



Certificate Concerning Xilinx Devices Designated as RoHS Compliant

Xilinx, Inc. certifies that to the best of our knowledge, all devices designated by Xilinx to be RoHS Compliant conform to the requirements of the European Union's Restriction on Use of Hazardous Substances Directive, 2015/863/EU ("RoHS 3") as defined in the table below:

Banned Substance	Maximum Concentration Value (ppm)
Cadmium	100
Lead	1000
Mercury	1000
Hexavalent Chromium	1000
Polybrominated Biphenyl (PBB)	1000
Polybrominated Diphenyl Ether (PBDE)*	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.

Some Xilinx devices claim RoHS Exemption 15 [*Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip-chip packages*] and therefore contain lead but are RoHS compliant. The part number designators for devices claiming Exemption 15 are included in the description below.

Identifying RoHS Compliant Devices

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

1. Wire bond devices that are Pb-free have a "G" in the third letter of the package code (e.g. XC3S1600E-4FGG400C)
2. Flip-chip devices have an "F" or "S" in the second letter of the package code (e.g. XC5VLX110-1FFG1153C, XCVU27P-L2FSGA2577E) and are Pb-free if either of the two conditions are true:
 - a. It has a "V" in the third letter of the package code (e.g. XCZU3EG-1SFVA625E).
 - b. It has a "G" in the third letter of the package code (e.g. XC5VLX110-1FFG1153C) and has  mark on the lid. See XCN16022 and XCN19005 for details.
3. Flip-chip devices that are RoHS compliant under Exemption 15 have a "G" in the third letter of the package code but do not have  mark on the lid.
4. Devices that do not contain RoHS Hazardous Substances except for Pb and are not covered under Exemption 15 do not have a "G" or "V" in the third letter of the package code (e.g. XC3S400-5FG320C).


Daniel Gitlin, Vice President Corporate Quality

7/8/2019
Date

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