



**IFIXIT**

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Let's Fix the World

**I'm from the internet and I'm here to help.**



**Step 1.** Reboot

Did that fix it?

No? Proceed to step 2

**Step 2.**

Format hard drive.

Reinstall Windows.

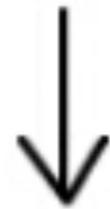
Lose all your files. Quietly weep.



# Apple

**Step 1.**

Take it to an Apple store.



Did that fix it?

No? Proceed to step 2



**Step 2.**

Buy a new Mac.

Overdraw your account. Quietly weep.

# Throwaway Culture



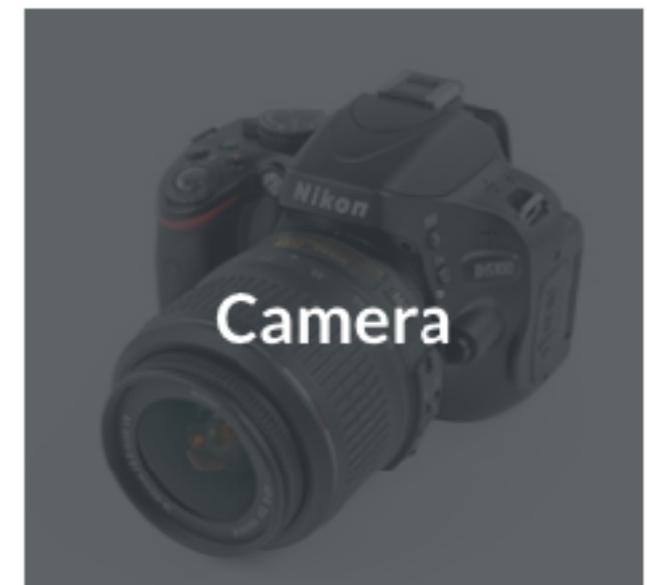
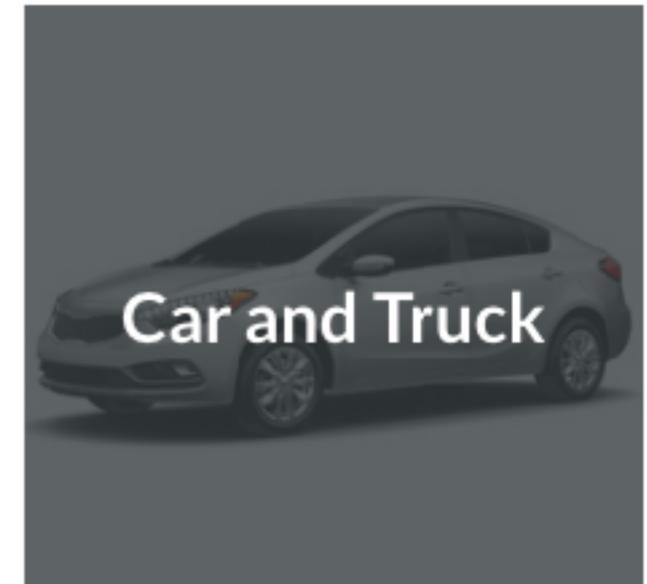
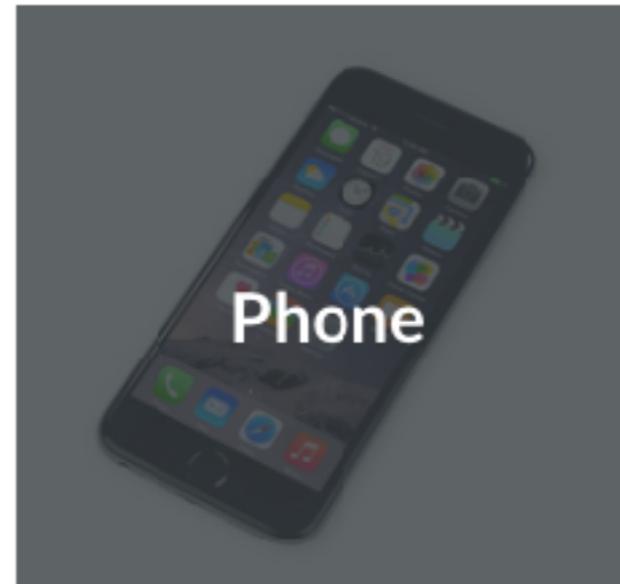


# Repair Guides

[Learn More](#)

[Create a Guide](#)

What do you need to fix?



