

# Cpw shining white light onto the object and

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CPW Flatbed Input Devices 16BCE056 What are flatbed input devices?

Flatbed Scanners are commonly known as reflective Scanners as they work by shining white light onto the object and reading intensity of reflected white and other light, they work by line by line and they are mostly used for scanning prints or other flat materials.

-They are better as they can scan larger size of image mostly they are used to scan A4 size. -They are more cheaper than other Scanners a color flatbed scanner can be bought under 120\$. -They are connected to computer via universal bus connection.

-Some of these Scanners can be connected to computer network so that they can be connected to multiple computers simultaneously. Types of flatbed Scanners - CCD Scanner - CIS Scanner - Hand Scanner - 3-D Scanner - SmartPhone Scanning apps

CCD Scanner It is a charged coupled device. It uses powerful lenses, mirrors, glass plates, control circuitry etc. It is highly accurate scanner and great image depth. It requires high power, it has complex structure, high maintenance cost. CIS Scanner CIS stands for contact image sensing scanner. Instead of using single lens it uses array of photo sensors connected by software in order to scan the image, the light reflected by each sensor will be stored inside photodiode and thus scanned image is formed. It requires less power, it is compact in size. But scanned image will not have greater depth this can be improved by using powerful softwares.

Hand Scanners Hand Scanners are used for scanning a large image the scanner is rolled on the scanner and then the clock pulse is generated to synchronize it with computer but hand scanners require high accuracy some

the hand scanners do have a window to view scanned image. 3-DScanner3-DScanners are used in industries, design engineering, reverse engineering, modelmaking they work as hand scanner but the image produced by them also have higher depth effect SmartPhone Scanning apps They are classified in 3 major categories Document Scanning apps : Produce pdf files Image Scanning apps : Produce . jpeg files Qrcode Scanning apps: Used to search and scan qr codes.