



iPhone 7 Digitizer/LCD REPAIR GUIDE

Version 1
2016 Edition





iPhone 7 Digitizer/LCD REPAIR GUIDE LCD AND DIGITIZER REPLACEMENT

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FOR EVERY REPAIR
MAKE SURE TO COMPLETE, INITIAL,
AND HAVE CUSTOMER SIGN THE CELLAIRIS
REPAIR LIABILITY WAIVER FORM



PRE-REPAIR DEVICE CHECK-IN

	Pre-Repair Device Inspection			Post-Repair Device Inspection		
Liquid Damage:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Jailbroken or Rooted:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A			
Unlocked or Flashed:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A			
Previously Repaired:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A			
Frame Damage:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Digitizer Damage:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
LCD Damage:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Device is unable to be turned on prior to repair for Device Inspection			<input type="checkbox"/> Yes	<input type="checkbox"/> NO		
	Yes (Working)	No (Not Working)		Yes (Working)	No (Not Working)	
Volume Button:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Mute Switch:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Vibration :	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Power Button:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Home Button:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
WiFi:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Cell Service/Call:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Proximity Sensor:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Ear Speaker:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Phone Microphone:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
External Speaker:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
External Microphone:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Headphone Jack:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Rear Facing Camera & Flash:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Front Facing Camera:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Charge Port:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Fingerprint Scanner:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A



TOOLS NEEDED

- Philips screwdriver
- Spudger
- Tweezers
- Isesamo
- Magnetic Mat
- Heat Gun
- iPhone 7 Digitizer/LCD
- Tri-point #000 screwdriver



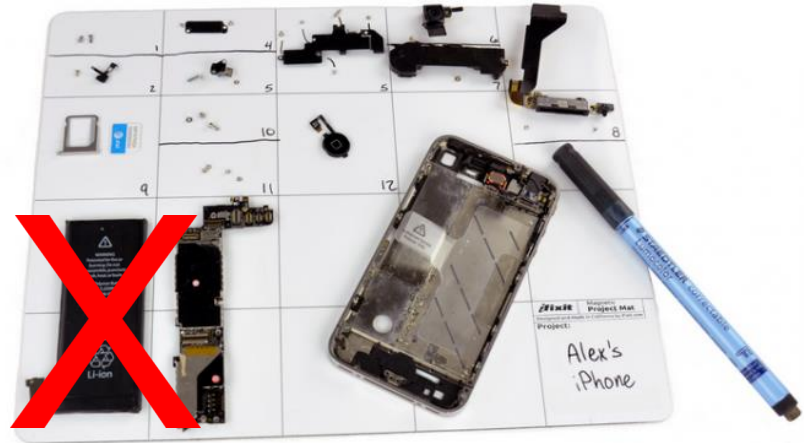
HEAT-GUN PRECAUTIONS

- Always operate the heat gun on the lowest setting.
- Keep face, hands, hair, and clothing away from the air stream.
- The air nozzle also becomes extremely hot. Never grab the heat gun by the nozzle.
- Never operate the heat gun by laying it on its side on a table. It should be firmly grasped in one hand at all times during usage.
- Never operate near flammable or explosive liquids and vapors. Cleaning supplies and the 3M #94 Primer are of concern. Make sure fumes are absent from the work area before operating the heat gun.
- The heat gun nozzle should never get closer than 2" to the object being heated.
- Keep heat gun moving. Never stay in one spot.



ADDITIONAL PRECAUTIONS

- **Magnetic Pad:** During the repair, you will be utilizing a magnetic pad to organize the plethora of differing screws that you will be pulling out of the Samsung Galaxy S4. Below is a list of several internal components of the Samsung Galaxy S4 that should never be placed on the pad, or you risk damaging the hardware or erasing client data:
 - LCD/Digitizer Assembly
 - Cameras
 - Motherboard
 - Battery
 - Speaker



ADDITIONAL PRECAUTIONS

- **Power on/off:** To avoid any damage to the hardware during the repair, it is best to have the device powered off until you can get to and disconnect the battery.
- **Battery:** Never unplug any flex cables unless the battery has been completely disconnected to avoid frying your hardware. Do not plug the battery back until all cables have been reconnected.
- **Release Screws:** Apply pressure on the screw and twist counterclockwise to initially loosen it, then lighten the pressure and continue twisting until the screw is gently released. Make sure you have properly sized screwdrivers available for the repair.
- **Pin Connectors:** extremely fragile and must be plugged or unplugged with extreme caution.
- **Battery connector:** held down by light adhesive and solder. If not cautious it will come off the motherboard. Very time consuming to be repaired. Do not break it in the first place.
- **Motherboard:** small surface mount components can be easily damaged if they are nicked by the spudger. Always take your time and never touch the surface of the motherboard.