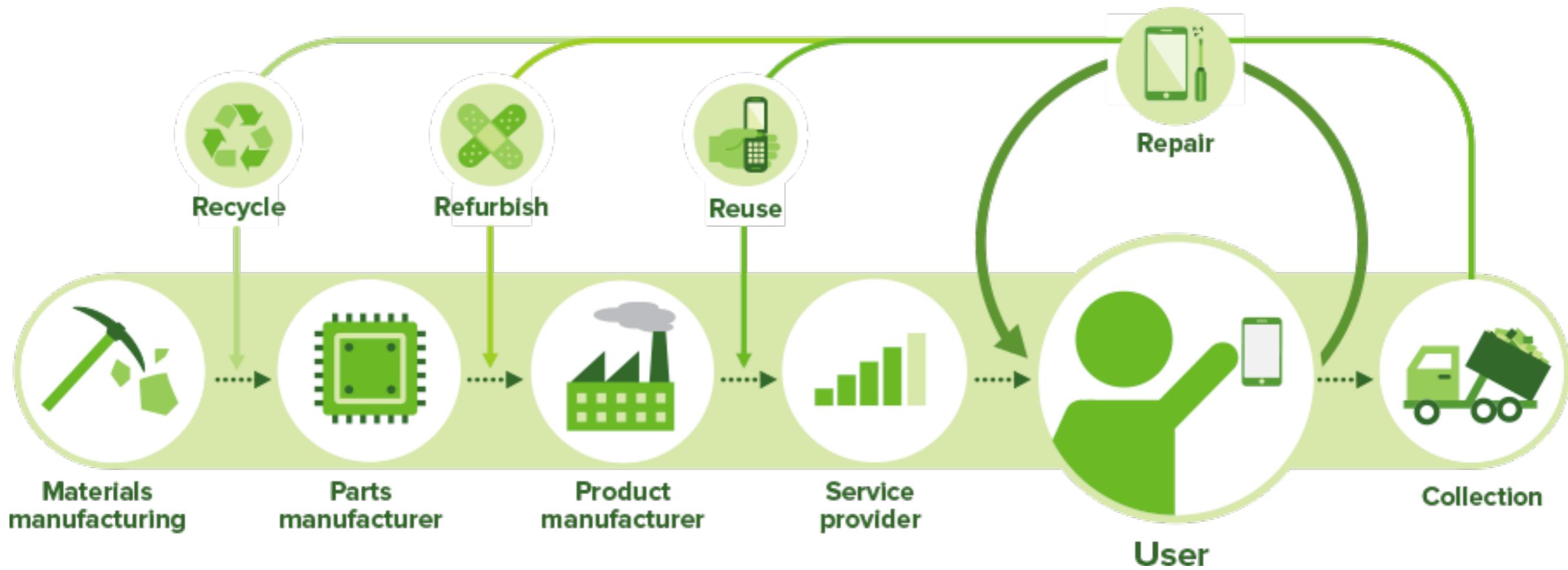




## Step 2

Edit 

- Remove the six Phillips screws securing the chrome rear panel to the Barista.
- Once the chrome panel is gone, you get a pretty comprehensive look at what makes the Barista boil. Major components include:
  - A reciprocating pump.
  - A pressure release valve
  - A boiler (with an internal heating coil).
  - A steam valve which, as you guessed it, allows steam into the steam wand for making frothy milk.
  - A bird's nest of wiring supplying power to everything.
- Remove all the Phillips screws holding the AC power cord and distribution block to the frame.



**Every patch is a memory,  
every tear has a tale.  
These are the stories we wear.**



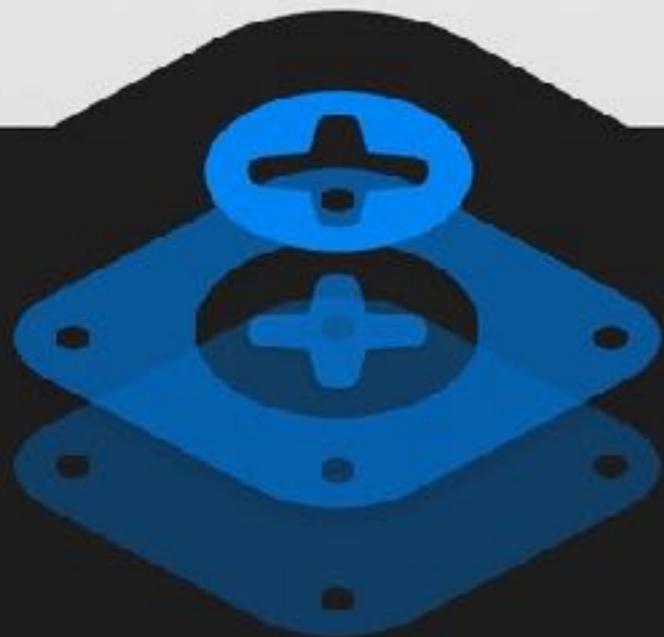
“Good Design is Long-Lasting. Good Design is Environmentally Friendly.”

