Viziotix Barcode Scanning SDK

The Viziotix barcode scanning SDK is a professional decode library designed to enable high-performance, accurate barcode scanning in critical and demanding enterprise applications.

Benefits

- ✓ Highly accurate, fast software scanning optimized for automation/ robotics platforms with large images with many barcodes;
- ✓ Single, 5 or unlimited codes in the image with **Multi-scan** or **Maxi-Scan** options;
- ✓ Any orientation ;
- ✓ Supports all key 1D and 2D barcode symbologies;
- ✓ Scans poor quality and damaged codes;
- ✓ Sub-pixel resolution via our **Nano-Scan** algorithm provides extended range and scans out-of-focus and small (high-density) codes;
- ✓ Works on all common image formats.

Features

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

The library supports any camera on fixed or mobile devices, including robots, drones, fixed industrial cameras and mobile devices.

Both Linux and Windows 10 OS are supported on x86 and ARM architectures.

Powerful scanning of all common 1D and 2D barcodes with either single or many codes in the image (**Multi-Scan** and **Maxi-Scan** modes for more than one code in the image).

In addition, The **Nano-Scan** algorithm provides sub-pixel resolution for extended range scanning and to decode codes that are out of focus or with movement blur.

The SDK is designed to locate and scan barcodes in an image in milliseconds and return the decoded data and barcode information.

The software has been developed for professional products and services with continuous development and support from the Viziotix team.

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Symbologies

1D Barcodes
UPC-A/UPC-E, EAN-8/13, JAN-8/13
GS1 Databar (all models)
Code 128/ GS1-128
Code 39 (Std and Full ASCII)
Interleaved 2of5
ITF-14
MSI Plessey
Code 32 (Italian Pharmacode)

2D Barcodes
QR Code
Datamatrix/DMRE/GS1 Datamatrix
Aztec Code
PDF417

Requirements

- Operating Systems Supported: Linux Ubuntu, Windows 10. Other OS under development;
- 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.

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

- Viziotix Demo Program for Windows – allows simple testing of images or cameras on a desktop test bench;
- Viziotix SDKs for Windows and Linux:
  - C/C++
  - SDK C#
  - SDK Python
- Support Plans available on request.

About Viziotix: we are a team with over 60 years combined experience in Computer Vision and Barcode Scanning. We have developed scanning software and hardware products for industry leaders in data capture. These products are used by major corporations worldwide for their critical line of business applications in retail, logistics, transportation and healthcare. Contact us for further information and demo tools. **contact@viziotix.com; www.viziotix.com**

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