

---

# Barcode Generation Showcase

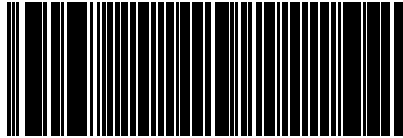
Complete Guide to 1D and 2D Barcodes

---

# Code 128 - Universal 1D Barcode

Code 128 is the most commonly used 1D barcode. It can encode all ASCII characters and is widely used in shipping, packaging, and inventory management.

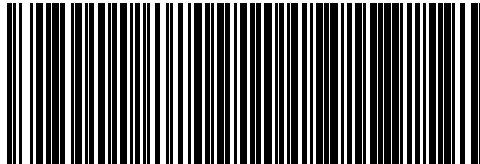
## Product SKU:



PROD-2024-XYZ-12345

CODE128

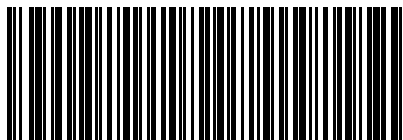
## Shipment Tracking:



1Z999AA10123456784

CODE128

## Serial Number:



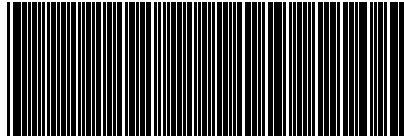
SN-A1B2C3D4E5F6

CODE128

# Code 39 - Industrial Standard

Code 39 supports alphanumeric characters and is commonly used in automotive, defense, and healthcare industries.

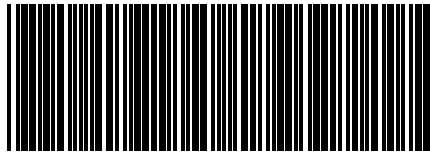
## Asset Tag:



ASSET-2024-001

CODE39

**Equipment ID:**



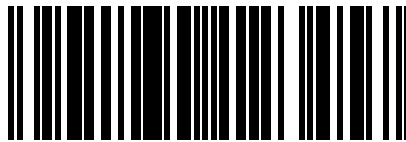
EQ-MFG-789

CODE39

## EAN-13 - European Article Number

EAN-13 is the standard barcode for retail products worldwide. It encodes 13 digits and includes country code, manufacturer code, and product code.

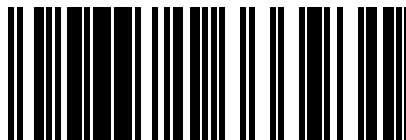
**Consumer Product:**



5901234123457

EAN13

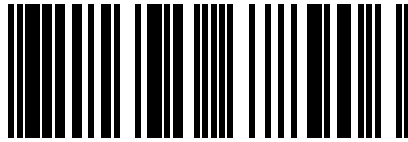
**Electronics Item:**



4006381333931

EAN13

**Food Product:**



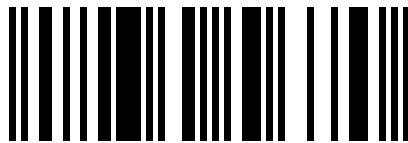
8712345678906

EAN13

## EAN-8 - Compact Product Code

EAN-8 is used for small products where EAN-13 would be too large. It encodes 8 digits.

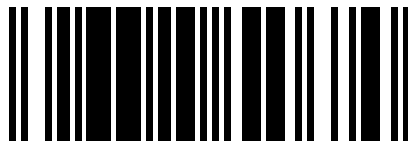
### Small Package:



12345670

EAN8

### Travel Size:



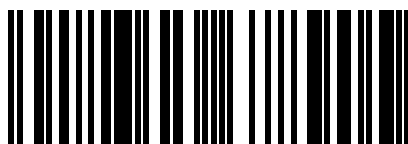
96385074

EAN8

## UPC-A - Universal Product Code

UPC-A is the standard retail barcode in North America. It encodes 12 digits.

