

# ZEBRA Frontline AI Enablers

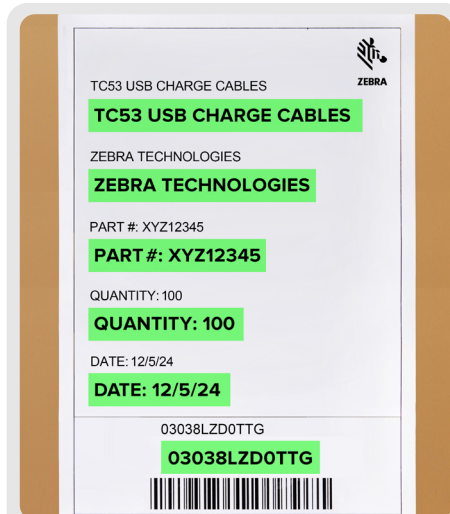


Augment your Zebra mobile devices with advanced AI tools that empower frontline workers to complete tasks faster, easier, and more accurately with the Zebra Frontline AI Enablers, a key component of Zebra's Frontline AI Suite. These tools provide the building blocks you need to rapidly and cost-effectively develop high performance AI vision applications on Zebra mobile computers. Eliminate manual steps in

your workflows to boost operational and workforce efficiency with trained models in the AI Data Capture SDK, plus ready-to-use sample applications and Application Programming Interfaces (APIs). Now you can develop and deploy AI vision applications in days instead of months—significantly accelerating time to market and your return on investment.



**Barcode Localizer**



**Text-OCR Recognizer**



**Shelf and Product Localizer**



**Feature Extractor**



**Product Recognizer**

**Simplified  
development of  
high performance  
enterprise AI  
applications for  
your Zebra mobile  
computers**

# AI Data Capture SDK

## Save time and money with trained models

Proprietary trained models make it easy to leverage the power of AI in enterprise applications in a wide variety of markets and industries. Trained AI models eliminate the high cost of: cloud solutions; the substantial time required to train the custom models; the need for highly skilled, experienced AI developers; and the resources required for training—such as hundreds of thousands of barcodes and images. The models include Barcode Localizer, Text-OCR Recognizer, Shelf and Product Localizer, Feature Extractor and Product Recognizer.

### Trained AI models



#### Barcode Localizer

Detects 1D and 2D barcodes in an image, eliminating the need for workers to scan individual barcodes. The localizer draws a bounding box around the barcodes on products, labels, parcels and shelf tags in the image, then the barcodes are decoded and tracked in the Barcode Analyzer sample application. This model can be utilized to enable inventory counts, locate a misplaced item and more, all with a single image capture or via video frames.



#### Text-OCR Recognizer

Detects and recognizes any text or characters in an image and decodes the text into words with extreme accuracy. Supports a wide variety of fonts, font sizes, text orientation and lighting conditions.

## Product and Shelf Recognizer

The following three components work together to provide the complete capability of identifying shelves, pegboard hangers, and the labels and products on the shelves.



## Shelf and Product Localizer

Instantly detects all the products, shelf labels, peg labels and shelf facings in a single image. This flexible model can adjust to various reading distances accommodating different store sizes and layouts. It can assist with identifying products that need to be restocked, are priced incorrectly, are on the wrong shelf and more.



## Feature Extractor

Extracts and stores key descriptors of products in a database to enable the Product Recognizer model to identify products in an image.



## Product Recognizer

Finds and recognizes products on shelves—a capability that can help locate an item, determine what items need restocking, recognize and ring up items at a Point of Sale (POS) and more.



