



Zebra Technologies

China RoHS Primer

Zebra Technologies



- All **E**lectronic **I**nformation **P**roducts sold and imported to China market (excluding exports and military products)

- Prevention and control of pollution caused by **E**lectronic **I**nformation **P**roducts. This refers to the control of six toxic substances or elements contained in EIP.
 - » Lead
 - » Mercury
 - » Cadmium
 - » Hexavalent Chromium
 - » Polybrominated biphenyls (PBB)
 - » Polybrominated Diphenyl Ethers (PBDE)

China RoHS covered products



- Electronic Radar Products
- Electronic communication products
- Broadcast TV products
- Computer products
- Household electronic products
- Electronic measuring instruments
- Electronic products for professional use
- Electronic component products
- Electronic applications equipment
- Electronic material products

“Effective” Dates of China RoHS



- More than one “effective date” for China RoHS
 - » March 1, 2007 is the “in force” date for all provisions labeling and documentation requirements for EIP including electrical components.
 - » Effective dates for substance restriction and pre-market certification requirements will be specified in the Catalogue and will be much later.

EIP categorizations for determining labeling compliance requirements



- Each base unit or component must be classified as one of the following
 - » EIP-A: Each homogeneous material in EIP
 - » EIP-B: Metal plated materials in each part of EIP
 - » EIP-C: Small component or material that cannot be separated under current condition. (generally less than 4mm³)

NOTE: EU “exemptions” do NOT apply in China RoHS.

- » Lead in Metal, lead in glass or ceramic, high temp lead in bonding of IC's
 - Turned shafts – EIP-B
- External Power supplies, Print heads, chargers etc have categories and labeling defined by the respective manufactures

Labeling requirements for EIP (&) components based category and Maximum Concentration Values



- Requirements for MCV on each classification type
 - » EIP-A: For homogeneous materials, the content of lead, mercury, hexavalent chromium, PBB and PBDE should not be over 0.1%. The content of cadmium should not be over 0.01%
 - » EIP-B: in this type of product, lead, mercury, hexavalent chromium, etc. hazardous substances cannot be added intentionally or used
 - » EIP-C: Small components or materials that cannot be separated under current condition. A general rule for the products is for specification less than or equal to 4mm³. The content of lead, mercury, hexavalent chromium, PBB and PBDE should not be over 0.1%. The content of cadmium should not be over 0.01%

C-RoHS Labeling use Definitions



Logo 1

- Logo 1 used for subassemblies and products that are below MCV and do not have intentionally added substances



Logo 2

- Logo 2 is required for items that can not meet the requirement for logo 1

» If logo 2 is used the table below must be provided in Simplified Mandarin.

Part Name (Major Subassembly)	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr6+)	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Display	X	X	0	0	0	0
Electronics	X	0	0	0	0	0
Drive train	X	0	0	0	0	0

The following is a list of released and translated documents that further define the C-RoHS regulations. These should be consulted for further information

- **SJ 11363-2006** Requirements for concentration limits for certain hazardous substances in EIP (Maximum Concentration Value, MCV)
- **SJ 11364-2006** Marking for control of pollution caused by EIP
- **SJ 11365-2006** Testing methods for hazardous substances in EIP
- **GB 18455-2001** Packaging Recycling Mark
- **GB 5296-2: 1999** Instructions for use of Consumer Products & Household Products and similar Electrical Appliances