



## RoHS EU Directive Compliance

Section 21.0

The European Union (EU) has adopted a new directive 2002/95/EC, the Restriction of Hazardous Substances (“RoHS Directive”), which will restrict the use of certain substances, including lead (Pb), in electrical and electronic products. The directive applies to all such electrical and electronic products and their component parts that will be placed on the market after July 1, 2006. In addition to lead, the directive restricts the use of mercury, cadmium, hexavalent chromium, and certain halide-containing flame retardants.

Broadcom Lead free parts are compliant to EU Restriction of Hazardous Substance (RoHS) Directive 2002/95/EC. The Lead-free package option is available today. Lead-free parts will have a letter 'G' added to the top line of the part marking. See example below

Broadcom standard (non “G”) parts are compliant to 5/6 RoHS substances, exception being Pb.

Hg - Mercury Cd - Cadmium Cr+6 - Hexavalent Chromium PBB - Polybrominated Biphenyl PBDE - Polybrominated Diphenylether.



RoHS Compliant Part Marking





## China RoHS Labeling Compliance

The Chinese Ministry of Information Industry (MII) has introduced a legislation “Management Methods for controlling Pollution by Electronic Information Products” also called China RoHS.

China RoHS regulates the identical six (6) substances and same maximum concentration values as EU RoHS.

- Pb-Lead, Hg - Mercury Cd - Cadmium Cr+6 - Hexavalent Chromium  
PBB - Polybrominated Biphenyl PBDE - Polybrominated Diphenylether

China RoHS will be implemented in two stages:

- Stage 1: **Effective March 1, 2007**  
All products in Electronic Information products (EIP) catalogue must be labeled with Environmentally Friendly Use period (see symbol-1 and 2), this primarily applies to the manufacturer of the end product and not required for the component suppliers.



Symbol-1 Used for products that do  
Not contain 6 restricted substances.



Symbol-2 Used for products that contain  
toxic substances, the number inside identify  
number of years (eg.10) that the product will  
Not leak to result in environmental pollution.

- Stage 2: Effective Date -> **Not Defined by MII**
  - Hazardous substance Declaration table to be included with the parts.
  - Certification of parts by Chinese certification agency (CCC).

Broadcom products are compliant to this labeling requirement. Broadcom RoHS compliant parts (part number ending with “G”) Packing contains “China RoHS compliant label” as shown in Figure 1 below.





(P)CUSTOMER ID: 43040064



(1P) SUPPLIER ID: BCM5321MKPBG



(1T) TRACE CODE 0626788553



(Y) Supplier Code: 813013



(Q) QUANTITY: 500



COO: HK



MADE IN HONG KONG



TEST PGM: 050506

SEAL DATE: 11/05/06



I5321MA2KPBG

Figure -1





## Broadcom Halogen-free / Green Products

“Green” is a generic term concerning the materials used in electronic components. While “Green,” “Pb-free,” and “RoHS” are often used interchangeably, “Green” can sometimes denote the elimination of materials or compounds in addition to those specified by RoHS such as halogens (bromine and Chlorine). However, there is currently no consistent definition or standard for “Green” in the industry.

The common de factor industry definition of “Green” includes the restriction of substances outlined in RoHS as well as limits on halogens:

**Br: <900ppm**

**Cl: <900ppm**

**Combined Br and Cl: <1500ppm**

Broadcom’s current Pb-free parts are RoHS-compliant. Broadcom Corporation is currently working with its manufacturing partners for the Qualification of “Green” products. Broadcom Corporation will have “Green” products available for customers within 2008.

Broadcom Corporation is committed to providing products that satisfy industry enviromental directives.

