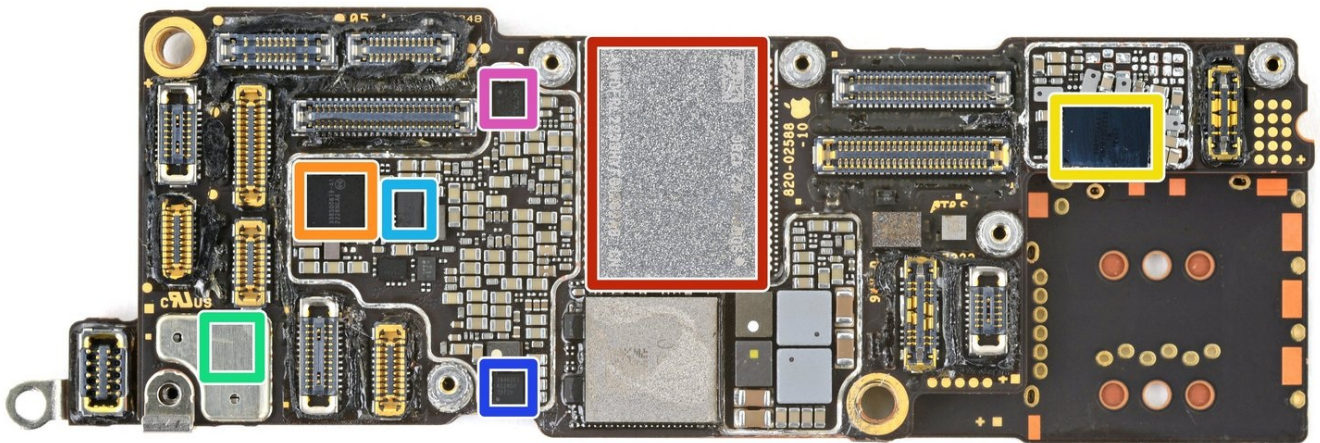




iPhone 14 Pro Max Chip ID

If you're curious about all the chips in the...

Written By: Arthur Shi



INTRODUCTION

If you're curious about all the chips in the new iPhone 14 Pro Max, you've come to the right place.

These board shots are taken using a US iPhone 14 Pro Max—model number A2651.

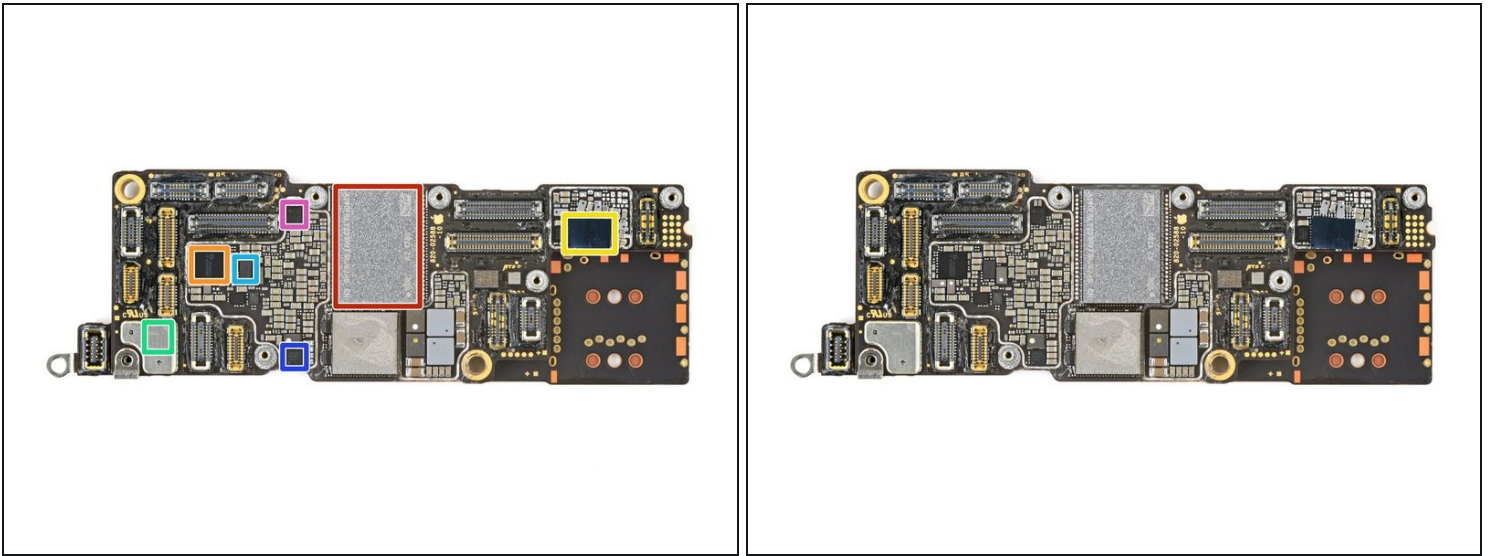
This model lacks a physical SIM tray, but contains hardware to support 5G mmWave bands, as well as satellite communication.

