# UID Format Verification

## UID policy

The Department of Defense defines the UID number as:

- The set of data for tangible assets that is globally unique and unambiguous, ensures data integrity and data quality throughout life, and supports multi-faced business applications and users.

**The UID applies to:**

- Items >/= $5,000
- Items < $5,000 as directed by requiring activity
- Subassemblies, components and embedded items
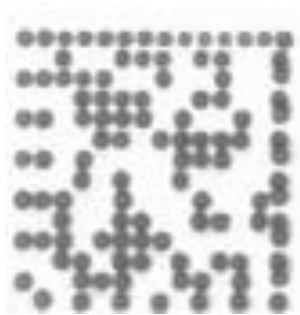- Commonly accepted commercial marks

**Sample UID:**

- Symbol contrast – lets the user know if contrast settings are less than acceptable.

(12V)194532636

(1P)1234

(S)786950

# UID number format

Example of UID  number constructed by an imager:



**Encoded Data:**
[)>{RS}DD{GS}CAG987654{GS}SERMKLJHUIYD{RS}{EOT}

**Constructed UID Number:**
D987654MKLJHUIYD

Eliminates the need for custom programming.

# UID mode features

- The MS-Q's UID mode provides the following features:

**UID-Only Enabled**

Allows the MS-Q to read UID data strings encoded on ECC 200 Data Matrix symbol and to send the UID numbers to the hose computer. The imager will not read any other symbol data when UID is enabled.

**UID-Only Enabled with Error Messaging**

Allows the MS-Q to recognize and decode only UID symbols. In addition, the imager will send an error message to the host if the UID format is incorrect.
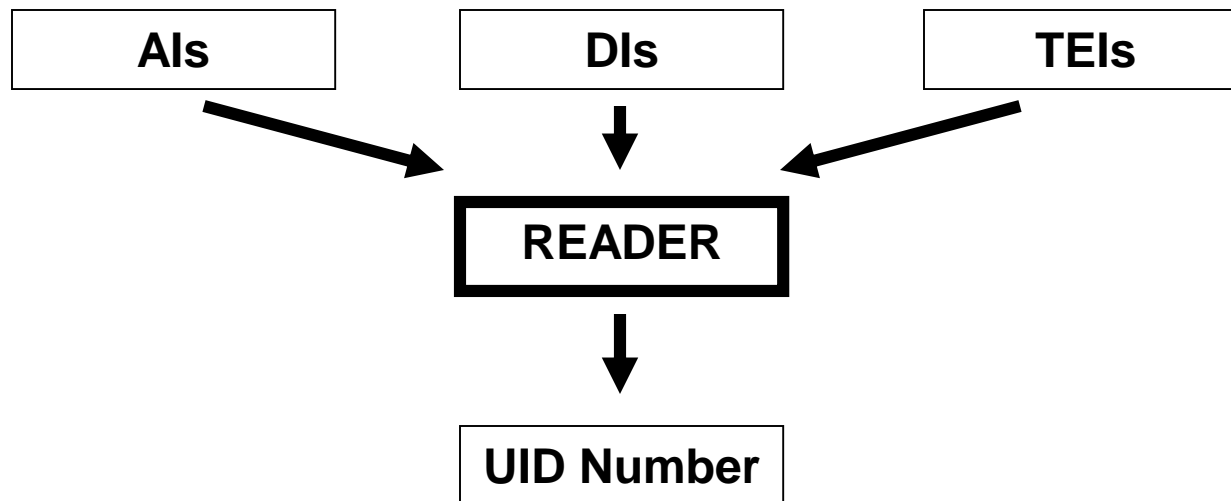
**UID Enabled with Pass Through**

Allows both UID-encoded symbols and non-UID symbols to be decoded and sent to the host.

**UID Enabled with Error Messaging and Pass Through**

Allows the MS-Q to decode UID symbols and non-UID symbols, and to provide error messages if UID format is incorrect.

**All of these formats can be used**

Hardware solutions are available that can construct the UID number from any of these identifiers

