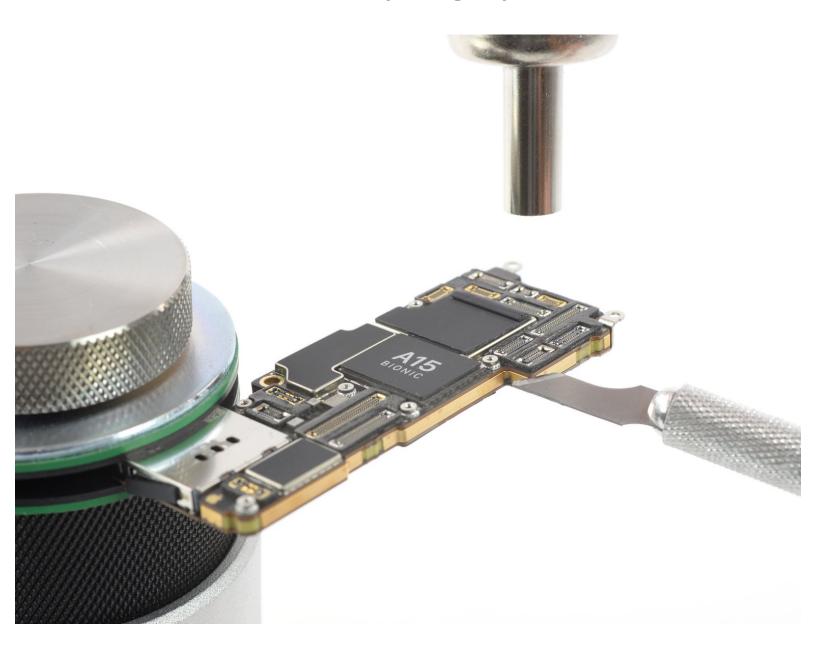


# iPhone 13 Pro Full Chip ID

Full reference guide for iPhone 13 Pro logic board chips.

Written By: Craig Lloyd

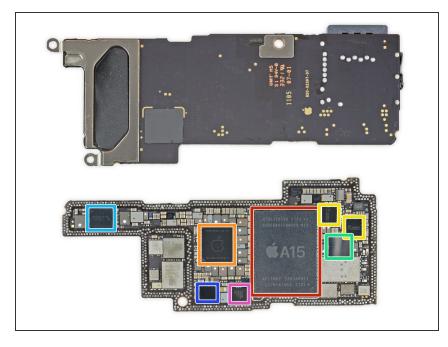


#### **INTRODUCTION**

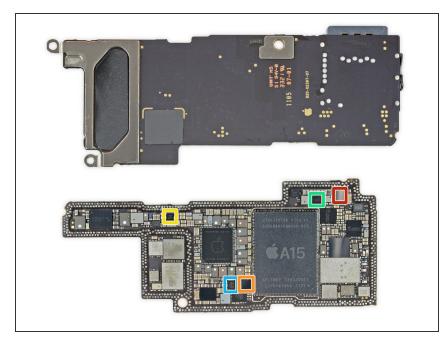
We couldn't quite fit every last drop of chip ID into our <u>iPhone 13 Pro teardown</u>. So if you're yearning for more, here is a much more thorough look into the chips found on the iPhone 13 Pro's logic board.

Special thanks to our community member Chunglin Chin for contributing to this!

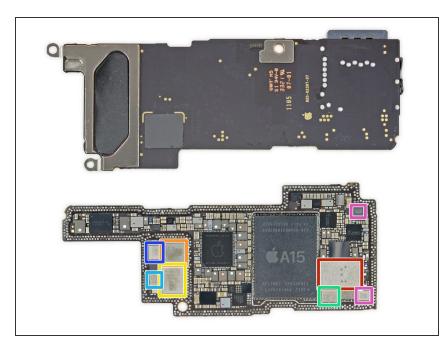
#### Step 1 — iPhone 13 Pro Full Chip ID



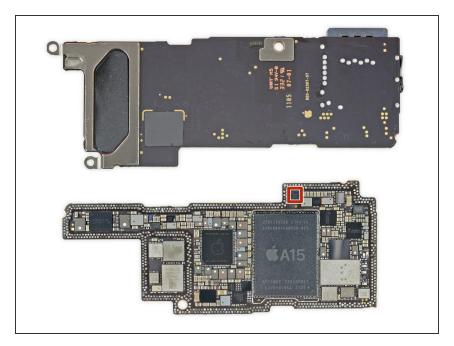
- Logic board, side 1:
  - Apple APL1W07 A15 Bionic SoC layered with what's most likely
     6 GB of SK Hynix LPDDR4X SDRAM
  - Apple APL1098 power management IC
  - Apple 338S00762-A1 power management IC
  - STMicroelectronics STB601A05 power management IC
  - Apple 338S00770-B0 power management IC
  - Texas Instruments TPS65657B0 display power management IC
  - NXP Semiconductor
    CBTL1616A0 display port
    multiplexer