Check out our [iPhone 14 Pro Max teardown](#) for more details.

Special thanks to our community member [Chunglin Chin](#) for contributing to this!

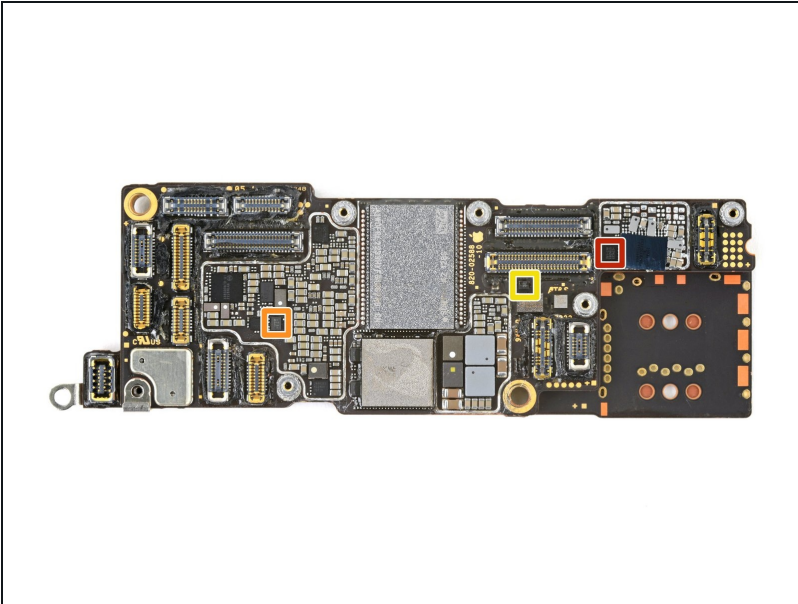
[video: <https://www.youtube.com/watch?v=SlUHjgZuLGU>]

Step 1 — Top-most layer



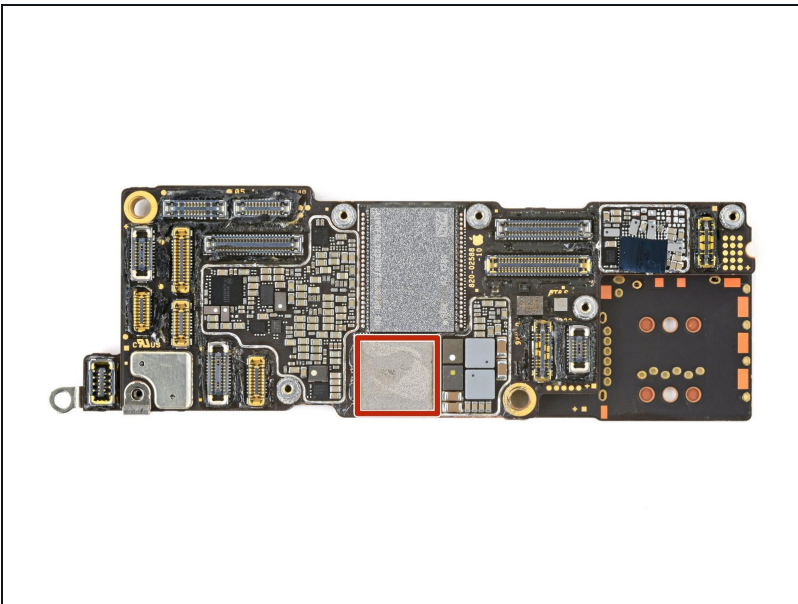
- Chip ID part 1:
 - SanDisk SDMVGLK2 128G 128 GB NAND flash memory
 - Apple/Dialog Semiconductor 338S00819-A1 power management
 - Likely Apple/Cirrus Logic 338S00843 voice processor
 - Apple/Cirrus Logic 338S00537 audio amplifier
 - Likely Apple/Dialog Semiconductor 338S0081C ? power management
 - Texas Instruments TPS61280H DC-DC converter
 - Maybe STMicroelectronics EEPROM

