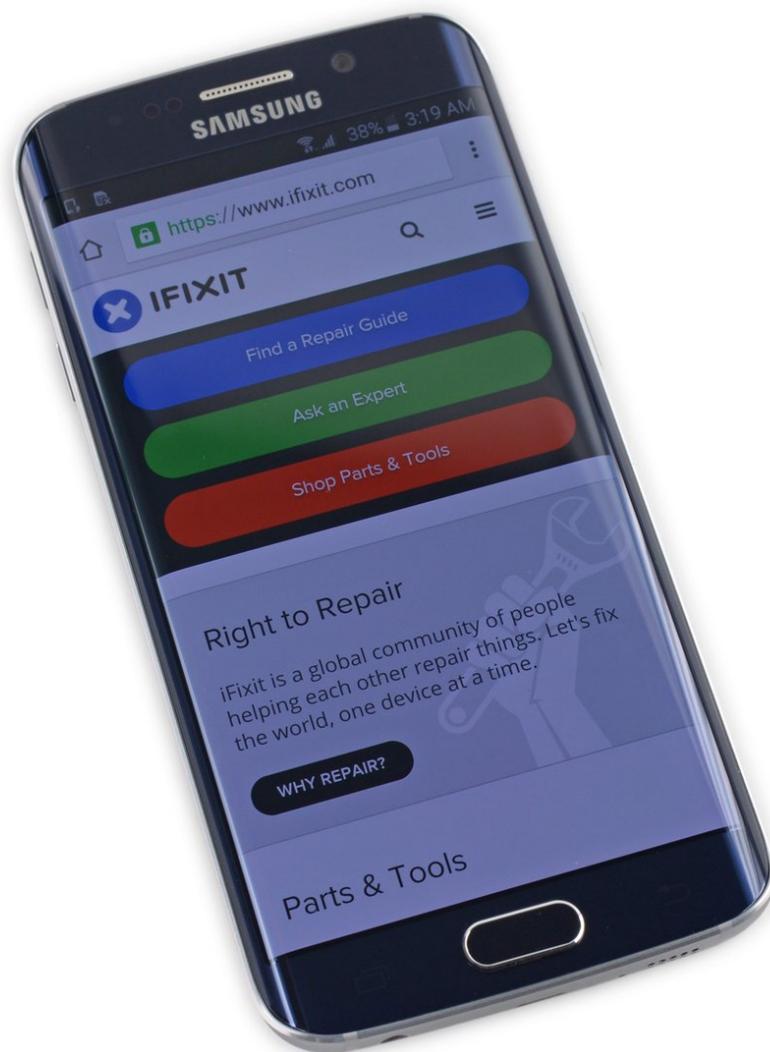




Samsung AMOLED Display Teardown

Teardown of Samsung AMOLED Display. It is much different than LCD display.

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INTRODUCTION

We will be diving into Samsung's fascinating AMOLED screen. It is much different than a LCD.

TOOLS:

- [Precision Utility Knife](#) (1)
-

Step 1 — Samsung AMOLED Display Teardown



- Here it is: The *beautiful* fortress of pixels known as the Super AMOLED screen.
- Now, We take to separating it.

Step 2



- After separating it, we take a closer look at it's insides.
- ⓘ The interesting thing is that after we separated it, the screen worked (no black spots or lines) but the touch didn't. This is interesting, because the touch and the pixels are integrated into the *same* layer. We will try to find out why.
- It looks like the touch has a separate cable than the screen. This is interesting, because the touch and the pixels are integrated into the *same* layer, as said above. **Note the touch screen controller chip in red.**
- ⓘ Taking a closer look, it appears that we have cut the touch cable while tediously separating the screen. The adhesive securing the display is no joke.