LET'S START!



Tools: Spudger, Fingers, isesamo, pentalobe screwdriver

Tips: Take your time opening the screen. Start from bottom left side there is a specific indentation. Might want to heat around the frame to loosen the adhesive but be careful.

STEP 1

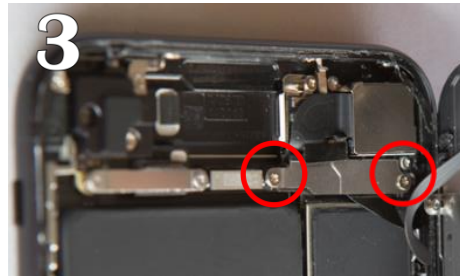
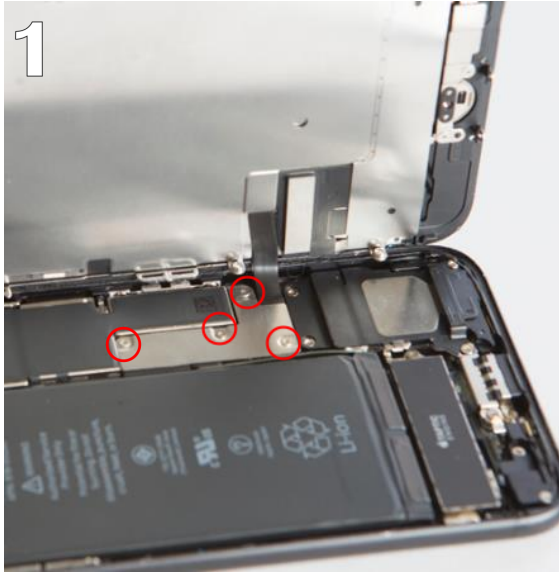
Disassemble the device

- Remove the 2 pentalobe screws located at the bottom of the phone near chargeport, using the pentalobe screwdriver.
- Next use the isesamo tool and slide it in between the frame of phone and screen. Start at bottom left side of phone push the isesamo straight down between the two then flex down to pry screen up. After the screen is up on that side flex the isesamo from left to right in upward motion around frame of screen to pry phone screen up. However, Be careful the screen unlike any other iPhone opens left to right not from top to bottom.



STEP 2

Disassemble the device



- Once the phone is open we will begin by removing metal bracket covering the battery and Digitizer/LCD cables. Remove four (4) screws holding down plate with the tri-wing screwdriver. Remove plate.
- Disconnect battery with spudger then also using spudger disconnect Digitizer/LCD cables.
- Move your way up to the proximity sensor and notice a metal bracket holding that cable down unscrew two (2) screws with Philips screwdriver and remove metal bracket then disconnect cable. At this point screen should be completely disconnected from the motherboard. We will now be working with old assembly removing components that need to be transferred.



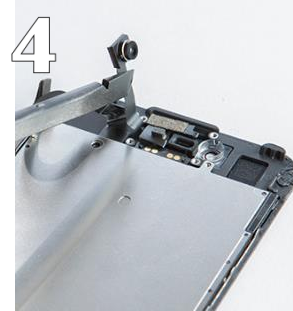
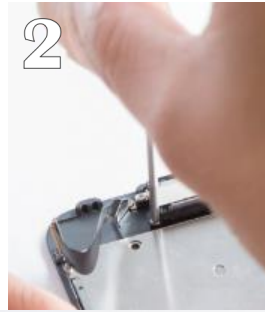
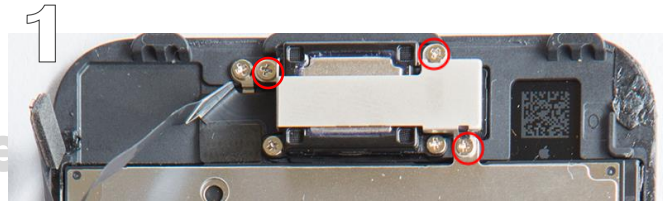
STEP 3

Tools: Spudger, Hands, tri-point screwdriver, Philips screwdriver

Disassemble the device

- Starting with the ear speaker removal of three (3) Philip screws holding down the metal bracket.
- Once the metal plate is removed you will see two (2) screws holding down the ear speaker remove those two (2) Philip screws to remove the proximity sensor underneath the ear speaker. Use the tri-wing #000 screw driver to remove four (4) screws holding down metal bracket cover home button.