Step 2



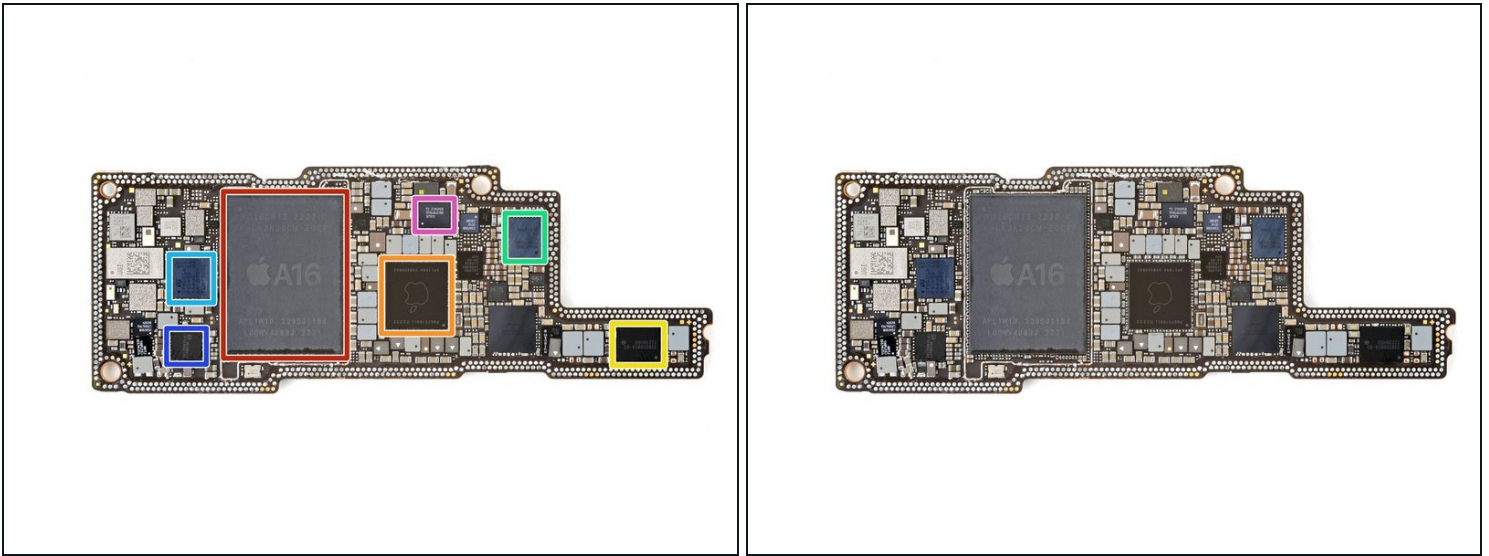
- Chip ID part 2:
 - Possibly Infineon load switch
 - NXP Semiconductor [NTB0101GS1](#) 1-bit translating transceiver
 - Texas Instruments [LSF0101](#) 1-bit bidirectional voltage level translator

Step 3



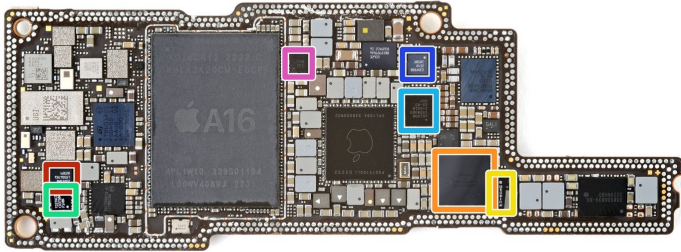
- Chip ID part 3:
 - WiFi/Bluetooth Module (possibly)

Step 4 — Underside of the top-most layer



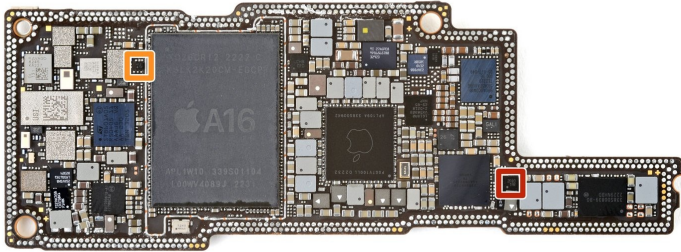
- Chip ID part 1:
 - Apple APL1W10/339S01104 A16 64-bit hexa-core applications processor w/ penta-core GPU layered underneath most likely Samsung K3LK2K20CM-EGCP 6 GB LPDDR5 SDRAM memory
 - Apple APL109A/338S00942 power management
 - Apple/Dialog Semiconductor 338S00839-B0 power management
 - Broadcom BCM59365EA1IUBG wireless power receiver
 - STMicroelectronics STB601A05 power management
 - Apple/Dialog Semiconductor 338S00819-A1 power management
 - Texas Instruments TPS65657B0 display power supply

