

EXAMPLES OF COMMON CHARACTERISTICS OF SELECT ELECTRONIC DEVICES

Version: 1



Guidance is intended to offer further explanation of the requirements in the R2 Standard along with examples and audit recommendations. However, this document is not auditable and cannot be cited in relation to any nonconformances. The explanations are intended to prevent misinterpretation of the R2 Standard, not to add to, subtract from, or modify the R2 Standard. The examples cited may not be the only way to fulfill a requirement of the standard.

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This document provides examples of key characteristics of select electronic devices, including where Focus Materials (FMs) can commonly be found, as well as devices that may contain various types of data storage media. Note that this summary is NOT a complete or exhaustive list of all examples. R2 Facilities must assess all electronic devices and material streams for the presence of FMs and data storage capabilities, and manage accordingly.

Equipment & Components	Notes	FMs					Data
		Circuit Board	Battery	CRT Glass	Mercury	PCBs	
Wearable Electronics							
Wireless Headphones; Fitness Trackers; Smart Watches; etc.	May include AC adapter with circuit board	X	X				May have internal data storage; connected online user accounts; and removable storage such as SIM and SD cards
Mobile Devices							
Cellular Phones; Tablets; Personal Digital Assistants; Pagers; etc.	May include AC adapter with circuit board	X	X				May have internal data storage; connected online user accounts; and removable storage such as SIM and SD cards
Portable Computers							
Chassis	May include circuit board and button cell battery	X	X				May have a hard drive and removeable media such as disks, memory cards and thumb drives
Hard Drive		X					May be magnetic, solid state or hybrid drive
Optical/Floppy Drive		X					May have magnetic or optical disks
Screen	May include mercury lamps	X			X		
Device Battery	May include AC adapter with circuit board	X	X				
Docking Station	May include AC adapter with circuit board	X					

Equipment & Components	Notes	FMs					Data
		Circuit Board	Battery	CRT Glass	Mercury	PCBs	
Desktop Computers							
Chassis	May include circuit board and button cell battery	X	X				May have a hard drive and removable media such as disks, memory cards and thumb drives
Power Supply		X					
Motherboard		X	X				
Sister Cards		X					
Hard Drive		X					May be a magnetic, solid state or hybrid hard drive
Optical/Floppy Drive		X					May have removable media such magnetic or optical disks
On/Off Switch (light)		X					
Computer Peripherals							
Routers; Hubs, Switches; Modems		X					May have internal data storage and removable storage such as thumb drives
Keyboard & Mouse		X	X				
Speakers		X	X				
External Hard Drive		X					May be a magnetic, solid state or hybrid hard drive
Printers; Copiers; Fax; Multi-Function Devices	May include circuit board and button cell battery; AC adapter with circuit board; and scanning and copying devices may include mercury lamps	X	X		X		May have internal data storage and removable storage such as memory cards and thumb drives
Uninterrupted Power Supply (UPS)		X	X				
Display Devices (TVs & Monitors)							
CRT	May include remote control with circuit board and batteries	X		X			
Rear-Projection	May include remote control with circuit board and batteries, and light tubes may contain glycol coolant	X					
Plasma	May include remote control with circuit board and batteries	X					May have internal data storage; connected online user accounts; and removable storage such as memory cards and thumb drives
LCD	May include remote control with circuit board and batteries, and AC adapter with circuit board	X			X		May have internal data storage; connected online user accounts; and removable storage such as memory cards and thumb drives
LED	May include remote control with circuit board and batteries, and AC adapter with circuit board	X					May have internal data storage; connected online user accounts; and removable storage such as memory cards and thumb drives

Equipment & Components	Notes	FMs					Data
		Circuit Board	Battery	CRT Glass	Mercury	PCBs	
Home Electronics							
Smart Speakers	May include AC adapter with circuit board	X	X				May have internal storage and connected online user accounts
Audio Equipment (Radios; Receivers; Amplifiers; Equalizers; Speakers; etc.)	May include batteries for backup power, as well as remote controls with circuit boards and batteries	X	X				May have magnetic tapes and optical disks
Video Equipment (Set-top Boxes; Blu-ray & DVD players; etc.);	May include remote controls with circuit boards and batteries	X					May have internal data storage; connected online user accounts; and removable storage such as SD cards, optical disks, magnetic tape, etc.
Home Theatre Projectors	May include mercury lamps and remote controls with circuit boards and batteries	X			X		
Telephones & Answering Machines	May include AC adapter with circuit board	X	X				May have internal data storage; connected online user accounts; and removable storage such as magnetic tapes
Gaming Consoles & Controllers	May include AC adapter with circuit board	X	X				May have internal data storage; connected online user accounts; and removable storage such as memory cards
Commercial Telecommunications Equipment							
Switches & Routers	May include batteries, mercury switches and PCB capacitors	X	X		X	X	May have internal data storage; connected online user accounts; and removable storage such as SD cards, optical disks, magnetic tape, etc.
PBX	May include backup lead acid batteries and mercury lamps in screens	X	X		X		
Voicemail Module	May include batteries for backup power	X	X				May have internal data storage; connected online user accounts; and removable storage such as SD cards, optical disks, magnetic tape, etc.
Telephones & Switchboards		X					May have internal data storage; and removable storage such as SD cards, optical disks, magnetic tape, etc.
Data Storage Media							
Memory Cards & Drives		X					May include SD cards; SIM cards; memory sticks; thumb drives
Magnetic Media							May include magnetic tapes; floppy disks and diskettes
Optical Media							May include CD; DVD; Blu-ray discs

Examples of Other Devices Requiring Specific Management Under Core Requirements 8.(b) & (c)		
Item	Processing Requirements	Notes
Ink & Toner Cartridges	Managed in accordance with the Core 2 hierarchy; in compliance with all applicable legal requirements; and any outputs conform with Core 6.(e)(1)	
Electrical Appliances	Managed in accordance with the Core 2 hierarchy; in compliance with all applicable legal requirements; and any outputs conform with Core 6.(e)(1)	If processed for materials recovery, may include circuit boards and AC adapters with circuit board
Portable Appliances	Managed in accordance with the Core 2 hierarchy; in compliance with all applicable legal requirements; and any outputs conform with Core 6.(e)(1)	If processed for materials recovery, may include circuit boards and batteries, as well as AC adapter with circuit board
LED Lamps	Managed in accordance with the Core 2 hierarchy; in compliance with all applicable legal requirements; and any outputs conform with Core 6.(e)(1)	If processed for materials recovery, may include circuit boards
Electronic Toys	Managed in accordance with the Core 2 hierarchy; in compliance with all applicable legal requirements; and any outputs conform with Core 6.(e)(1)	If processed for materials recovery, may include circuit boards and batteries
Other equipment, components, and materials that do not contain Focus Materials or are not defined as electronic equipment under the R2 Standard	Managed in accordance with the Core 2 hierarchy; in compliance with all applicable legal requirements; and any outputs conform with Core 6.(e)(1)	If processed for materials recovery, assess for data storage capability and FMs