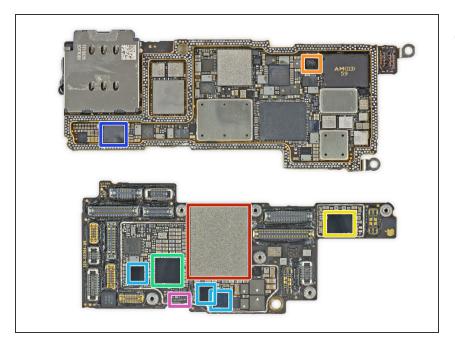
- Logic board, side 1 (cont.):
  - Texas Instruments CD3710A1
    VCSEL array driver
  - Texas Instruments USB 2.0 dual repeater
  - ON Semiconductor DC-DC converter
  - Possibly a NXP Semiconductor power management IC
  - Possibly a NXP Semiconductor load switch



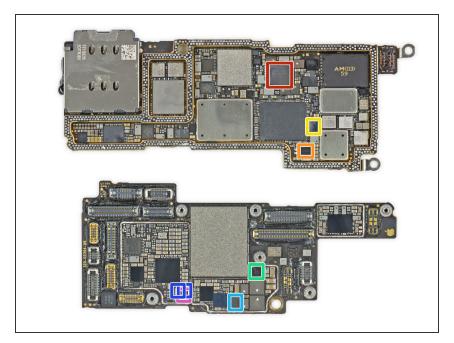
- Logic board, side 1 (cont.):
  - Apple/USI U1 ultra-wideband chip
  - Skyworks SKY58271-19 front-end module
  - Skyworks SKY58276-17 front-end module
  - Likely a Broadcom AFEM-8225 front-end module
  - Likely a Skyworks SKY59723 power amplifier module
  - Likely a Murata 141 RF switch module
  - Likely Broadcom filters



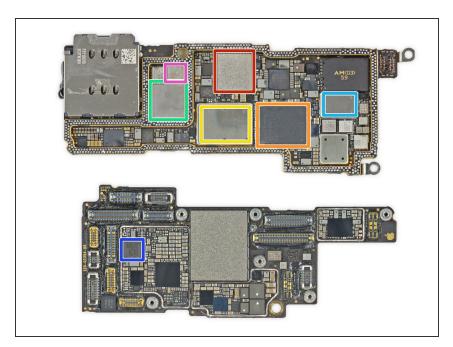
- Logic board, side 1 (cont.):
  - Alps HSCDTD00xA electronic compass



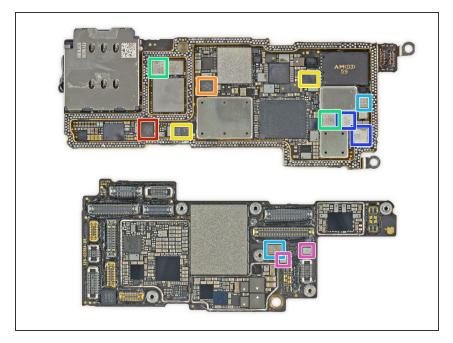
- Logic board, sides 2 and 3:
  - 128 GB of <u>Kioxia NAND flash</u> memory
  - STMicroelectronics ST33Jxxx secure microcontroller w/ eSIM
  - Possibly an Apple/Cirrus Logic 338S00817 audio processor
  - Apple/Cirrus Logic 338S00739 audio codec
  - Apple/Cirrus Logic 338S00537 audio amplifier
  - Broadcom BCM59365 wireless power receiver
  - Likely an Analog Devices haptic driver



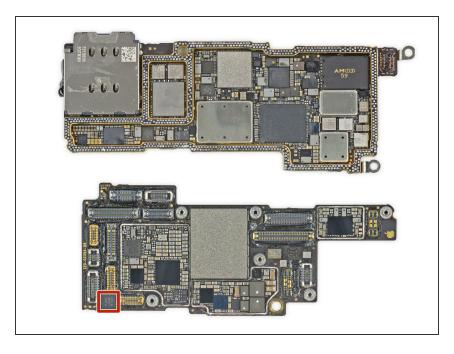
- Logic board, sides 2 and 3 (cont.):
  - Qualcomm PMX60 power management IC
  - Apple 338S00616 power management IC
  - Texas Instruments LM3567A1 LED flash driver
  - ON Semiconductor DC-DC converter
  - Likely a STMicroelectronics DC-DC converter
  - Nexperia <u>74AVC1T45</u> 3-state voltage level translator/transceiver
  - Nexperia <u>LSF0101</u> 1-bit bidirectional voltage level translator



- Logic board, sides 2 and 3 (cont.):
  - USI 339S00761 WiFi/Bluetooth module
  - Qualcomm <u>SDX60M</u> 5G modem
  - Possibly a Qualcomm SDR8685G RF transceiver
  - Broadcom AFEM-8215 front-end module
  - Possibly a Skyworks SKY53838-17 front-end module
  - NXP Semiconductor SN210V NFC controller with secure element
  - Likely a Skyworks SKY57217 power amplifier module



- Logic board, sides 2 and 3 (cont.):
  - Qualcomm QET510 envelope tracker
  - Qualcomm QET5100 envelope tracker
  - Likely a Qorvo envelope tracker
  - Likely a Skyworks SKY514xx RF switch module
  - Likely Skyworks RF switch
  - Likely Murata antenna switch module
  - Antenna tuning switch



- Logic board, sides 2 and 3 (cont.):
  - Bosch Sensortec 6-axis accelerometer/gyroscope

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