Step 5



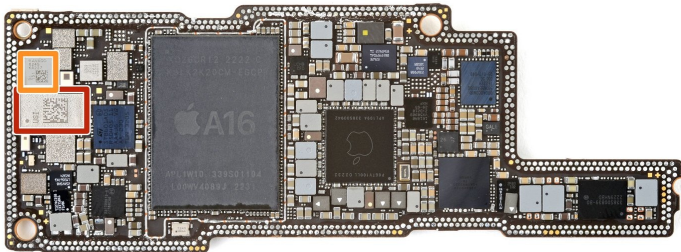
- Chip ID part 2:
 - Texas Instruments LM3567A1 LED flash driver
 - Apple/Cirrus Logic 338S00738 audio codec
 - Likely Analog Devices taptic engine driver
 - Texas Instruments CD3710A1 VCSEL array driver
 - NXP Semiconductor CBTL1618A0 DisplayPort multiplexer
 - Texas Instruments USB 2.0 dual repeater
 - onsemi DC-DC converter

Step 6



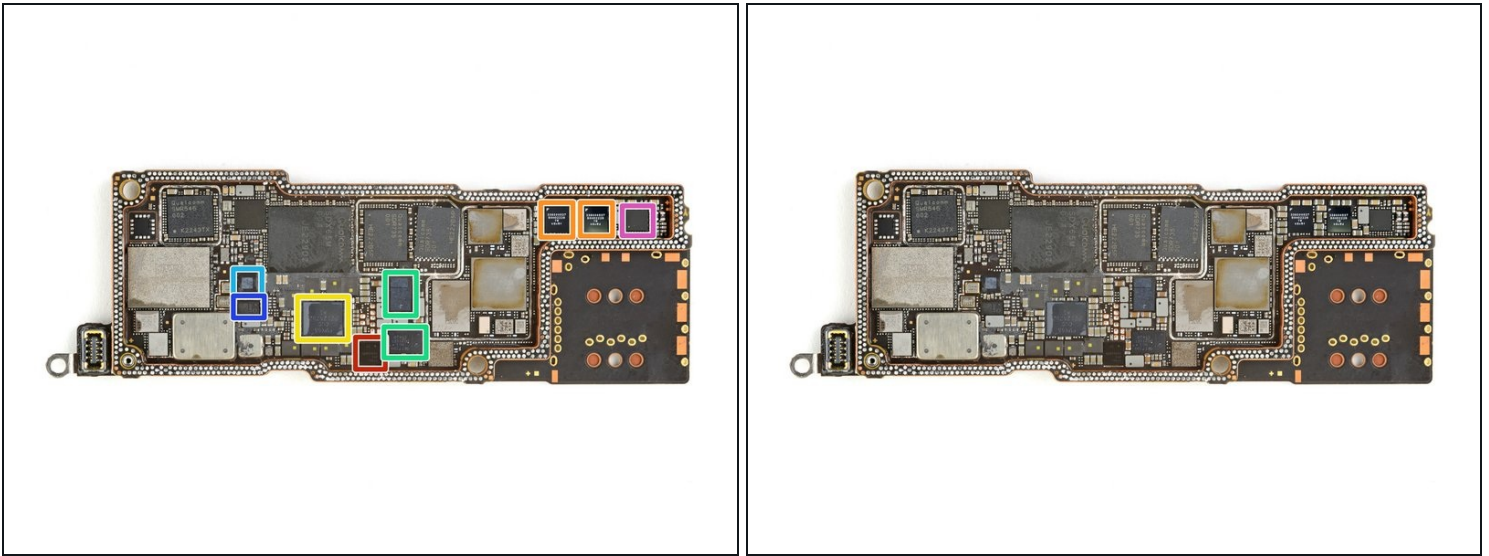
- Chip ID part 3:
 - Likely onsemi DC-DC converter
 - Possibly STMicroelectronics serial EEPROM memory

