UNIQUE MICRO DESIGN

Application Note 104

Bar Code Reading Technology available from UMD.

This application note details available bar code reading technology from Unique Micro Design (UMD).

What is CCD technology?

Charge coupled device (CCD) image sensors are essentially single line TV cameras. As they are completely solid state with no moving parts, they prove to be very reliable. With the image being scanned electronically, reading is accurate and instantaneous.

CCD scanners are good in applications where the least reaction to the technology is required from customer or user. They require the least maintenance and operator training of all the bar code reading technologies.

Traditionally CCD Scanners must be touched to the barcode for it to be read. However, with developments made in this technology in recent years, barcodes can be read, with some CCD Scanners, at distances of upto 35 cm away.

What is Laser barcode reading technology?

Laser barcode readers use a solid state Visible Laser Diode (VLD), reflecting off a moving mirror or prism, to project a line or pattern across the barcode. The reflection from the laser crossing the barcode is read onto a sensor, providing an image of the barcode suitable for decoding.

Hand held Laser scanners generate a single visible line across a barcode once a trigger is pressed on the scanner.

Fixed mount Laser scanners project a pattern of between 1 and 50 lines. When one of these lines passes across the full barcode, the reflected image can then be decoded.