| AIs | DIs | TEIs |
|:---:|:---:|:----:|

READER

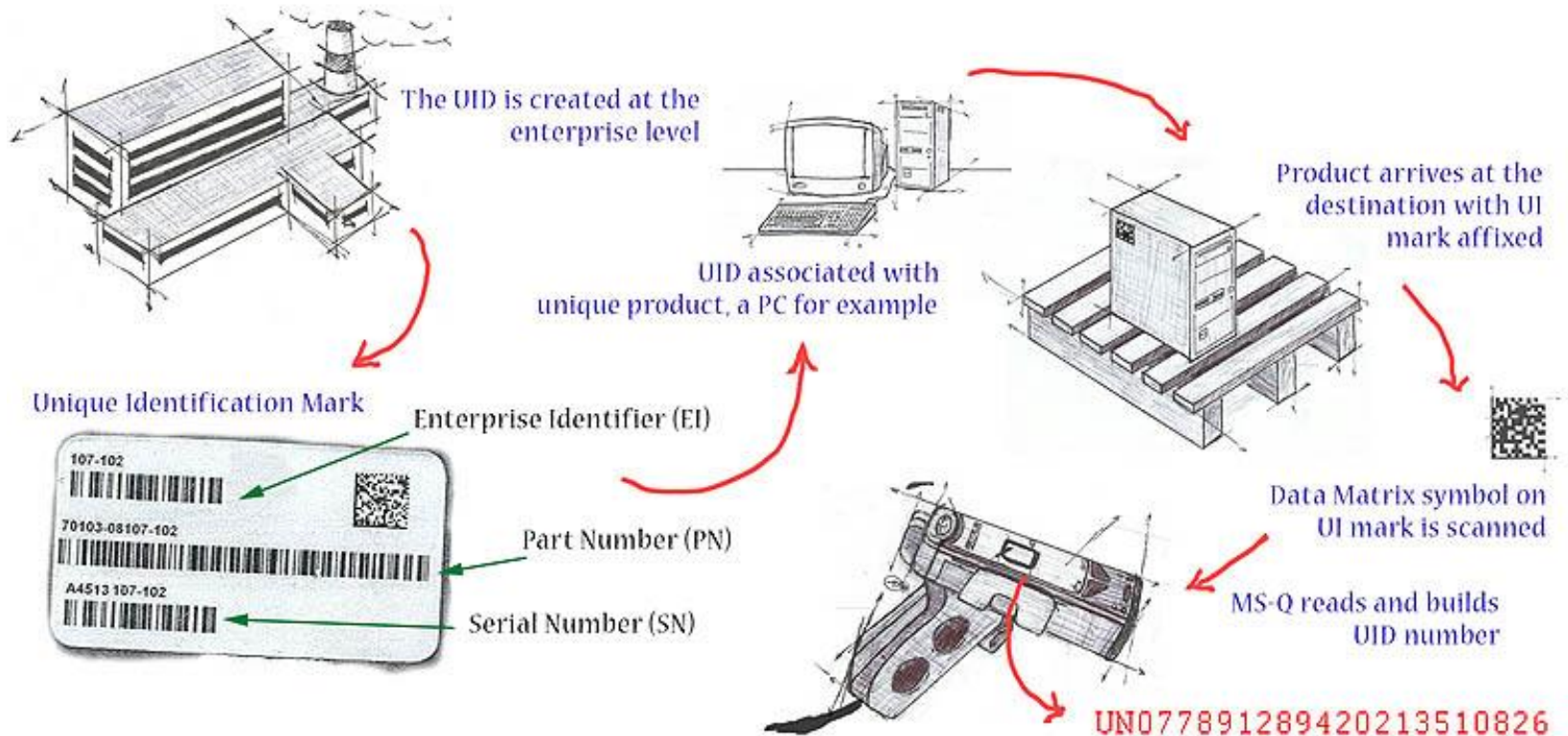UID Number

## UID format verification

- The MS-Q provides suppliers with UID format verification

    - Software enables the DoD supplier to scan their UID symbols and verify that the information is in the correct format:

    - If the format is incorrect, the MS-Q will generate an error message, stating the symbol is a bad UID symbol and the reason why it violated the specification.

    - Error Messaging covers the following:
        - Invalid preamble
        - Invalid format
        - Invalid AI
        - Invalid DI
        - Invalid TEI
        - Spaces
        - Lower case characters
        - Invalid characters
        - UID too long
        - Part number too long
        - Serial number too long
        - EID number too long

# MS-Q works throughout the DoD supply chain



The UID is created at the enterprise level

UID associated with unique product, a PC for example

Product arrives at the destination with UI mark affixed

Data Matrix symbol on UI mark is scanned

MS-Q reads and builds UID number

Unique Identification Mark

107-102

70103-08107-102

A4513 107-102

Enterprise Identifier (EI)

Part Number (PN)

Serial Number (SN)

UN07789128942021351 0826

## More information

- If you would like further information about UID or direct part marking, we recommend you view the additional seminars in the DPMI series, such as ***Factors that Determine Symbol Readability***.

- If you have questions regarding the MS-Q and reading UID codes, send us an e-mail to [training@microscan.com](mailto:training@microscan.com)