Step 7



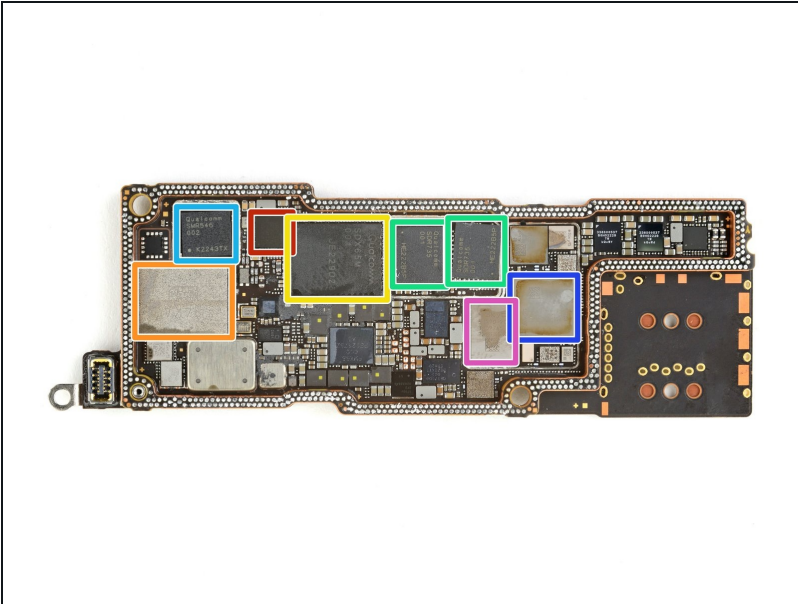
- Chip ID part 4:
 - Likely USI UWB module
 - Broadcom AFEM-8245 front-end module

Step 8 — Sandwich layer



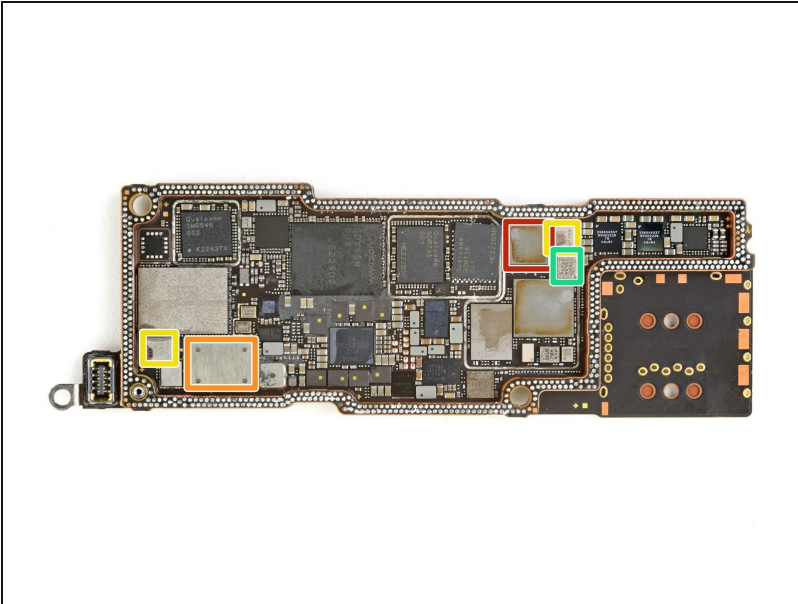
- Chip ID part 1:
 - STMicroelectronics [ST33J](#) secure element
 - Apple/Cirrus Logic 338S00537 audio amplifier
 - Qualcomm PMX65 power management
 - Qualcomm [QET7100](#) envelope tracker
 - Probably Qualcomm PMK65 clock generator
 - Likely Qorvo envelope tracker
 - Possibly STMicroelectronics power management