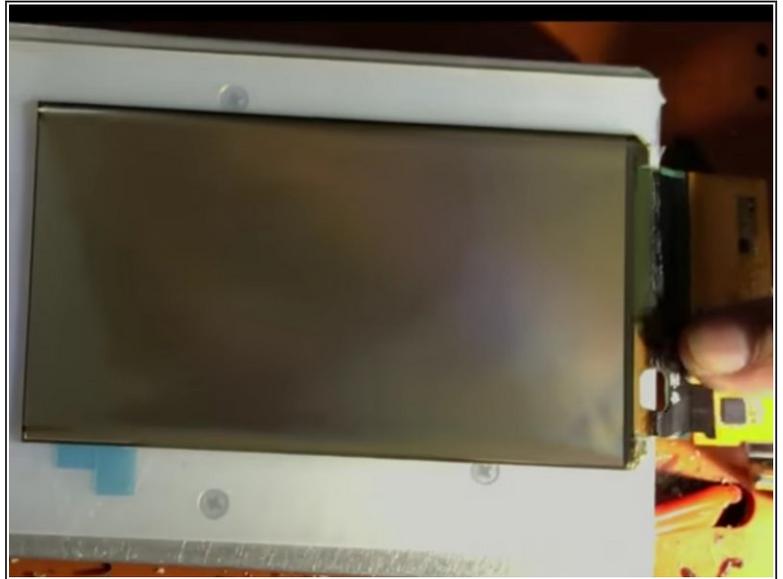
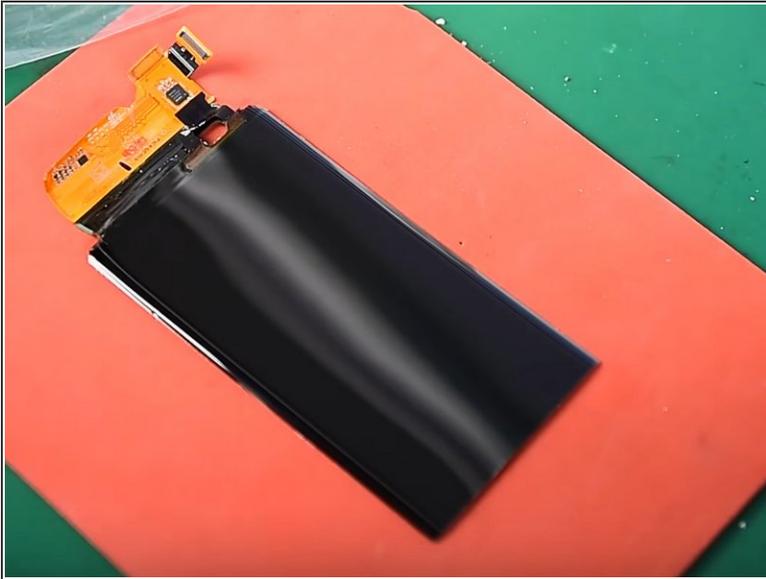
Step 3



- Full IC Identification:

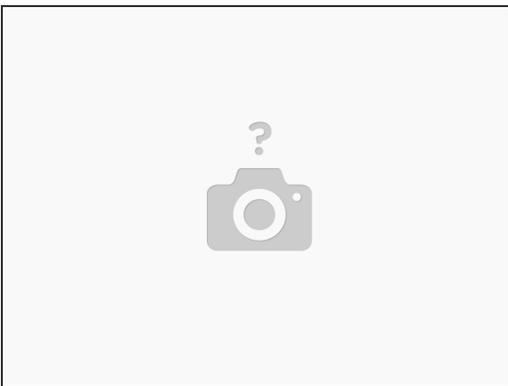
ⓘ You may need to enlarge it to view the text.

Step 4



- Using a [freezer](#), we separate the AMOLED display from the glass.
- We take the screen polarizer film off, and we find out that the screen is really a silver-ish color, not black!
- ⓘ However, you technically won't be able to see any text or images on the screen without the black polarizer film.

Step 5



- We will update you on our later findings on the inside this screen.