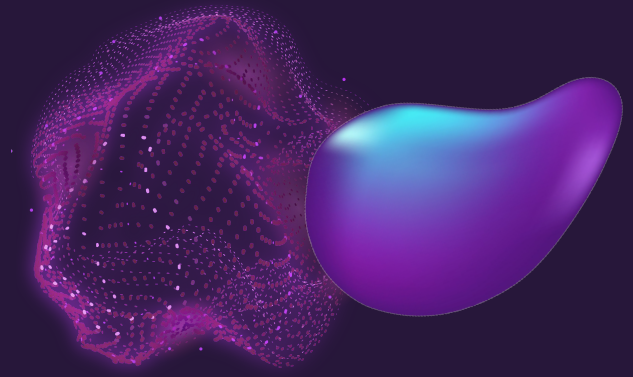
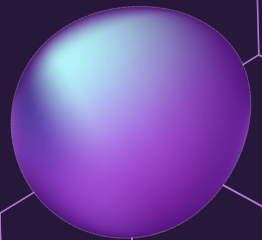


# Reverse Engineering Challenge

Team 3028Y



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# Why we chose this item

The item that we chose was a canon powershot camera. We chose this item because when I was a child, my mom decided to get me a camera since I had always been into photography and love taking pictures and videos of things. Even though it has sentimental value, I chose to use this camera because I would love to see its insides and how it works.


01
Day One

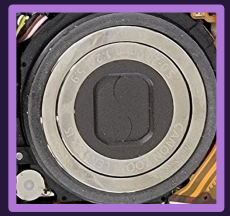
# Day 1 Progress


## IC-Chip

An IC is the fundamental building block of all modern electronic devices.


## Weaker ic chip

This IC chip is the same as the other one,  just weaker



## Lens

Resolution of 12.10 megapixels, It has 4x zoom, f2.8-5.9 aperture, and 28-112mm (eq) in size.


02
Day Two

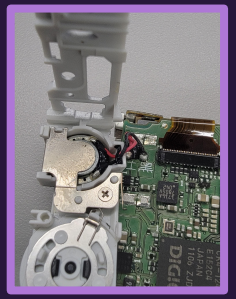
# Day 2 Progress

## CMOS Battery

Allows to keep time and date even if the main battery is dead.


## Main Battery

The Canon 100 HS uses a 760mAh NB-4L lithium-ion battery capable of capturing about 230 shots on a single charge.



## Speaker

Used to produce sound from the video recordings to create surround audio and allows the person to be able to hear what is happening.

# Day 2 Progress

## Microphone

It is used to record audio from video tapes and then can be emitted using the speaker.

## LCD Screen

It is a  3 inch diameter with a 230,000-pixel LCD.

## Auto Focus Assist Lamp

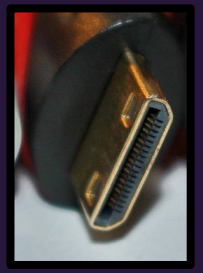
An AF assist lamp is a small light, usually built into a camera body above the lens mount.


03
Day Three

# Day 3 Progress

## Flash

The flash is a device that emits light momentarily. You can use the flash's light to compensate for the lack of brightness when shooting in dimly lit situations like indoors or night scenes.



## HDMI

The hdmi this camera requires is a mini hdmi.

## USB Cable

The type of usb cable the camera uses is mini-b.

# 04

# Day 4 (Summary)

# Backside-Illuminated CMOS Sensor

Gives better low-light photos and shooting performance than the CCD sensors Canon used previously for its Elphs.

## History

When the Backside-Illuminated CMOS Sensor was first released in 2011, it was only found in expensive items like the IPhone. So with the release of the Canon PowerShot ELPH 100 HS people were able to get it at an affordable price.

# Conclusion

In conclusion, the item we chose was very advanced for its time, in return we found out the reason as to why it was advanced. Some of the reasons being the parts that it has and how compact it was.

# References


Canon PowerShot ELPH 100 HS review
Canon ELPH 100 HS Review - Imaging Resource
Canon PowerShot ELPH 100 HS review - CNET
Canon PowerShot ELPH 100 HS manual