Step 9



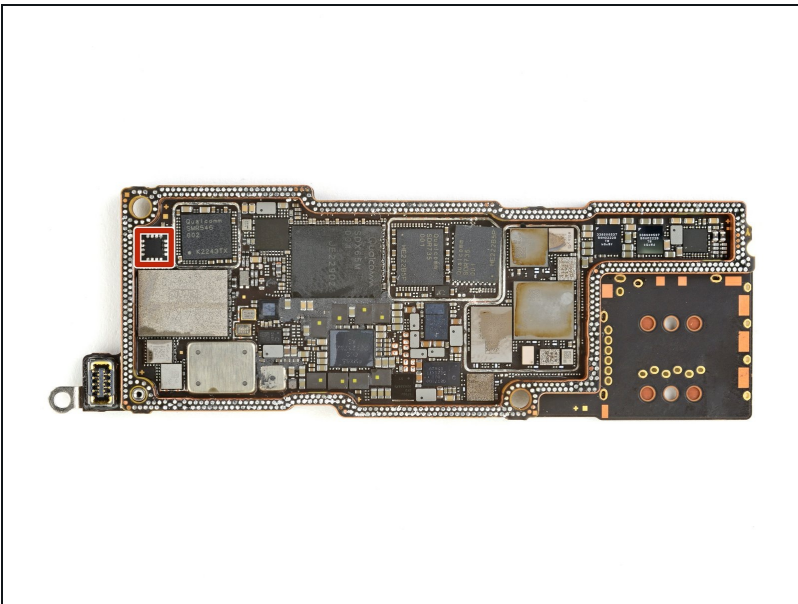
- Chip ID part 2:
 - NXP Semiconductor SN210V NFC controller w/ secure element
 - Satellite module (possibly)
 - Qualcomm [SDX65M](#) X65 5G modem
 - Qualcomm SDR735 RF transceiver
 - Qualcomm SMR546 RF transceiver
 - Broadcom AFEM-8231 front-end module
 - Skyworks SKY58290-20 front-end module

Step 10



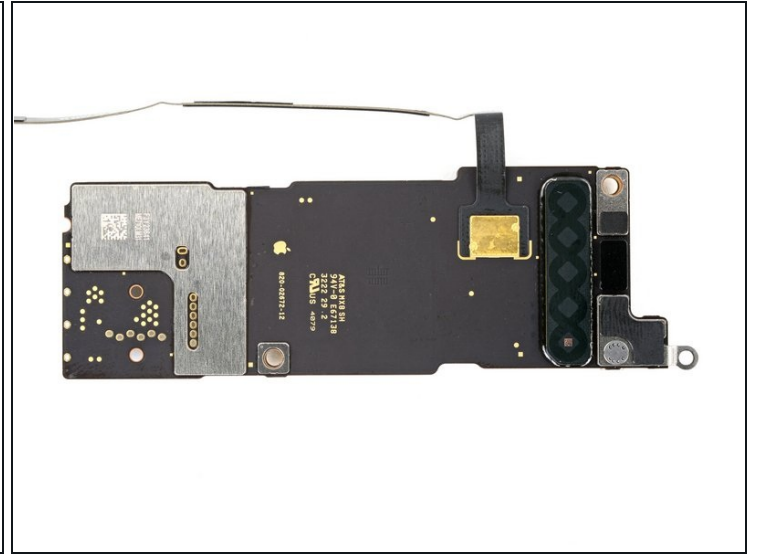
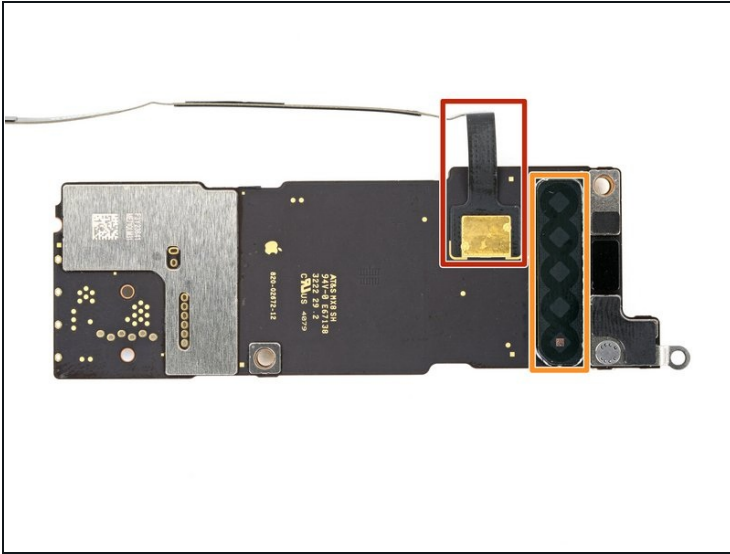
- Chip ID part 3:
 - Broadcom AFEM-8240 front-end module
 - Likely Skyworks SKY58853-17 ? front-end module
 - Possibly Skyworks SKY52628 antenna switch module
 - Possibly Skyworks SKY5xx92-16 power amplifier module

Step 11



- Chip ID part 4 - sensors:
 - Bosch Sensortec 6-axis accelerometer/gyroscope

Step 12 — Bottom layer



- Antennas:
 - Connector to possibly the satellite antenna
 - 5G mmWave patch antenna

To reassemble your device, follow these instructions in reverse order.