—DIETER RAMS



**iPhone**

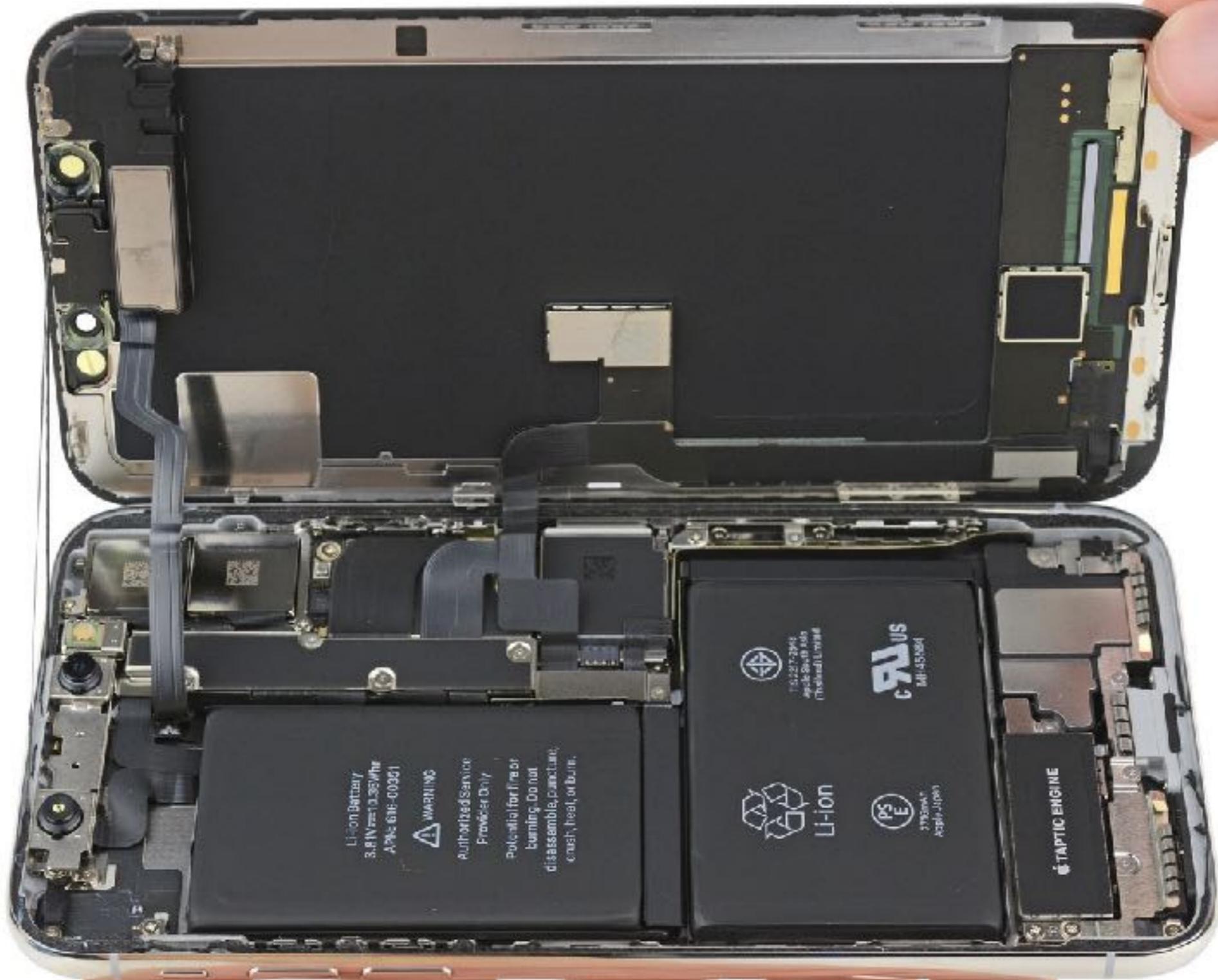
**X**



**TEARDOWN**







Li-ion Battery  
3.81V nominal 3.35Whr  
A2046 6146-00351

**WARNING**  
Authorized Service  
Provider Only  
Potential for fire or  
burning. Do not  
disassemble, puncture,  
crush, heat, or burn.

15227-22945  
Apple Service Tools  
Checked & Locked

**CAIUS**  
ME-45384

**PS E**  
1793004  
Apple-Japan

**LI-ION**

**TAPTIC ENGINE**



iPhone 12 Pro  
A2409 - MC2296  
MK278-0233

WARNING  
Advanced Safety  
Precautions  
Prevents wireless  
charging, avoid  
disposable, puncture,  
may heat or burn.

