

Reverse Engineering

VEX IQ Online Challenge

Team 952W

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Item: Flip UltraHD Video Camera - Black, 8 GB, 2 Hours (3rd Generation)

About this Camera (Flip UltraHD Video Camera - Black, 8 GB, 2 Hours (3rd Generation))

The batteries need to be charged; this item must be charged by computer alone or via the charger provided for it. Shoot up to 2 hours of better than ever HD video on the simple, smaller Ultra HD.

Press the big red button to begin recording vivid HD video (720p/60fps) on the incredibly straightforward user interface begin recording vivid HD video (720p/60fps) on the incredibly straightforward user interface, press the big red button.

The newest feature for UltraHD, image stabilization, keeps your video stable.

Connect the built-in USB arm to your PC or Mac to run the FlipShare software that is already installed.

Note: Should be charged with a computer attached.

This camera was chosen because it seemed interesting to take apart a camera but also because it no longer functions and was useless.

Specifications of this product

Brand:	Flip Video
Connectivity Technology:	USB
Color:	Black
Special Feature:	Wireless, zoom-magnification
Screen Size:	2 Inches
Optical Zoom:	2X
Camcorder type:	Video Camera
Video Capture Resolution:	720p
Recommended Uses For Product:	Camcorder
Water Resistance Level :	Not Water Resistant





This is the 'case' of the camera that holds the screen, batteries, and the circuit board. It also has a USB stick attached to it so you can access the files in it.



This is the front cover of the camera. It has the buttons to operate the camera and it also acts as the screen protector for the screen. It is the input of the camera.



This is the batteries of the camera. It seems to be 2 rechargeable AA batteries conjoined together so they don't get lost and get charged together



This is the screen of the camera. It is the output of camera as it shows what the camera is capturing. While assembling, it goes between the front cover and the 'case'.



Conclusion: The camera has many complex parts which help it to operate. Pieces like the CPU, Storage, and pretty much everything on the circuit board are things we don't think about we use a camera, but without it, the camera would be useless,

This is the circuit board of the camera, it has the CPU, camera, storage, and everything that is required to process camera. It connects to the the case and the screen via a cable. The big black square on the left is the CPU from the company ZOMAN©. The rectangle to the right is the storage from Samsung©. And the final black square on the right, is the camera, which is the most important thing for the camera. The circuit board also has a mini-HDMI input so you can add/take files from it.