

# [Cpw shining white light onto the object and](https://assignbuster.com/cpw-shining-white-light-onto-the-object-and/)

[Engineering](https://assignbuster.com/essay-subjects/engineering/)

CPW FlatbedInput Devices16BCE056  Whatare flatbed input devices? FlatbedScanners are commonly known as reflective Scanners as they work by shiningwhite light onto the object and reading intensity of reflected white and otherlight, they work  by line by line and theyare mostly used for scanning prints or other flat materials.

-Theyare better as they can scan larger size of image mostly they are used to scanA4 size.-Theyare more cheaper than other Scanners a color flatbed scanner can be boughtunder 120$.-Theyare connected to computer via universal bus connection.

-Someof this Scanners can be connected to computer network so that they can beconnected to multiple computers simultaneously. Typesof flatbed Scanners-CCDScanner-CISScanner-HandScanner-3-DScanner-SmartPhone Scanning apps CCDScannerItis a charged coupled device. Ituses powerful lenses, mirrors, glass plates, control circulatory etc. Itis highly accurate scanner and great image depth. Itrequires high power, it has complex structure, high maintenance cost. CISScannerCISstands for contact image sensing scanner. Insteadof using single lens it uses array of photo sensors connected by software inorder to scan the image, the light reflected by each sensor will be storedinside photodiode and thus scanned image is formedItrequires less power, it is compact in sizeButScanned image will not have greater depth this can be improved by usingpowerful softwares.

HandScannersHandScanners are used for scanning a large image the scanner is rolled on thescanner and then the clock pulse is generated to synchronize it with computerbut hand scanners requires high accuracy some the hand scanners do have awindow 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 havehigher depth effect SmartPhone Scanning appsTheyare classified in 3 major categoriesDocumentScanning apps : Produce pdf filesImageScanning apps : Produce . jpeg filesQrcode Scanning apps: Used to search and scan qr codes.