Li-ion  
Lithium  
Li-ion  
Lithium  
Li-ion  
Lithium

iPhone 12 Pro  
A2409 - MC2296  
MK278-0233





Li-ion Battery  
3.81V --- 10.35Whr  
APN: 616-00351



**WARNING**  
Authorized Service  
Provider Only

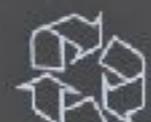
Potential for fire or  
burning. Do not  
disassemble, puncture,  
crush, heat, or burn.





Li-ion Battery  
3.81V 10.35Whr  
APN: 616-00351

**WARNING**  
Authorized Service  
Provider Only  
Potential for fire or  
burning. Do not  
disassemble, puncture,  
crush, heat, or burn.

  
Li-ion

  
2715mAh  
Apple Japan

  
TIS 2217-2548  
Apple South Asia  
(Thailand) Limited

  
MH45584

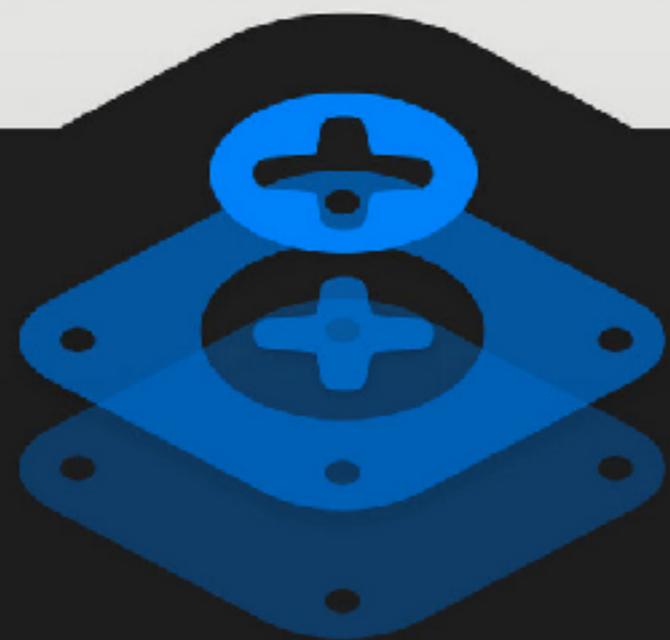
 TAPTIC ENGINE







# Galaxy S7 Edge



# TEARDOWN





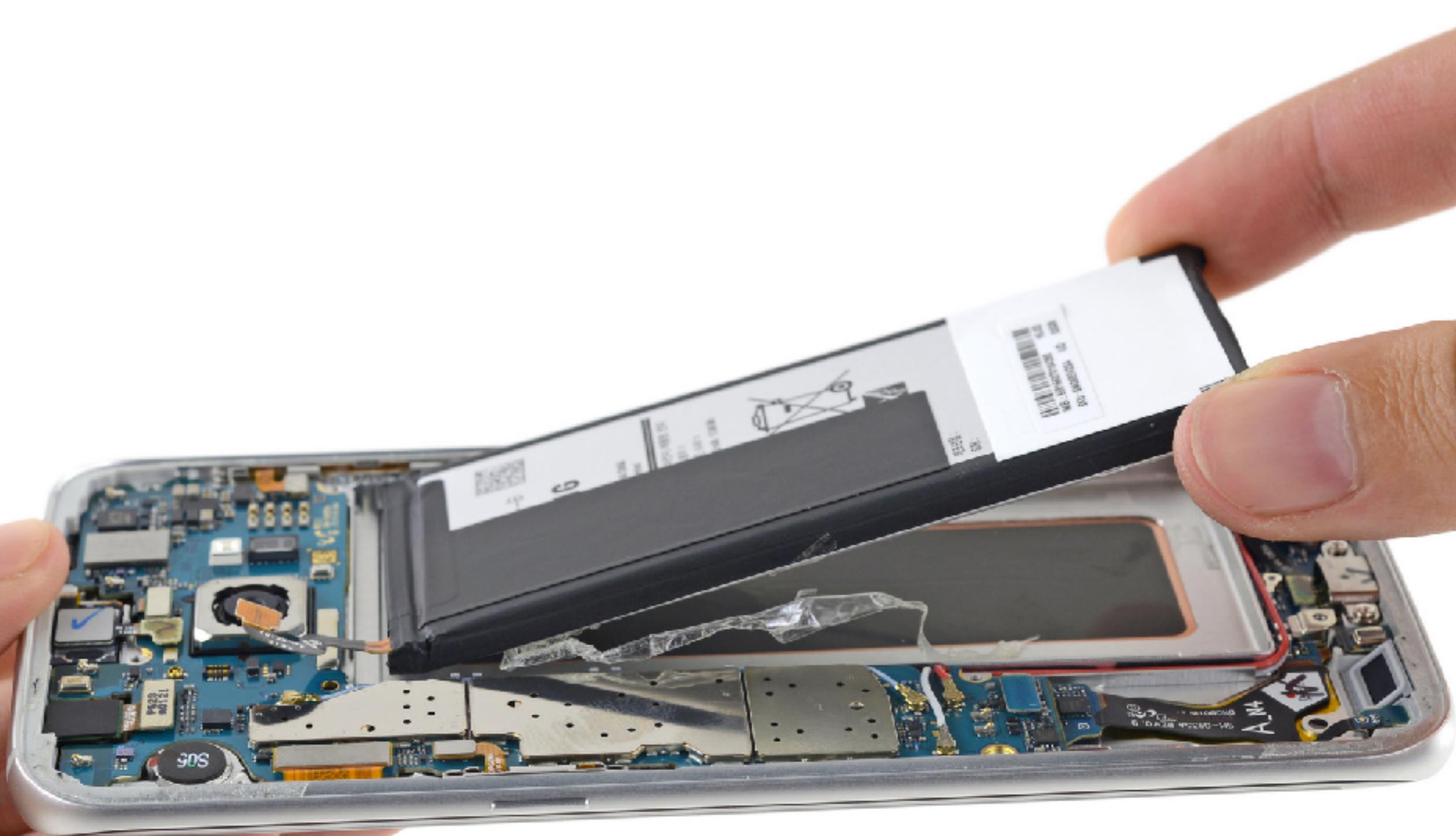
 **iFIXIT**

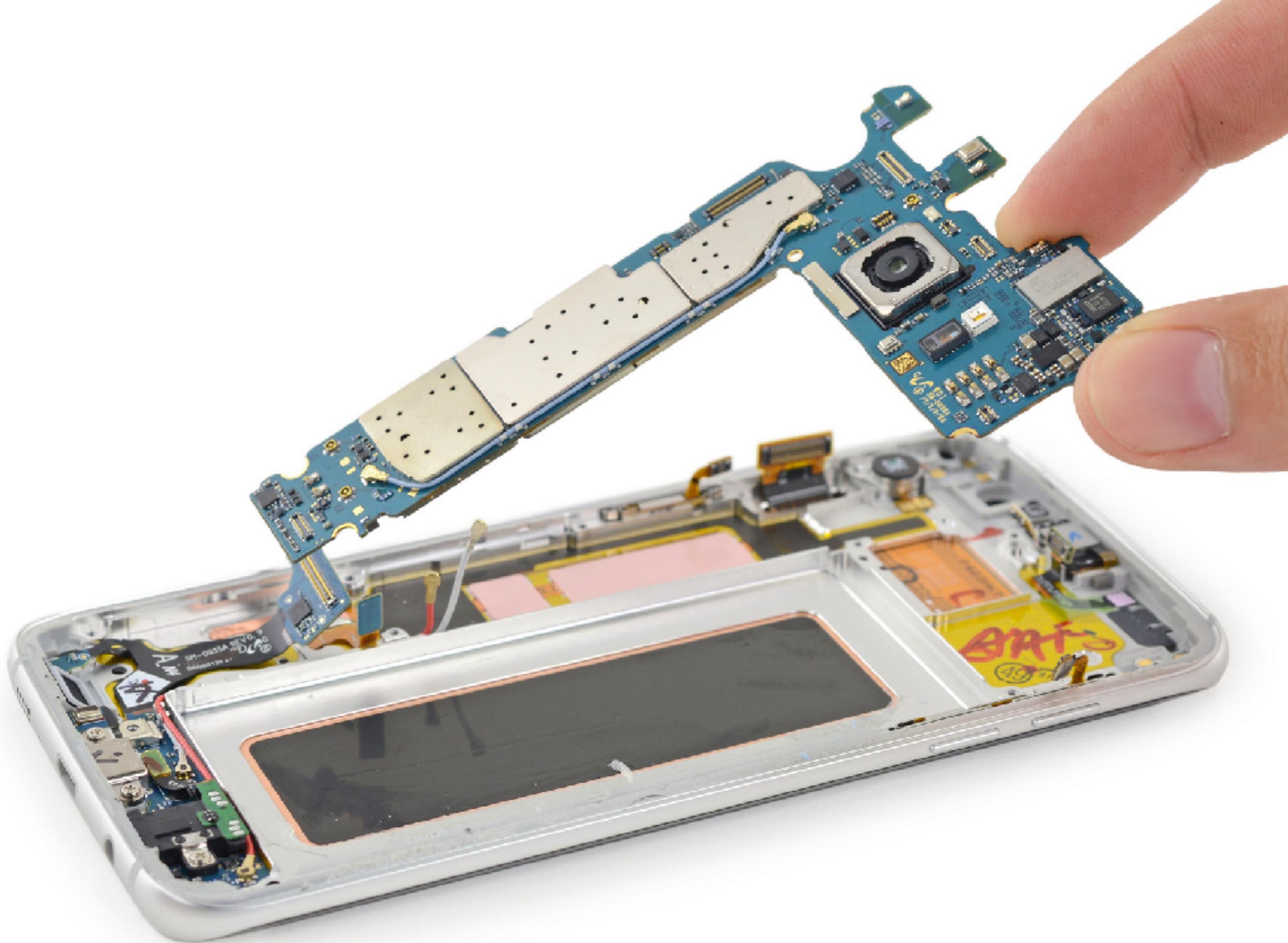
**iOpener**

Galaxy S7 Edge

Verizon









# REPAIRABILITY SCORE:



# Monopoly Strategies

## Copyright on Service Manuals



31<sup>st</sup> July 2012

Dear Mr Hicks,

**Toshiba copyright Repair Manuals.**

We understand that you are the owner and editor of a website that is found at <http://tim.id.au> and that your ABN is [REDACTED]

On your website we are able to read and see that you are distributing, by download, copyright repair manuals (the Manuals) that are proprietary to Toshiba (Australia) Pty Limited and its parent company, Toshiba Corporation of Japan (Toshiba).

The Manuals are only available to Toshiba authorised service providers under strict confidentiality agreements. You are not a Toshiba authorised service provider and therefore you have no rights to have any of the Manuals that are listed and linked under the heading "Toshiba" that appears on your website.

OPERATION:



