Software Decode Library

Save space and power while reducing costs with software decode

When you choose Zebra's 2-D imaging engines to enable barcode scanning and image capture in your products, Zebra's SDL can help you improve your product designs and lower component cost. Since SDL connects the Zebra 2-D imaging engine directly to your host device central processing unit (CPU), the need for decode hardware is eliminated—the decode function is built right into the host device software. SDL provides the same industry-leading algorithms used in Zebra hardware decoders, so your customers get the first-time every-time easy capture of data that has made Zebra the leader in the barcode industry.

And since you no longer need to allocate space for decode hardware, you can easily integrate Zebra's best-in-class image capture into your most space-constrained product designs

Integrated with Host Device Software
Zebra's flexible SDL API allows for simple scanning control, making any application on your device scanning-enabled. And because this is a software-only solution, you have the flexibility to easily update drivers to meet your evolving product designs.

Support You Can Count On
When you choose the Zebra SDL, you get the support you need. Complete documentation thoroughly covers engine hardware and SDL, providing a strong knowledge base for development engineers. And Zebra's engineering resources are available and ready to support your development and integration questions and support needs.

How Does the SDL Work?
When users capture an image of a barcode using the Zebra imaging engine, the image is loaded into the host processor's memory via the camera driver. Then, SDL accesses the image for decoding, ultimately reporting any decoded data up to a scanning application. The SDL works with the I2C driver to handle bidirectional command and control of the imaging engine. This decode solution is 100 percent software—there is no decode hardware required.

Zebra SDL in Action

Less Hardware, Less Power and Less Required Space = Less Cost
Less hardware to purchase means better product margins. Since decoding no longer requires any hardware, you can preserve power for other operations and extend operating cycle times on a single battery charge.

Start reaping the benefits of Zebra's software decode solution today.
For the latest support and specifications please visit www.zebra.com/softwaredecode

SDL Components

Libraries
Contains image processing software and command interpretation; interface between hardware drivers and users

• Provides an API for full access and control of the scanning function
• Provides a single point of contact for all scanning interaction

Reference Drivers
Provides communication between the processor and scan engine; these low-level drivers for I2C and camera acquisition are:

• Provided as source code for easy customization
• Based on industry reference platforms to further simplify integration

Sample Applications
Sample applications are provided as source code and binaries:

• Sets a starting point for custom application development
• Greatly simplifies the debugging process by enabling easy testing