Tips: you may need to heat the front of the screen to loosen adhesive to remove proximity sensor. Heat the front of the screen near ear speaker in a constant back and forth motion for 5 to 6 seconds. Do not rest heat in one area too long causing heat spots on LCD.

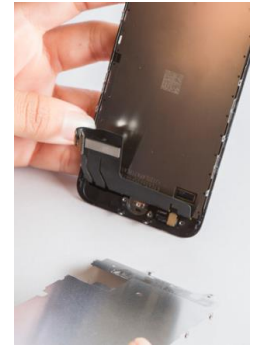
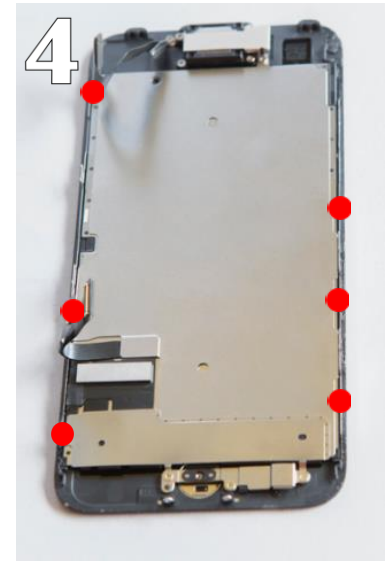
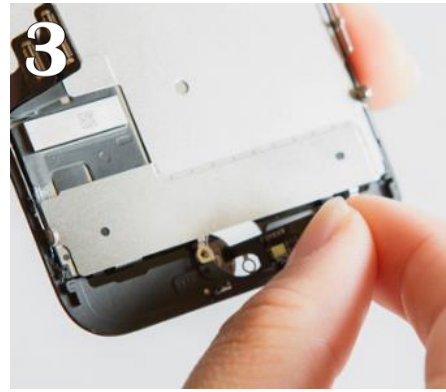
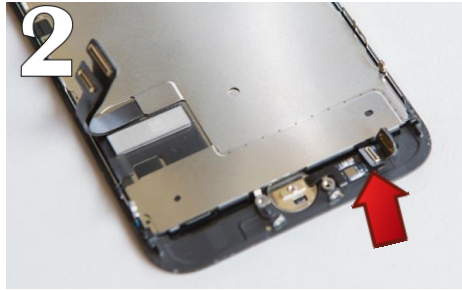


STEP 4

Tools: Spudger, Fingers,
tri-wing screwdriver

Disassemble the device

- Once metal bracket is removed from home button disconnect home button flex connector using spudger. Then use flat end of spudger to slide underneath home button flex cable to pry up.
- Next step is to remove metal heat plate covering the LCD, use the tri-wing screwdriver and remove all 6 screws then remove but use spudger to help peel off the adhesive holding the cables to heat plate.

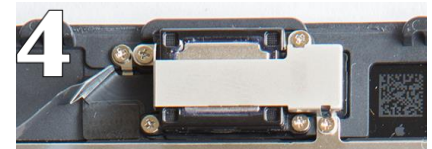
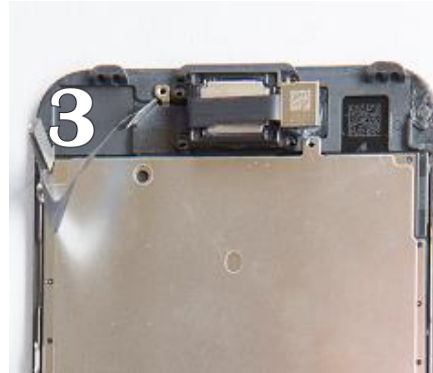


Tools: spudger, Fingers

STEP 1

Reassembly of the device

- Take new iPhone 7 digitizer/LCD and place heat plate on it. Screw in the 6 screws using tri-wing screwdriver.
- Put the proximity sensor back into place at the top of the new assembly then place ear speaker on top of proximity sensor and screw down the 2 Philips screws to ear speaker. Place metal bracket on top of those components and screw in 3 Philips screws that hold metal bracket down.