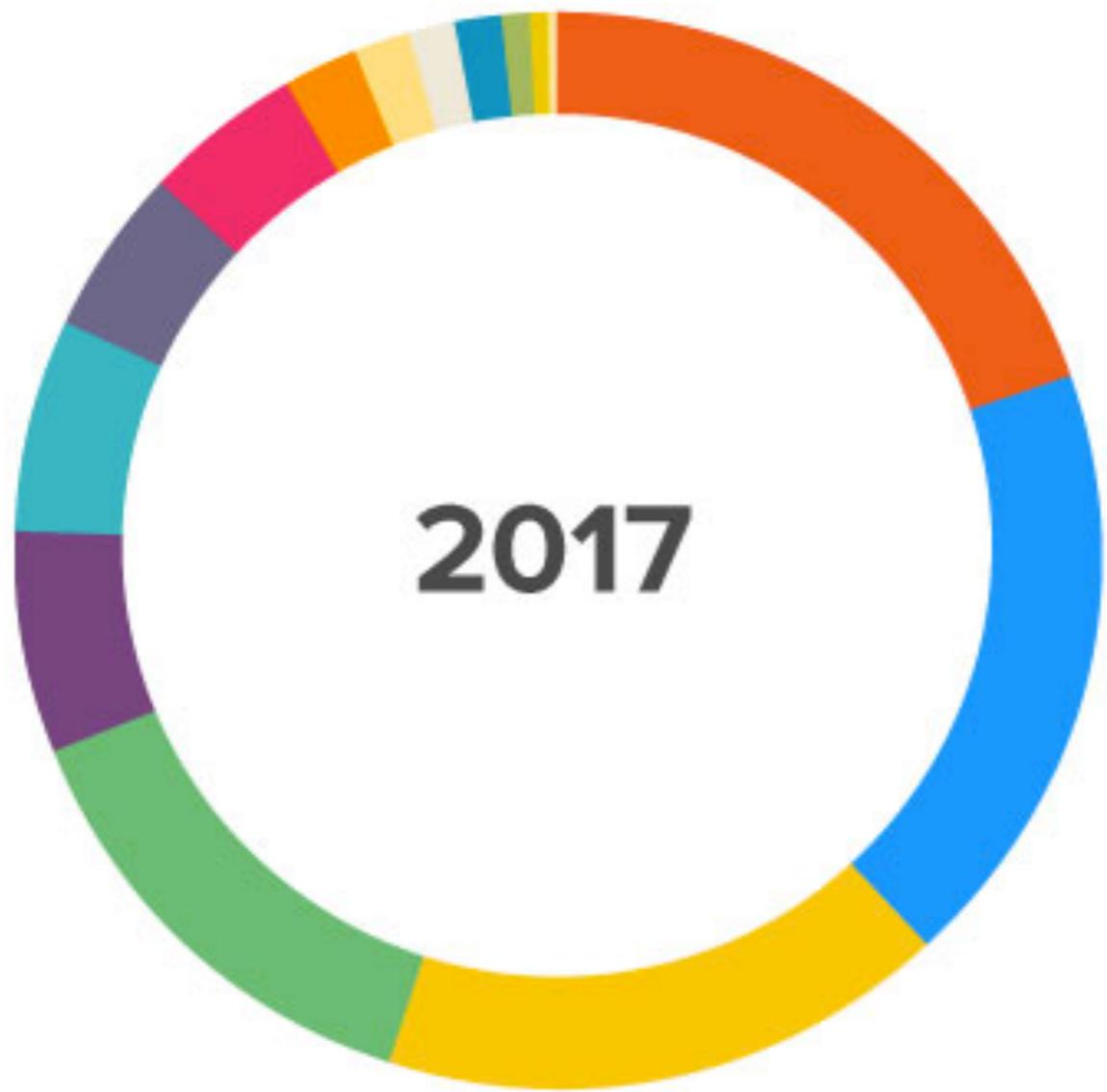
**FIX TOSHIBA**

by: [iFixit.com](http://iFixit.com)

