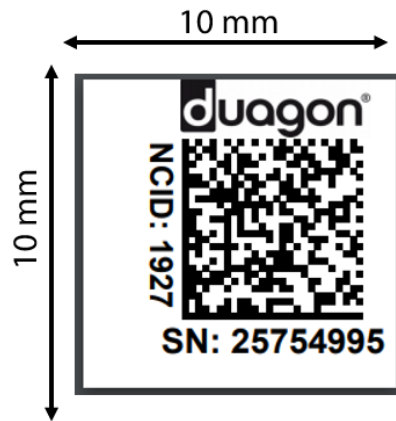


Figure 1: New small product identification label for products with limited space.

The data matrix contains following information:

1518+1927+D113F.T-P4A+24938+5941+AVR80+2575995+None

The meaning of the data matrix is as follow:

DC (week/Year)	NCID (Network component ID)	Product description	HW (Hardware ID)	FW (Firmware ID)	Name of used varnish	Serial number	CPN (Customer product number)
1518	1927	D113F.T-P4A	24938	5941	AVR80	25754995	None

**Product identification label with sufficient space**

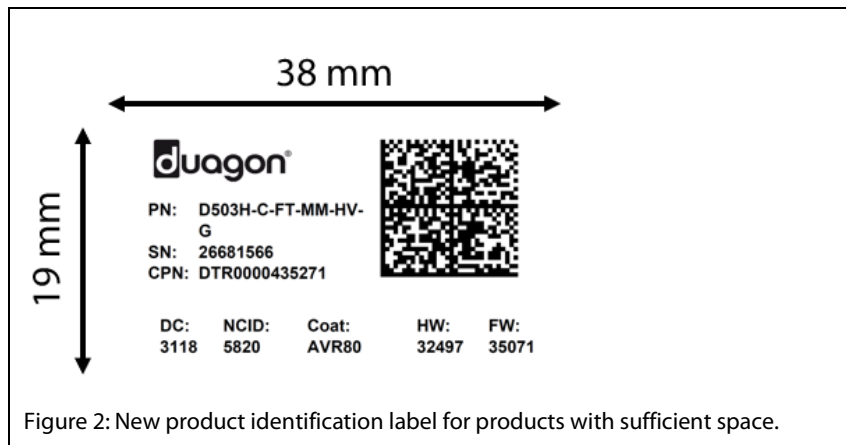


Figure 2: New product identification label for products with sufficient space.

The data matrix contains following information:

3118+5820+D503H-C-FT-MM-HV-G+32497+35071+AVR80+26681566+DTR0000435271

The meaning of the data matrix is as follow:

DC (week/Year)	NCID (Network component ID)	Product description	HW (Hardware ID)	FW (Firmware ID)	Name of used varnish	Serial number	CPN (Customer product number)
3118	5820	D503H-C-FT- MM-HV-G	32497	35071	AVR80	26681566	DTR0000435271

### 1.3.1 Date code (DC)

The date code indicates the date (week/year) of manufacturing of the device.

### 1.3.2 Network component ID (NCID)

The NCID is a unique number which describe the configuration of the device. More precisely the hardware revision and the programmed firmware revision on the device.

### 1.3.3 Product description

The Type of Product shows name of configured product.

### 1.3.4 Hardware ID and Firmware ID

The hardware and firmware ID indicate the revision of the manufactured device and the programmed firmware. The ID is based on the duagon document identification number which is unique.

The identification number has a certain internal structure in order to ease tracking of different documents and the revisions. In general, there are two parts:

Prefix	Document number	Filing number
d	-000310	-001952
Always constant	Specifies a certain purpose of a document with the intention to link several documents with different filing number.  The format is either 6 digits or not available.	Unique number that identifies a particular document. Released in sequential manner as the documents are filed in the archive. A duagon-internal data base contains exactly one document title text for each filing number.  Always 6 digits.

### Example

Identification number	Document Title / Remarks
d-000310-001606	„DXIO data sheet“
d-000310-001952	„DXIO data sheet“ (updated version)  A document, that is updated from time to time: the document number has the purpose to link several versions of the

	<p>„DXIO data sheet" together. The filing number distinguishes between different versions.</p> <p>Please note, that the document number part is kept the same, as long as the basic intention of the early versions is still kept, for example during revisions due to debugging or manufacturing updates.</p> <p>In case a significant change happens, another document number would be applied.</p>
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On the label the filing number is shown. The document number is not visible on the label.

### 1.3.5 Name of used varnish

This indicates the type of used varnish.

### 1.3.6 Serial number

Each device has its own, unique serial number. This is an 8 digit number, following the prefix "S". Further, each activity on the device will be registered in the duagon data base with the serial number and will therefore be used for traceability as well.

### 1.3.7 Customer product number

All customers may add a customer product number on the duagon label. If a customer product number is not defined than the state "none" will be shown on the label (see figure 2).

## 1.4 PCB Identification

The identification number of PCBs is marked on the top copper layer on the board. This number begins always with the prefix „b", and consists always of the syntax  
b-part document number – part filling number.

This number is unique within duagon and can all the time be referred. It represents the revision of the PCB. Further with this PCB number the HW and revision of the board can be identified easily from the duagon data base.

Note: Some products are delivered in a housing. In these cases, you do not have access to the PCB identification.

## 1.5 Traceability of the products and their configuration

All serial numbers are stored in the duagon database. In this database the serial number is linked with

- the production batch
- the programmed firmware (at delivery status only),
- the hardware version including modifications.
- the applied coat

Also, during the life cycle, upgrades and repairs performed in the duagon factory will also be linked to the serial number of the boards.

By these records the traceability (with serial number) is ensured for all duagon products.

