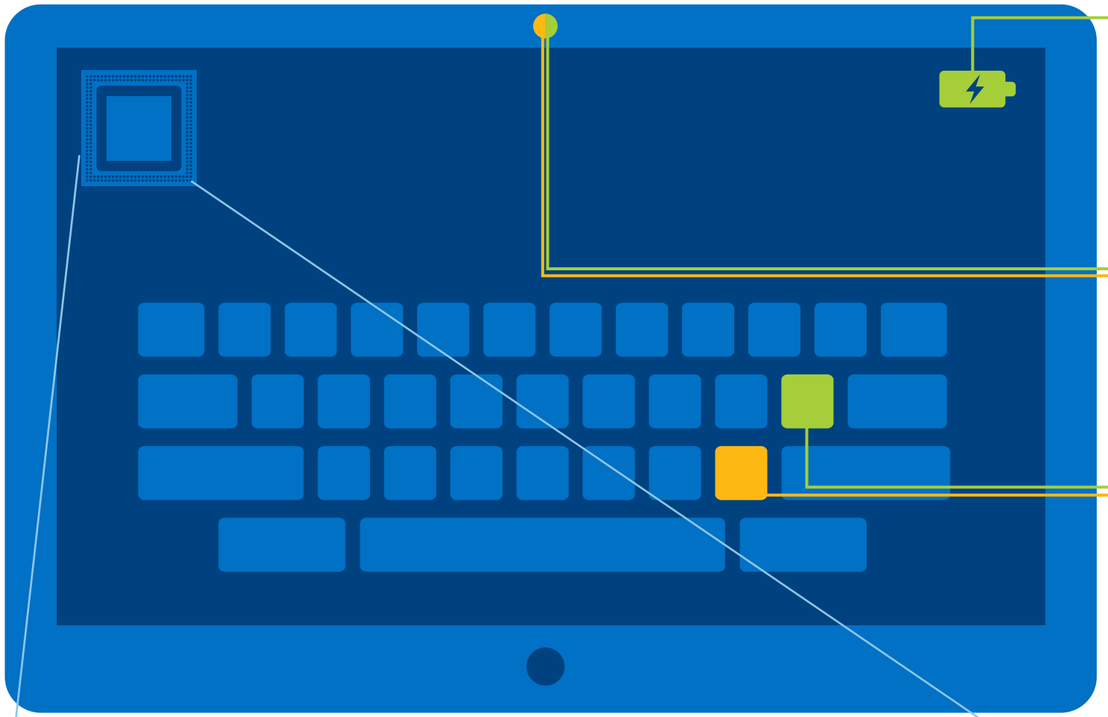
Conflict Minerals in Your Daily Digital Life



Charging Battery *(Tantalum)*

Over the years our electronic devices have slimmed down dramatically. A key mineral to thank for this is Tantalum. Tantalum stores electronic charge, packing high capacitance into a small volume.

Camera *(Tin, Tantalum)*

Taking a picture activates the camera's logic board which is soldered together with tin. Tantalum Oxide also helps create thinner, smaller lenses.

Texting/Emailing *(Tin, Tantalum)*

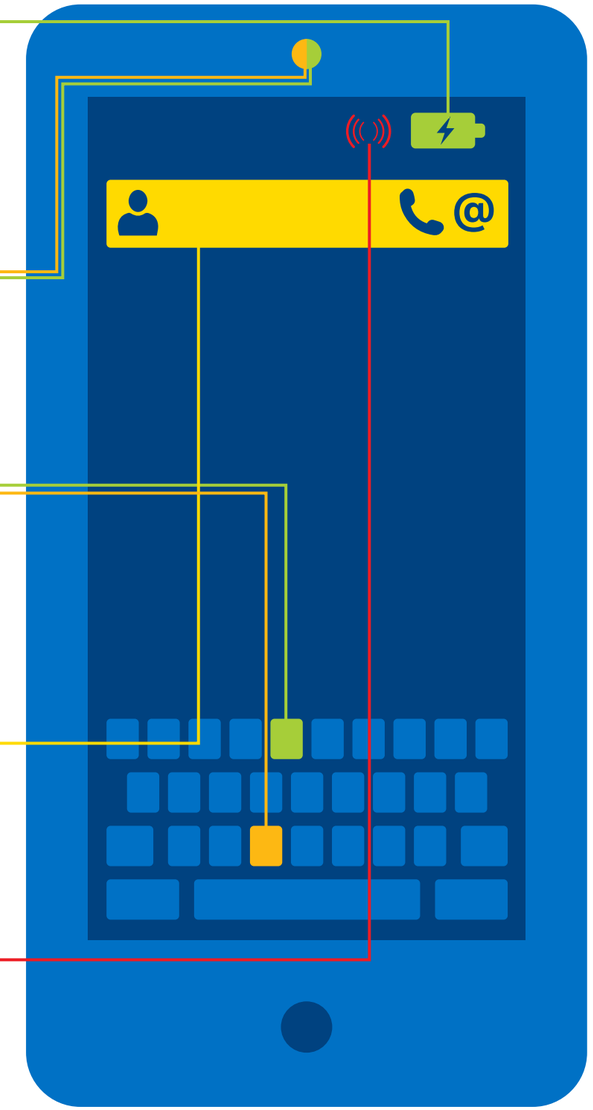
With each message sent, we transmit data through a circuit board. Tin is used to solder the circuit board. Tantalum helps keep highly conductive materials in check and helps signals pass swiftly through the device.

Viewing Contacts *(Gold)*

Gold is highly conductive. Though used sparingly, your SIM card may contain a layer of gold thinner than a strand of hair, assisting every time you pull up a phone number.

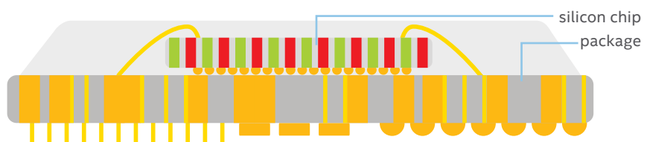
Vibration *(Tungsten)*

Tungsten creates the familiar vibrating alert of an incoming call or message. Beyond vibrations, Tungsten is a dense, wear-resistant metal used in everything from golf clubs to instrument strings.



Microprocessor
(cross-section)

Packed inside an Intel processor are many complex layers. These key metals are used to make power efficient electrical connections within the silicon chip itself, from chip to the package which carries it, and from package to the circuit board.



- Tantalum and Tungsten are part of the "wiring" connecting transistors and act as a barrier to maintain the integrity of the transistors inside the chip itself.
- Tin is used to connect the chip out to the package and the package out to the device board.
- Gold is highly conductive and used in wires and films when a very pure connection between components is required.

Tungsten Tantalum Tin Gold

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