ZEBRA DS6707-HD:

Optimize throughput and quality in electronics manufacturing with versatile solution for multiple data capture applications

The DS6707-HD accurately captures 1D/2D bar codes and The complete set of high density marks common in component manufacturing, such as laser etched, ink marked, chemical etched and inkjet marks — all with a single device.

THE CHALLENGE

As electronics manufacturers look to stay competitive, reduce costs yet meet production demands, significant attention has been placed on streamlining and optimizing the manufacturing process. Bar code and automated data capture technology have long been used to keep assembly lines moving, ensure the right part is used at the right time and trace parts throughout the assembly line for better inventory management and quality control.

However, there are unique challenges in the electronic component assembly environment. While larger printed circuit board (PCB) assemblies may have ample space to accommodate standard 1D and 2D bar code labels, space is often at a premium on semiconductor components and smaller PCB assemblies. In order to enable tracking of parts during the assembly of smaller components, semiconductor and electronics component manufacturers often apply a bar code mark directly on the substrate, ink swatch, molding compound, protective cover/lid or even on the exposed silicon itself.

The resulting mix of bar codes found in these environments often forces manufacturers to purchase multiple scanners per employee – 1D/2D bar code scanners as well as high resolution fixed mount scanners. The costs of purchasing, managing and maintaining multiple devices impacts the bottom line – not to mention the productivity loss created when employees need tostop and find the proper device for each task.

By nature, electronics manufacturing is a demanding environment for data capture. Issues such as low contrast bar codes marked on semiconductor components or PCB assemblies, the lack of natural lighting and a high number of dirty and damaged bar codes all pose unique challenges to obtaining successful first time reads of small, high density bar codes. In this taxing environment, workers often have to scan a given bar code multiple times to obtain a proper reading or even go through the effort of finding a replacement bar code label, which adds to production time — potentially reducing throughput and profitability.

KEY BENEFITS

Fewer devices to purchase and manage – reduces capital and operational expenses

Improves product quality – and customer satisfaction

Increases assembly line throughput and productivity

Provides real-time visibility into inventory levels

Reduces training requirements

Helps ensure high performance in the extreme conditions of the manufacturing floor

The solution: DS6707-HD — automate electronic component assembly with versatile and affordable scanning

The flexible DS6707-HD provides electronics manufacturers with a single affordable device capable of reading virtually every type of bar code used in electronic component assembly, bringing a new level of cost-efficiency and accuracy to electronics manufacturing. Workers are more productive and assembly accuracy is improved, leading to more cost-efficient manufacturing operations and increased customer satisfaction — a valuable edge in this highly competitive market. And one multi-function device replaces many — the enterprise no longer needs to purchase and manage multiple devices to enable the capture of different types of data.

Designed to address the unique challenges in electronics manufacturing, the DS6707-HD can accurately capture 1D, 2D and a complete set of high density marks common in component manufacturing, such as laser etched, ink marked, chemical etched and inkjet marks. In addition, the device is fine-tuned for the high density and low contrast marks common in electronics manufacturing environments, including black bar codes on white backgrounds, white bar codes on black backgrounds and etched bar codes with very low contrast tone-on-tone effect – where there is very little difference in color between the mark and the background material on which it is printed.

Improve product quality without affecting throughput

With a rich feature set optimized for electronic component assembly, the DS6707-HD automates and error-proofs data capture on the manufacturing floor. Workers can use the same device to quickly and accurately capture codes – including a laser-etched mark on a protective lid of a microprocessor, an ink-marked code on the molding compound of a semiconductor chip, such as a Flash

memory chip, or a printed label on a PCB assembly. Now, regardless of which type of data marking technologies are in use, this versatile device ensures that each part will be scanned and verified prior to assembly. Product quality is significantly improved, along with customer satisfaction. Production levels remain high as workers can continue scanning parts, components, boxes and more without interruption. The integrated high-resolution image sensor in the DS6707-HD allows workers to easily document damaged parts, sub-component assemblies and more at the touch of a button. And the digital image gives management undisputable proof of quality issues without any significant impact on either assembly times or worker productivity.

Designed for ease of use, the DS6707-HD delivers true point-and-shoot performance for all bar code symbologies. A viewfinder helps ensure accurate first-time aim, even for novice users. The omni-directional scan pattern allows marks to be presented at any angle. And Zebra's high-performance scanning technology enables accurate capture of bar codes, regardless of whether they are dirty, damaged, very dense or low-contrast tone on tone – so scanning throughput and productivity remain high, even in the most challenging data capture conditions.

Using its optional stand, the DS6707-HD can also be used in hands-free mode, allowing workers to effortlessly move parts in range of the scanner while still providing the flexibility to pick up the scanner at any point to scan a box or other item. This ability to dynamically switch back and forth between handheld and hands-free mode maximizes worker productivity and application flexibility — and is especially handy for tiny parts.

Improve inventory management

Beyond improved product quality, tracking parts throughout the manufacturing process also enables tighter inventory control. As workers scan each part and component as they're utilized, those parts are

instantly deducted from inventory. The resulting real-time inventory visibility ensures that orders are placed in a timely manner to avoid costly out-of-stock conditions that can bring the entire production line to a grinding halt. In addition, visibility into the inventory levels of the stock on hand at assembly line stations helps ensure prompt replenishment of parts, again protecting throughput and productivity on the production line. And lastly, the real-time usage information enables manufacturers to better plan for just-in-time inventory management, increasing inventory turns and reducing inventory carrying costs — improving overall profitability.

Cost-effective solution that delivers the right return on investment (ROI)

The DS6707-HD combines the advanced performance and proven reliability of Zebra scanner solutions with the versatility to capture 1D and 2D bar codes, digital images and the high density marks common in electronics manufacturing. This single device provides all the data capture functionality workers need on the electronics assembly line – including the ability to scan virtually any part and electronically document damaged parts. Merging the functionality of three separate devices into one affordable scanner significantly reduces the capital and operational costs typically associated with automating data capture on the assembly line. And with only one device to manage, IT is free to focus on key strategic business initiatives.

For more information on how the multiple data capture options of the DS6707-HD can benefit your manufacturing operations, please visit us on the Web at www.zebra.com/DS6707HD, access our global directory at www.zebra.com/contact or contact your local Zebra authorized partner.

ABOUT ZEBRA

Zebra Technologies Corporation is a global leader respected for innovation and reliability. Zebra offers an extensive range of asset-tracking technologies incorporating mobile computing, data capture, barcode, wireless LAN, RFID, location systems and Zatar™, the cloud-based Internet of Things (IoT) platform. These technologies make businesses as smart and connected as the world we live in. Zebra's tracking and visibility solutions transform the physical to digital, creating the data streams businesses need in order to simplify operations, know more about their business, and empower their mobile workforce.

Zebra's products and solutions are used around the world by industries including healthcare, retail, transportation and logistics, manufacturing and sports—for a variety of applications from improving patient safety; to eliminating checkout lines with mobile devices; to streamlining warehouse operations and adding a new dimension to professional sports and entertainment with real-time information.

Company Name
Address 1
Address 2
City, State, Zip
www.xxxxxxxxxxx.com
Phone: 888.555.1212
555.555.1212
Fax: 555.555.1212

Channel Identifier
Additional Line
Additional Line

www.zebra.com

ZEBRA