# TOSHIBA

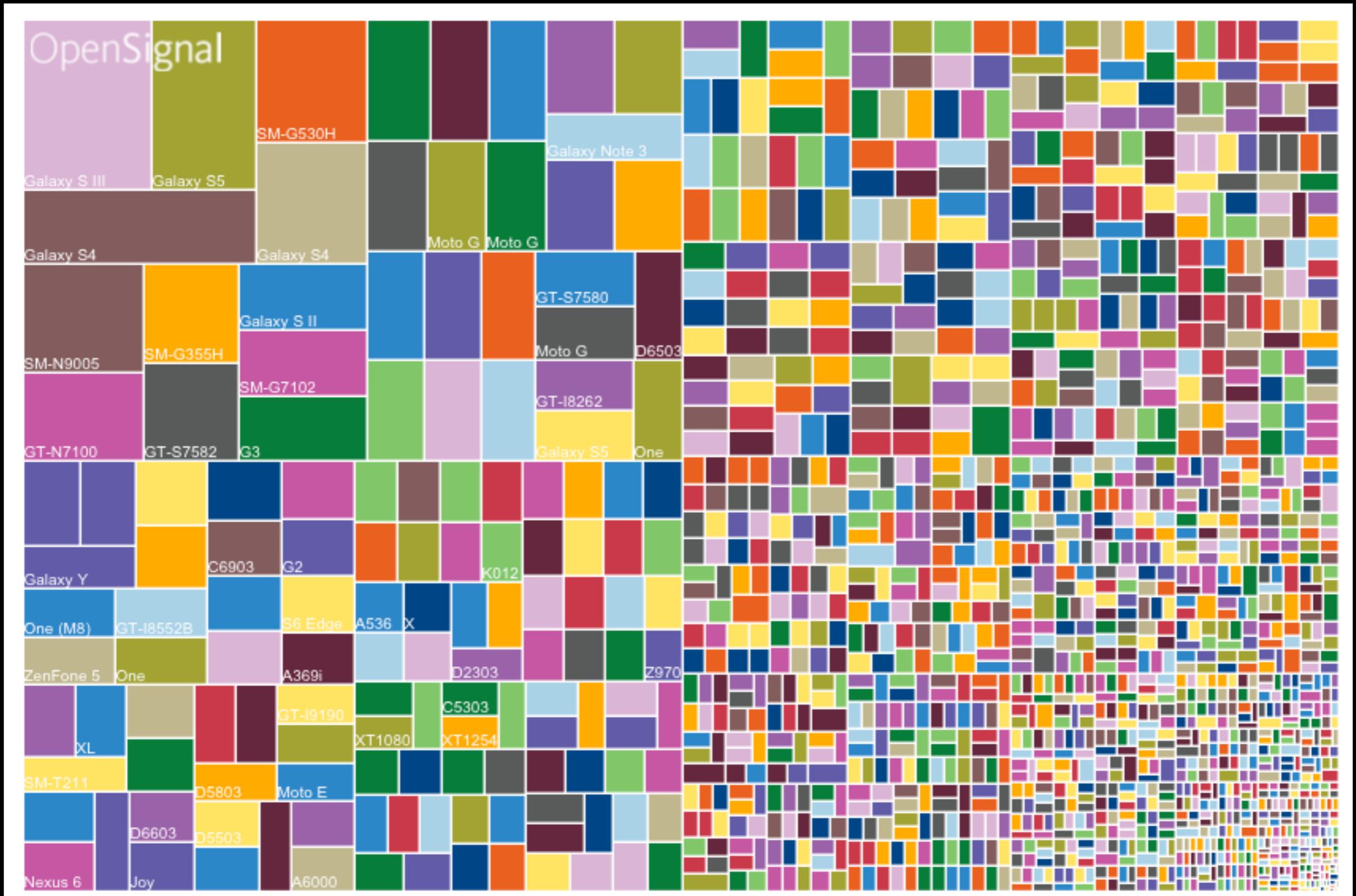
Leading Obsolescence»»»





