

Certificate Concerning Xilinx All Programmable Devices Designated as RoHS Compliant

Xilinx, Inc. certifies that to the best of our knowledge, all devices designated by Xilinx to be RoHS Compliant to conform to the requirements of the European Union's Restriction on Use of Hazardous Substances Directive, 2002/95-EC ("RoHS1") as well as the recast Directive 2011/65/EU ("RoHS 2").

Xilinx defines the terms "RoHS Compliant", "Pb-free" to be synonymous and indicate that the named products are compliant with the current RoHS directive for all substances as per the table below:

Banned Substance	Maximum Concentration Value (ppm)
Cadmium	100
Lead	1000
Mercury	1000
Hexavalent Chromium	1000
Polybrominated Biphenyl (PBB)	1000
Polybrominated Diphelyl Ether (PDBE)*	1000
Bis(2-Ethylhexyl) phthalate (DEHP)	1000
Benzyl butyl phthalate (BBP)	1000
Dibutyl phthalate (DBP)	1000
Diisobutyl phthalate	1000

^{*}Including Decabromodiphenyl Ether (DecaBDE)

Since none of our processes or parts use or contain Cadmium, Mercury, Hexavalent Chromium, PBBs, PBDEs, DEHPs, BBPs, DBP and Diisobutyl phthalate, Lead (Pb) is the only substance that applies to our parts. Therefore if we designate a part as Pb-free, it is also RoHS compliant.

Under the RoHS Directive, Xilinx devices may be exempt from the Pb-free requirements under certain exemptions. E.g. Exemption 15 [Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages]. As allowed, Exemption 15 may be applied to Xilinx devices in a Flip Chip Package.

Identifying RoHS Compliant Devices

The RoHS compliant or Pb-free marking and nomenclature for our products is as follows:

- 1. Products that are RoHS Compliant with no exemption have a "V" in the package code (e.g. XC5VLX110-1FFV1153C)
- 2. Starting July 1, 2017, products that are RoHS compliant with no exemption and have "G" in the package code and will have added @ mark on the lids.
- 3. Products that are RoHS compliant under exemption 15 have a "G" in the package code, but do not have the ® mark added on the lids (e.g. XC5VLX110-1FFG1153C)
- 4. Products that are RoHS '5 of 6" compliant (i.e. contain Lead (Pb) but are not covered under Exemption 15) do not have an additional 'V' or 'G' in the package marking (e.g. XC5VLX110-1FF1153C)

WK Wong, Vice/President Corporate Quality

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