

DATASHEET

# EXPERT BARCODE SCANNER SDK

for Smartphones, Robots, Drones and Cameras



Viziotix

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



# FAST AND POWERFUL



Highest scan success rates ensure success of automation, robotics, and all smart-device projects;



Fast and powerful **Smart-Findr** location algorithm to **find every barcode** in milliseconds;



Unlimited barcodes decoded per image with **Maxi-Scan** option;



Scans blurred and high density barcodes with sub-pixel resolution via our optional **Nano-Scan** algorithm;



Scans poor quality and damaged codes;



Supports all key 1D and 2D barcode symbologies. Any orientation;



Works on all common image formats.

The Viziotix Barcode SDK provides the tools to easily integrate enterprise-grade barcode scanning into your product software stack or application.

Robots, drones, fixed industrial cameras, mobile devices, and any other smart-camera device can be used to scan barcodes.

Linux, Windows, Android and iOS are supported on x86 and ARM architectures.

Powerful location finding with **Smart-Findr** to capture every code, even in large image files, and **Maxi-Scan** to decode them.

Additionally, the **Nano-Scan** algorithm provides sub-pixel resolution for extended range scanning and decodes barcodes that are out of focus or have excessive movement blur.

The barcode SDK locates and scans barcodes in an image in milliseconds, returning the decoded data and associated barcode information.

This software is for use in **professional products and services**. Continuous development provides regular, improved releases and it is fully supported by the Viziotix team.



# HIGHEST SCAN SUCCESS

## Symbologies

### 1D Barcodes

UPC-A/UPC-E, EAN-8/13, JAN-8/13  
 GS1 Databar (all models)  
 Code 128/ GS1-128  
 ISBT128  
 Code 39 (Std and Full ASCII)  
 Interleaved 2of5  
 ITF-14  
 Code 93

Codabar  
 MSI Plessey  
 Code 32 (Italian Pharmacode)

### 2D Barcodes

QR Code  
 Data Matrix/DMRE/GS1 Data Matrix  
 Aztec Code  
 PDF417

## Requirements

- ✓ Operating Systems Supported: Android, iOS, Linux and Windows;
- ✓ C/C++, SDK C#, Python, Java, Swift;
- ✓ CPU: ARM, ARM 64, X86, X86\_64;  
GPU: Supported and optimized for NVIDIA;
- ✓ Camera: All camera types supported (Industrial cameras, Mobile Devices, Camera Modules, Fixed and Auto-focus);
- ✓ Image Formats: Most common formats supported for Demo App. For maximum performance use uncompressed image formats (RAW);
- ✓ Resolution: sub-pixel resolution (Nano-Scan algorithm) provides excellent performance on all camera and image sizes. 720p and up will increase scan range;
- ✓ Scanning substrates: Labels, Laser Etched, Screens – even on difficult to read or damaged barcodes and out-of-focus images.

Scans Blur and Low Res Images:



## Specifications

- ✓ Scan Distance: Extended range with sub-pixel resolution. Example: Code 128 15mil: up to 72cm. Exact range depends on code and camera resolution;
- ✓ Rotation: 360 degrees;
- ✓ Scan Angle (code 128) : Pitch: +/- 77°; Roll (Tilt): +/- 360°; Skew (Yaw): +/- 66°;
- ✓ Decode speed: Down to 5ms (depending on CPU, image size and contents);
- ✓ Damaged Codes: Algorithms for blur, glare, physical damage, etc.

## Assets

### Mobile Demo App

"VIZIOTIX BARCODESCAN DEMO"



### Desktop Demo App



Download Free Trial

[www.viziotix.com/tree-trial](http://www.viziotix.com/tree-trial)



# TEST BARCODES

## 1D Barcodes

EAN-13



EAN-8



UPC-A



UPC-E



Code 128



Code 39



Interleaved 2/5



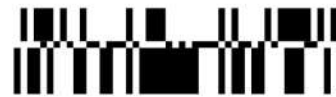
ITF 14



GS1 Databar



GS1 Databar Stacked



## 2D Barcodes

QR Code



Data Matrix



Aztec Code



PDF417