iPhone 7	19.74%
iPhone 6S	18.58%
iPhone 6	16.77%
iPhone 7 Plus	13.83%
iPhone 6S Plus	6.77%
iPhone 5S	6.43%
iPhone SE	4.91%
iPhone 6 Plus	4.77%
iPhone 8 Plus	2.18%
iPhone 8	1.68%
iPhone 5	1.51%
iPhone 5C	1.19%
iPhone X	0.93%
iPhone 4S	0.58%
iPhone 4	0.14%

# Android Fragmentation



# Right to Repair is a Growing Movement



**88% of Voters**

in Massachusetts overrode the car companies and passed the automobile owners' Right to Repair law in November, 2012.



**114,322 Americans**

signed a petition to legalize cell phone unlocking. The White House supports cell phone unlocking—but your voice is still needed to convince Congress.

WHAT IS GOING ON?

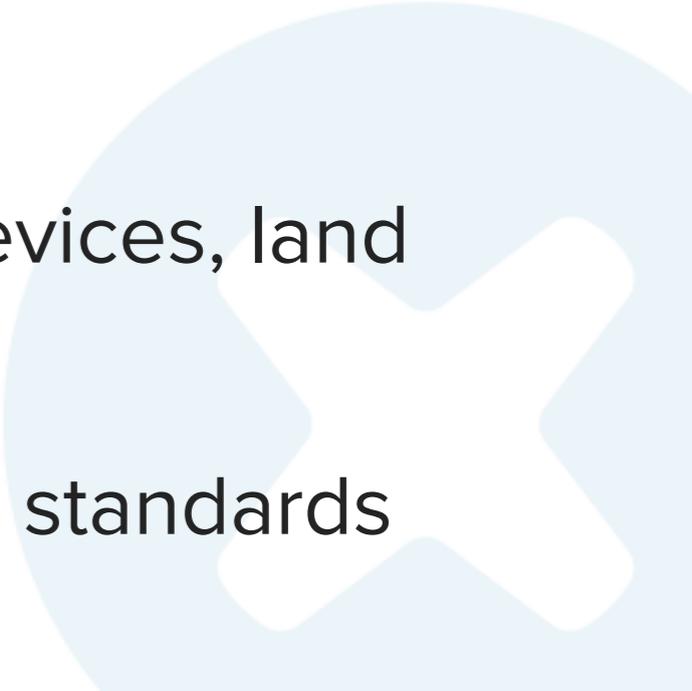
GUESS WHAT I  
CAUGHT THIS  
FARMBOY DOING?

I CAUGHT HIM UNDER  
A SHADE TREE  
REPAIRING HIS OWN  
TRACTOR!



FRIDAY @  
2016

# Pre-2017 Accomplishments

- 5 bills introduced
    - South Dakota (2014)
    - New York, Minnesota, Massachusetts (2015)
    - Nebraska (2016)
  - DMCA Reform in 2012 and 2015
  - Cell Phone Unlocking signed into law
  - Exemptions for cell phones, tablets, medical devices, land based motor vehicles (tractors)
  - EPEAT, UL, and IEEE environmental electronics standards
- 

# Minnesota: Amanda Lagrange





# Minnesota's 'right to repair' bill would upend tech giants' monopoly on fixing your stuff

Friday, February 3, 2017 by Taylor Danz in [News](#)



*advertisement*

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## RELATED

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[John Marty: The Environmentalist](#)

# 2017 State Legislation

	Senate	House	End of session
New York	S618	pending	December 31
Nebraska	LB 67	n/a	June 2
Minnesota	SF 15	HF 287	May 22
Massachusetts	SD 938	HD 1692	June '18
Kansas	pending	HB 2122	May 15
Wyoming	pending	HB 0199	March 6
Washington	pending	pending	April 23
Tennessee	SB0888	HB1382	April 14
Illinois	pending	HB3030	December 31

# 2018 State Legislation

Hawaii
Illinois
Iowa
Kansas
Massachusetts
Minnesota
Missouri
Nebraska
New Hampshire
New Jersey
New York
North Carolina
Oklahoma
Tennessee
Vermont
Virginia
Washington
Wyoming

# Gay Gordon-Byrne

Executive Director, Repair.org



# It's Time for Fair Repair

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