

Typical Electronic Uses of Metals Derived from Conflict Minerals

Application	Metals Derived from Conflict Minerals			
	Gold	Tantalum	Tin	Tungsten
Printed boards (Gold surface finishes (NiAu, ENIG, and ENEPIG))	√			
Immersion tin surface finishes			√	
Terminal finishes	√(on connectors, brass parts, components (e.g. capacitors, inductors, resistors, couplers, power amplifiers, switches, custom designed contacts, etc.))		√(connectors and components (e.g. capacitors, inductors, resistors, couplers, RF shields, etc.))	
Semiconductors	√(plating, bond wire die)			√(bond wire die; in small quantities on a "chip")
LED active devices	√			
Capacitors		√	√	
High power resistors		√		
Substrates	√	√(for Surface Acoustic Wave Filters)		
Processors and chip sets		√(used in the sputter targets)		√(sputter targets)
Integrated circuits (metallic portion of die)		√		√
Sensors		√		
Solder	√		√(bar, paste, and wire forms)	
Tin plated wire			√	
Fuses			√	
Contacts			√	
Transistors				√
Platings	√		√	√(in Surface Acoustic Wave Filters)
Plastics			√(stabilizing compounds and color dyes)	
Mobile device vibration motors				√(shaft counterweights)
Crystals				√
Metallic films				√

Note: This list may not indicate all uses and should not be construed as a comprehensive list. Source: IPC Guidance: Conflict Minerals Due Diligence Guidance