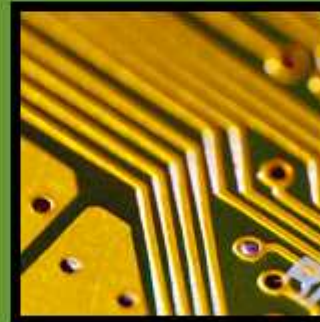




# China RoHS



move<sup>to</sup>  
green



## China RoHS



- China RoHS
  - The First country to implement a national RoHS-like law after the EU RoHS Directive and has entered into force March 1, 2007
- Federal Legislation
  - Ministry of Information Industry of the People's Republic of China
  - Issued Feb 28<sup>th</sup> 2006





## Implementation of China RoHS

- Translated as “Measures for Administration of the Pollution Control of Electronic Information Products ”
- China RoHS is to be implemented using 3 pillars:
  - The Measures (the legislation),
  - Standards, and
  - The key catalogue
- Legislation provides
  - the basic framework for the elimination of hazardous substances and
  - a mandate to develop standards with implementation details.



## What products are affected by this law?

- Products listed in the EIP (Electronic Information Product) Classifications and Explanations explanatory note are subject to “China RoHS” regulation provisions.
  - Over 30 pages of specifically identified products that range from components to finished products.
- Affects EIP products for sale in China
  - manufacturers in China and importers into China.
  - The scope of China RoHS does not apply to export products and only affects products specifically listed in EIP explanatory note
  - One important note, however, is that MII officials pointed out that many products are covered by the “others” subcategories in the EIP list. As the need arises, specific products will be pulled out of the “others” subcategories and identified in the list. MII also stated that it is their intention to eventually include all electronic products.



## Basics

- Phase 1
  - All products in EIP (Electronic Information Products) explanatory note
    - Product and packaging labeling
    - Environment Friendly Use Period (EFUP)
      - Also referred to as Environmental Protection Use Period (EPUP)
    - Table of Toxic and Hazardous Substances Names and Contents (user manual)
    - EIPs should be designed and manufactured for easy recycling and for environmental friendliness
  
- Phase 2
  - Products specifically listed in the catalogue
    - Substance restrictions
    - Certification (CCC) by Chinese certification agency



## China RoHS Label

- Appropriate label on each product
  - If no hazardous substances use figure 1
  - If product contains hazardous substance use figure 2
  
- Number indicates
  - Environment-Friendly use Period
  - In years from date of manufacture
  
- Date and country of manufacture also required on the products



Figure 1



Figure 2



## Environment Friendly Use Period (EFUP)

- Environment Friendly Use Period of Electronic Information Products refers to
  - “the period during which the toxic and hazardous substances or elements contained in electronic information products do not leak or mutate. Using electronic information products by the user do not cause serious pollution to environment and damage to human life and property.”
- Determined by manufacturer.
  - Based on normal use conditions
- No official standards currently available
  - MII has initiated work group to provide guidance on Use Period.
  - Having a difficult time converging on recommendations.
  - Industry is pulling in different directions.



## China RoHS Material Declaration

- Toxic and Hazardous Substances Names and Contents

Table 1		Toxic and Hazardous Substances and Elements				
Part Name	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr6+)	Polybrominated Biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Display	x	x	o	o	o	o
Base	o	o	o	o	o	o
Keyboard	o	o	o	o	o	o

- Created for each product from component data
- "x" for parts that contain any of the six hazardous substances over the Maximum Concentration Value (MCV) and "o" if below the MCV
- Required in the user manual for each product



## China RoHS Materials Declaration

Actual substance declaration table must be in Chinese

表一 有毒有害物质或元素名称及含量标识样式

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr <sup>6+</sup> )	多溴联苯 (PBB)	多溴二苯醚 (PBDE)



## Maximum Concentration Values

- Homogeneous Materials (EIP-A)
  - <1000ppm for Pb, Hg, Cr+6, PBB, PBDE (excluding Deca-BDE)
  - <100ppm for Cd
- Metal plated parts (EIP-B)
  - Pb, Hr, Cr+6, PBB, PBDE, Cd cannot be intentionally used.
- Small components  $\leq 1.2\text{mm}^3$  (0805 component) (EIP-C)
  - Cannot be separated in homogeneous materials under current conditions
  - <1000ppm for Pb, Hg, Cr+6, PBB, PBDE (excluding Deca-BDE)
  - <100ppm for Cd



## Product Packaging

- China RoHS Management Measures includes product packaging
  - China does not have independent product package regulation (such as EU packaging directive)
  - The SJ/T 11364-2006 Marking and Labeling standard applies the GB-18455-2001 Packaging Recycling Mark standard to EIPs.
  - It has similar requirements to international standards



## GB 18455-2001 Packaging Recycling Mark

- Packaging material must be marked on the packaging itself or, if smaller than  $5 \times 10^3 \text{mm}^2$  in size, in the product documentation.
- Example



04—Plastic code  
LDPE—Type of Plasti

- Denotes plastic code and type of plastic



## Key Catalogue

- The catalogue includes
  - Products with substance restrictions
  - Date of requirement of substance restriction
  - Substances restricted
- For a product added to the Key Catalogue
  - CCC China RoHS certification is required
  - A deadline for meeting the substance restrictions
- No official schedule to draft the content of the key catalogue
  - First catalogue expected in second half of 2007



## CCC Certification

- CCC Certification will be required of products subject to substance restrictions within the catalog.
- Products that have not been introduced to the catalog do not require CCC Certification.
- Requirements and Procedures for CCC Certification for China RoHS are still under development by Chinese standards body



## Enforcement

- For Phase 1, the spot inspections, if they occur inside China, would be conducted by the local entry-exit inspection and quarantine bureaus (often referred to as “CIQs”).
- Compliance with labeling and information disclosure requirements, would likely occur via the spot check process (market surveillance, essentially).
- For Phase 2, inspection and some sort of to-be-determined certification upon import is something that would be compulsory for imports of items that will be on the to-be-drafted Key Catalogue.



## Compliance Responsibility

- The manufacturer or importer of the final product sold to the user is responsible for overall compliance and will be held accountable for non-compliance.
- In many cases, the Canadian exporter will not be directly responsible for compliance but the distribution partners will request the following;
  - Labeling of product
  - Table of Toxic Substances
  - Labeling of packaging



## Comparison of China RoHS to EU RoHS

- Similarities
  - Same six restricted substances
  - Similar basis for Maximum Concentration Values (MCV)
- Differences
  - Products that are in scope
  - Applicable to components and finished products
  - Requires Product marking and substance declaration table
  - Restrictions are phased in across product catalogue and not when law enters into force
  - Third-party certification is required (CCC)
  - Exemptions are defined by product type during phase-in
  - Special MCV consideration for metal plating and small parts
  - Applicable to packaging
  - “put on the market” based on date of manufacture



## Summary on China RoHS

- Phase 1 applies to all EIPs manufactured on or after March 1, 2007
  - Product label with environment-friendly use period
  - Table of Hazardous Substances (in documentation)
  - Packaging material and marking requirements.
- Substance restrictions and certification take effect as defined by the Key Catalogue
  - First release of catalogue expected second half of 2007
- Marking, MCV, and testing standards have been released
- Many special cases and subtleties of regulations are still to be defined



**Thank You**