

EU RoHS Exemptions Expiring in July 2016

TI Products Requiring RoHS Exemptions:

The majority of Texas Instruments' (TI) IC components do not require RoHS exemptions. When TI IC components require an EU RoHS exemption, one of the following may apply:

- 7(a):** Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)
- 7(c)-I:** Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devices, or in a glass or ceramic matrix compound
- 7(c) IV:** lead in PZT based dielectric ceramic materials for capacitors being part of integrated circuits or discrete semiconductors
- 15:** Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages

Exemption extensions have been requested for all four exemptions listed above in Jan 2015 to meet the EU RoHS 18 month prior to expiration rule for these exemptions. For the first 3 listed, TI as well as the rest of the electronics industry, has been working diligently on possible solutions, but none exist today for the majority of these products. For exemption 15 this will likely not be extended broadly to all flip chip products since ICs on newer technologies smaller than 90nm or IC components less than 300mm² have Pb-free replacements today. Technologies 90nm or greater or ICs 300mm² or larger do not have Pb-free replacements.

TI started working with electronic industry consortia in June 2013 to consolidate the need for extending these exemptions beyond the current July 2016 expiration date. Though the exemptions 'expired' the end of July of 2016, there has not been a new RoHS Directive published with updated exemptions and expiration dates (or removal of any particular exemption). Since extensions have been filed for these exemptions they will remain in effect until the next EU RoHS Directive is published. TI continues to support the need for these exemptions being extended and will address product requirements and customer inquiries when the latest Directive is released as quickly as possible.

Sincerely,

A handwritten signature in black ink that reads 'Mark Frimann'.

Mark Frimann
TI SC Product Stewardship Management

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