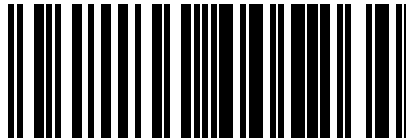
### US Product:



012345678905

UPC\_A

### Grocery Item:



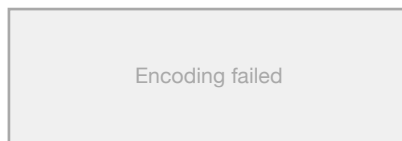
042100005264

UPC\_A

## UPC-E - Zero-Suppressed UPC

UPC-E is a compressed version of UPC-A for small packages. It encodes 6 digits that expand to 12.

### Compact Product:



123456

UPC\_E

## ITF - Interleaved 2 of 5

ITF is used for shipping containers and cases. It's commonly seen on corrugated cardboard boxes.

### Carton Code:



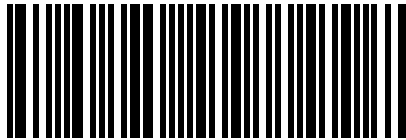
12345678901234

ITF

## Codabar - Healthcare & Libraries

Codabar is used in blood banks, libraries, and package tracking. It supports digits and a few special characters.

### Library Book:



A1234567B

CODABAR

## QR Code - Quick Response Code

QR codes can store large amounts of data including URLs, contact information, and structured data. They support error correction levels L, M, Q, H.

### Website URL:



<https://github.com/casoon/renderreport>

QR\_CODE

### Product Information:



PRODUCT:XYZ-123 | PRICE:\$99.99 | MFG:2024-03-15

QR\_CODE

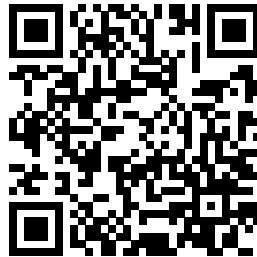
### Contact Card (vCard):



```
BEGIN:VCARD  
VERSION:3.0  
FN:John Doe  
TEL:+1-555-0123  
EMAIL:john@example.com  
END:VCARD
```

QR\_CODE

### WiFi Configuration:



```
WIFI:T:WPA;S:MyNetwork;P:SecurePassword123;;
```

QR\_CODE

## Data Matrix - Compact 2D Code

Data Matrix is a very compact 2D code often used in electronics manufacturing, pharmaceuticals, and small item tracking.

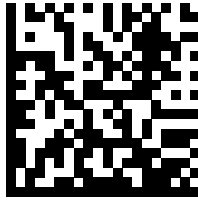
### Component Serial:



```
COMP-2024-SN-987654321
```

DATA\_MATRIX

### Batch Number:



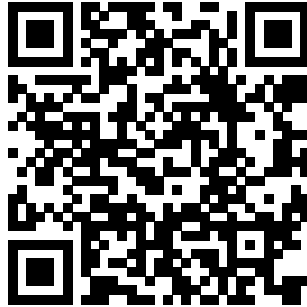
BATCH:A123|EXP:2025-12-31

DATA\_MATRIX

## 2D Codes - Real-World Applications

2D barcodes are widely used for inventory, logistics, and digital interactions. Here are practical examples with QR Code and Data Matrix formats.

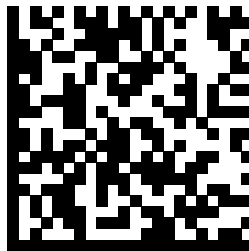
### Event Ticket:



TICKET:EVT-2026-0317|SEAT:A12|GATE:3|TIME:19:30

QR\_CODE

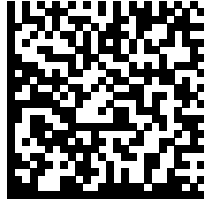
### Pharmaceutical Package:



NDC:12345-678-90|LOT:X42B|EXP:2027-06

DATA\_MATRIX

### Asset Tag:



ASSET:LAP-2024-0891 | DEPT:ENG | PURCHASED:2024-03-15

DATA\_MATRIX