

Environmental Compliance Policy of Semiconductors Products

AudioCodes is pleased to inform our customers that Texas Instrument (“TI”) has announced the following:

TI certifies to the best of its knowledge that TI’s semiconductor products designated as “Pb-Free” and “RoHS Exempt” (defined below)*:

- Do not exceed IEC 62474 Regulated Substances threshold.
- Are compliant with the threshold requirements of the EU’s Restriction on the Use of Hazardous Substances Directive 2002/95/EC (“RoHS-1”) as well as the recast Directive 2011/65/EU (“RoHS-2”).
- Meet the China Management Methods for controlling pollution by electronic information products (“China RoHS”).

RoHS Compliance and Pb-Free

AudioCodes terms “Lead-Free” or “Pb-Free” mean semiconductor products that are compatible with the current RoHS requirements for all 6 substances (see table below), including the requirements that lead not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, AudioCodes Pb-Free products are suitable for use in specified lead-free processes. By definition, all Lead Free semiconductors are also RoHS-Compliant. *

AudioCodes term “RoHS Exempt” mean semiconductor products that are compatible with the current requirements for all 6 substances (see table below) excluding lead, which may be found in the leadframe plating or solder balls and therefore might exceed the 0.1% by weight in homogeneous materials, as defined by the valid exemptions 5(a), 7(a), 7(c)-I or 15. *

Banned Substance	RoHS Proposed Maximum Limit (ppm) ¹
Cadmium (Cd)	100
Lead (Pb)	1000
Mercury (Hg)	1000
Hexavalent Chromium (Cr6+)	1000
Poly Brominated Biphenyls (PBB)	1000
Poly Brominated Diphenyl Ethers (PBDE)	1000

¹ Maximum limit does not apply to applications covered by valid RoHS exemptions.

AudioCodes QFP Lead-Free semiconductors are: AC481-CL-J, AC482-CL, AC483-CL, AC486-CL, AC488-CL, AC476-CL, and AC498-CL. Please note that AudioCodes Lead-Free semiconductors in QFP package types are compatible to soldering temperatures of 235°C to 260°C +0/-5°C.

AudioCodes BGA Lead-Free semiconductors are: AC481-CBL-J, AC482-CBL, AC486-CBL, AC460-CBL, AC476-CBL, AC490-CBL, AC49008-CBL, AC490-CBL IND, AC491-CBL, AC491L-CBL, AC491030-CBL, AC491064-CBL, AC494-CBL-D, AC495-CBL-D, AC496-CBL-D, AC495L-CBL, AC494E-CBL, AC495E-CBL, AC496D-CBL, AC5011-CBL, AC5012-CBL, AC5013-CBL, AC5014-CBL,

AC5015-CBL IND, AC5014-CBL IND, AC5039-CBL, AC5039-CBL IND. Please note that those AudioCodes Lead-Free semiconductors in BGA package types are compatible to soldering temperature of 260°C +0/-5°C.

AudioCodes BGA RoHS-Exempt semiconductors are: AC481-CB-J, AC482-CB, AC486-CB, AC486-CB IND, AC476-CB, AC490-CB, AC49008-CB, AC490-CB IND, AC491-CB, AC491030-CB, and AC491064-CB. Please note that those AudioCodes RoHS-Compliant semiconductors in BGA package types are compatible to soldering temperature of 235°C to 260°C +0/-5°C.

TI's position is that its semiconductor products are considered components under RoHS-1 and RoHS-2. Therefore, the CE marking - EU declaration of conformity - and internal product control provisions stipulated in Article 7 of RoHS-2 do not apply.

China RoHS

All TI finished IC products labeled as "Pb-Free" are fully RoHS compliant in China and the EU. The only substance that may be contained in TI finished IC products above the 1000ppm threshold is lead (Pb). Any TI product containing lead (Pb) above 1000ppm will not have the Pb-free symbol on the label of TI products. The Pb-Free status of TI products can be verified through the substance content reports located at the www.ti.com/productcontent website. These products containing no RoHS materials above MCVs would share the China RoHS chasing arrow symbol with an "e" in it.



TI products labeled **without** the "Pb-Free" symbol contain one or more of the China RoHS substances above the allowed MCV. China RoHS does not require special labeling for components, though communications with the Ministry of Information Industry (MII) have stated, *"In the case of components or raw materials purchased abroad for completing the production, in principle labeling with related environmental information is required. However, if the component or raw material supplier has an agreement with the downstream producer, it may not label the components or raw materials, but pass the relevant environmental information to the downstream producer."* The relevant environmental information concerning Environmentally Friendly Use Period (EFUP) for these types of products is:

<http://focus.ti.com/quality/docs/gencontent.tsp?templateId=5909&navigationId=11219&contentId=32595>.

REACH

With regard to the Substances of Very High Concern (SVHC) candidate list published on the ECHA website, and based on information from TI's suppliers and internal chemical screening processes, TI Integrated Circuit (IC) devices do not contain any of the SVHC candidates above the regulatory threshold of 0.1%. TI is currently engaging with its suppliers to obtain additional information and assurances. As the ECHA SVHC list is updated, TI will provide information to its customers in a timely manner concerning their use or non-use within finished IC products through IT's product

content database

(<http://focus.ti.com/quality/docs/prdcntsearch.tsp?templateId=5909&navigationId=11220>).

For further information, see -

http://focus.ti.com/en/download/qlty/TI_REACH_Statement.pdf

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Signature: _____

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