## 2. Packaging

The products are packed in two boxes

- Box 1: Shipping box
- Box 2: ESD protective box (if ESD sensitive goods are packed)

The first box (box 1) prevents damages of boards during the transport. And the second box (box 2) protects the boards against ESD. For transport the ESD box (box 2) is packed into a shipping box (box 1, see example shipping box) to increase the protection.

Further, for ESD sensitive products which are shipped in boxes with no ESD protection are covered in ESD bags. Please note that non ESD sensitive boards are packed in shipping boxes only.

In general, the packaging (boxes) prevents damage of the products from

- shock (fall of 1.5m)
- pollution
- protection against ESD (only ESD protective boxes (box 2))

Remark: If the packaging protects against ESD, the package is marked with the following sign.



The packaging does not protect from

- excessive stress /pressure
- humidity

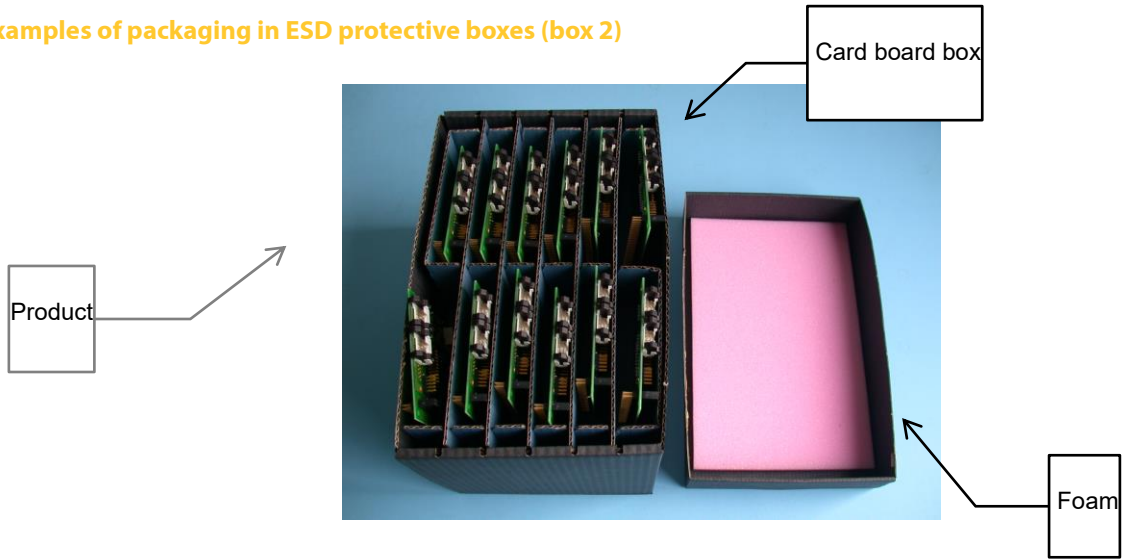
The goods must be transported and stored

- in dry environment (max. 70% RH)
- -20°C + 70°C

The material of the packaging is non-wooden. Normally card board boxes are used as package material.



Examples of packaging in ESD protective boxes (box 2)



## Examples of shipping box (box 1)



## Example of ESD – bag

ESD sensitive products which are shipped in boxes with no ESD protection are covered in ESD bags.




## 2.1 Box labeling

The packages are labeled with a box label showing the following data:

- Suppliers name (duagon)
- Customers address / Customers Order Number / Customers Order date
- Delivery date / Type of product / Quantity of products packed in box
- Box identification number with reference to the duagon delivery note number

Please note that the label will be placed on ESD protective box (box 2), if ESD sensitive boards are packed. Otherwise the box label will be placed on the shipping box (box 1).

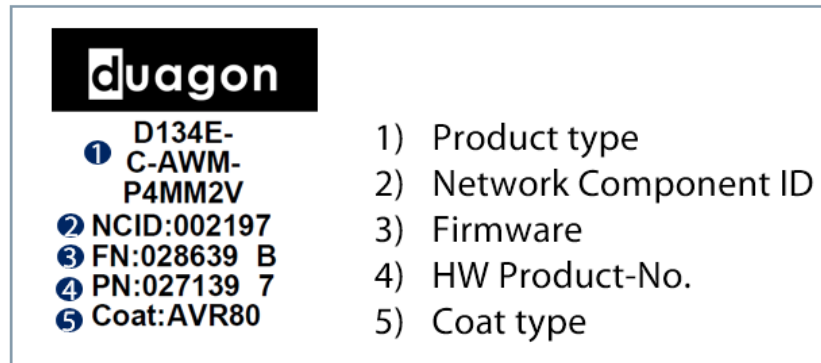
Example of label:

			
duagon AG Riedstrasse 12 CH-8953 Dietikon Switzerland		Recipient <b>Duagon International GmbH</b>	
Package No.:95506		Order No.: E-Mail_DZ_01_of_November_20	
Qty	Product name	NCID	PN
2	D445 Rev.3.0	NCID005852	016611-027083
 95506		<b>D</b> UAGON_INTERNATIONAL 2018-07-30	

## 3. Appendix

### 3.1 Previous product labels

Example:



Example:

**D113LF.T-P4A2L**  
PN: 647 - 002162

Type: D113LF.T-P4A2L

PN: 647 (equal to D113LF.T-P4A2L)

Revision: 2162

Remarks:

- The label size is approx. 30 x 10 mm
- Type specification (same as on the delivery note)
- The Product number (PN) / article number (same as on delivery note)
- The duagon revision Number

### 3.2 Other duagon products

To identify all other products please call duagon by passing the serial number of the product.

## 4. Document history

### d-000778-029375

Several small updates (e.g. picture of box label, etc.)

### d-000778-029375

Update product identification label

### d-000778-018652

Update product identification label and packaging

### d-000778-002424

First release