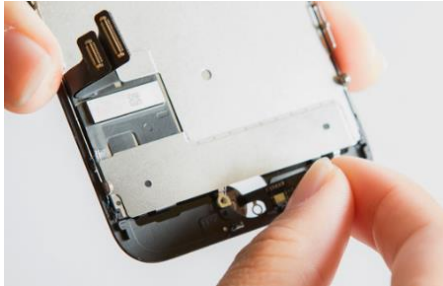
STEP 2

Reassembly of the device

Tools: Philips screwdriver, Fingers

Tips: Take your time and be gentle!

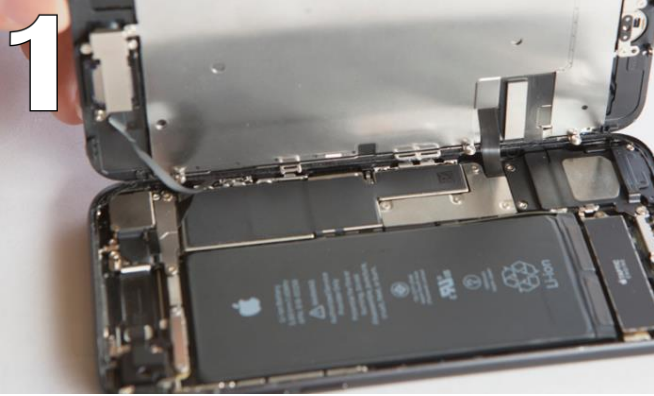
- Next step is to re-attach home button on new assembly by sliding the cable through the front then laying home button in place after its set correctly connect flex cable.
- Put metal bracket over the home button flex cable and screw four (4) screws with the tri-wing screwdriver.
- Now that those components are now transferred over to new Digitizer/LCD you can reconnect cables back to motherboard starting with proximity sensor at the top.



Tools: Heat gun, painters knife, spudger, Hands

STEP 3

Reassembly of the



into the bottom of the phone
one and




- Connect the Digitizer/LCD to motherboard then connect battery.
- Place metal plate over battery and cable then screw down the four (4) screws with tri-wing screwdriver.
- Begin to lay screen down by sliding screen in between the frame of the phone and hooks at the top of new Digitizer frame. Once down and in at the top slide you hands down the side of the device as you push down on screen to lock in place.
- Once the phone is laying flush put the two (2) pentalobe



Troubleshooting

- If you notice the front facing camera is frozen do a hard reset by holding down power button and home button at the same time until apple logo reappears.
- If the device still says searching after being powered on turn airplane mode on then turn it back off should bring the service back if not then could have been a antenna error during repair.
- Lines in the lcd either mean a defective part or the cables weren't properly installed power off device then disconnect cables and reposition make sure they are snapped down completely.

 **CELLAIRIS** CUSTOMER DEVICE INFORMATION SHEET AND LIABILITY WAIVER

First Name:							
Last Name:							
Phone Number (omit the # of the device being serviced):					Phone Number to Device being serviced:		
Email Address:							
Service Requested:					Price Quoted:		
Customer Address							
	Address		City		State		Zip
Device Information:	Phone Manufacturer: <input type="checkbox"/> Apple <input type="checkbox"/> Samsung <input type="checkbox"/> LG <input type="checkbox"/> HTC <input type="checkbox"/> Other: _____		Storage Size:		Color:		Carrier:
	Model:		IMEI/Serial Number:		Passcode:		
Remember to attach receipt to completed paperwork.	Today's Date:		Arrival Time:		Due/Pick-up Date:		Due/Pick-up Time:
	Pre-Repair Device Inspection				Post-Repair Device Inspection		
Liquid Damage:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
Jailbroken or Rooted:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A				
Unlocked or Flashed:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A				
Previously Repaired:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A				
Frame Damage:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
Digitizer Damage:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
LCD Damage:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
Device is unable to be turned on prior to repair for Device Inspection				<input type="checkbox"/> Yes	<input type="checkbox"/> NO		
	Yes (Working)		No (Not Working)		Yes (Working)		No (Not Working)
Volume Button:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
Mute Switch:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
Vibration :	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
Power Button:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
Home Button:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
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Cell Service/Call:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
Proximity Sensor:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
Ear Speaker:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
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Rear Facing Camera & Flash:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
Front Facing Camera:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
Charge Port:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	
Fingerprint Scanner:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	



CONTACT

**BECOME A
MASTER
FRANCHISE**

678.513.4020 x2
info@cellairis.com





**THANK
YOU!**