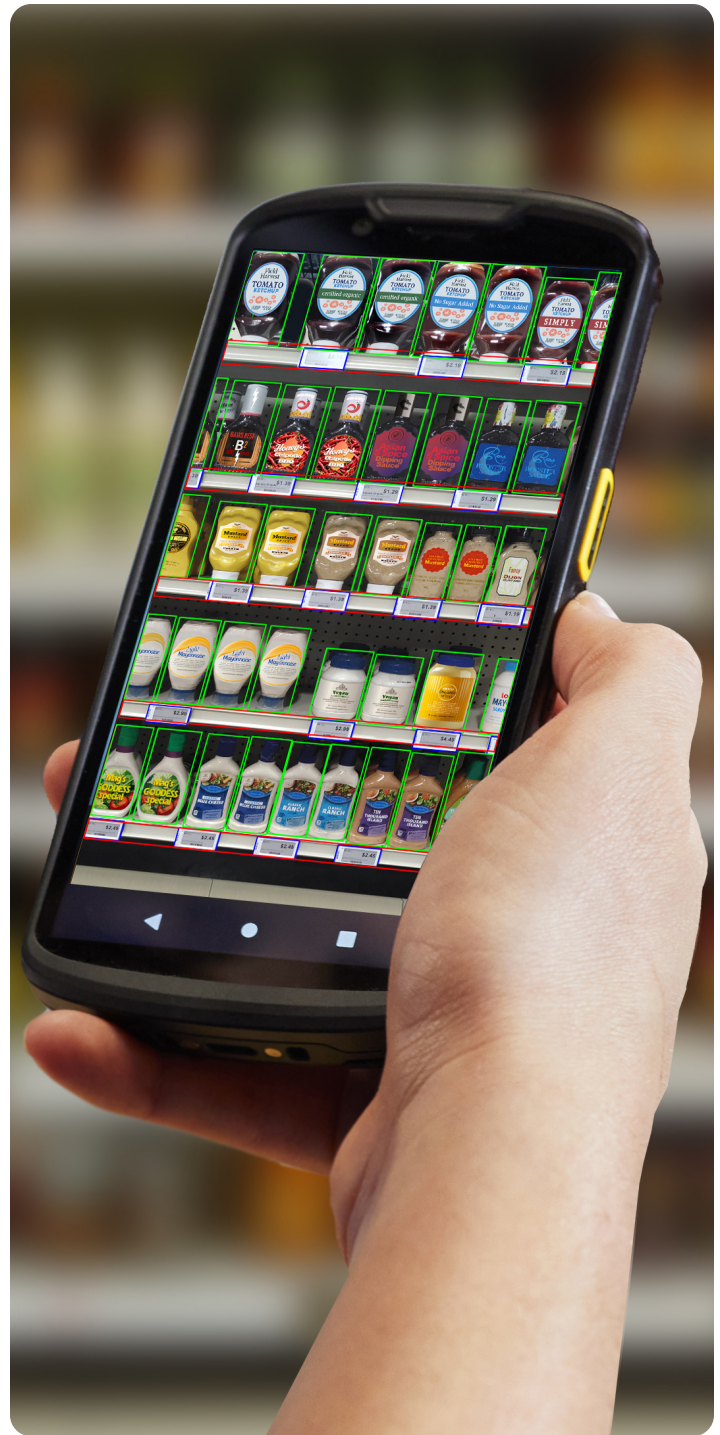
# Sample Applications and APIs

## Take development speed to the next level with sample applications and APIs

Zebra has further refined the AI models into sample applications that can be used to turbocharge application development. This library of sample apps features typical enterprise use cases that can be utilized as standalone apps or integrated into a larger, more fully-featured app. For example, one sample app identifies all the barcodes in an image and highlights which barcodes require a worker to take action—enhancing inventory counting, picking workflows and more. The Application Programming Interfaces (APIs) make it easy to add AI vision capabilities into any line of business app, opening a world of possibilities to streamline just about any business process.

## Why Choose the Zebra Frontline AI Enablers for your AI application development needs?

The Zebra Frontline AI Enablers make it easy to streamline workflows to improve productivity for retail and warehouse workers, delivery drivers and more. Unlike open-source generic models, the Zebra enablers are optimized for real-world enterprise applications, putting you ahead of the curve. And since the Zebra Frontline AI Enablers are designed specifically for Zebra mobile computers, you can count on the AI apps you develop to deliver maximum performance on Zebra mobile devices.



Unlock the potential of your frontline workforce with the **Zebra Frontline AI Enablers** to optimize workflows, streamline processes and simplify complex tasks.

For more information, visit [www.zebra.com/ai](http://www.zebra.com/ai)



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