

## Introduction:

Texas Instruments has changed the world dramatically in terms of technology. Many of the devices we use today have Texas Instrument components inside them, like calculators, iPhones, and iPads, among others. We chose to take apart the iPad Air 3. We chose it because we thought it would be interesting to see inside something we use daily. A lot of people don't know how the devices around us work, and we thought it would be interesting to learn something most people don't.

## Texas Instruments 343S0499 Touch Screen Controller:

One TI component used in iPads is a Touch Screen Controller, which detects contact pressure on a visual display surface. A hand-held stylus or one or more fingers are typically used for the touch screen controller to sense. A touch screen controller is a sensor that senses pressure on the screen and reacts to it. Without the touch screen controller, we would not have touch screen iPads and iPhones. Drawing and animating would be much harder because many animators use stylus pens to draw on devices. This touch screen controller is powerful and small to fit more instruments in the interior of the device. The Texas Instrument touch screen controller is vital to modern technology. Without it, the world as we know it would be different.



## A4 semiconductor:

This A4 semiconductor is a Texas Instrument component. It is marked with 02A0KETC1 and CD3240A1. It conducts electricity more than an insulator but less than a pure conductor. It is used in thousands of electronic devices. There are four types of basic semiconductors. One semiconductor is the A4 conductor, which is shown in the picture below. This semiconductor can conduct energy and boot up your iPad Air 3. If there weren't one, then we would not be able to talk to our friends and family. This Texas Instrument is essential because it allows it to conduct electricity. Without that, it can not function.

An A4 conductor shown below.



## Battery:

The iPad Air 3 Battery is another Texas Instrument component that is the battery for the whole iPad and in recent iPads, these batteries are becoming more powerful and efficient. Also, now Apple will be able to add new features to the iPad because there is more space to put new instruments. This is vital to us because without the battery our daily lives would change. These Texas instrument batteries are much better than normal batteries and even Apple buys their parts. Without them, the world would be stranger and more different from our regular lives but that is not happening thanks to Texas instruments for making high-quality batteries.



## Conclusion:

We believe that Texas Instruments is helping the world because they are improving and inventing new technology to improve our lives. While many people don't know what goes on behind the scenes, we must understand it. In our everyday lives, understanding what is inside of the devices we use can help us create better and more advanced technology.



## Sources:

General info link: <https://www.zdnet.com/pictures/cracking-open-the-apple-ipad/23/>

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Shriya Matamudra - Editor

Monica Chopra- Wording