March 31, 2017

Statement Regarding the RoHS Compliance of Cypress Products

Note: This compliance statement applies to all Broadcom IoT, Spansion and Cypress products that are currently distributed through Cypress Semiconductor.

The EU Directive entitled "Restriction on the use of certain Hazardous Substances (RoHS) 2002/95/EC" became effective on 1st July 2006. It restricts the use of six substances in the manufacture of electrical and electronic equipment. This directive was revised in June 2011 and is now referred to as directive 2011/65/EU. Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU announced plans to add four substances from 22 July 2019.

The substances are:

RoHS Material	Maximum Concentration in Homogenous Material
• Lead (Pb),	< 1,000 ppm
• Mercury (Hg),	< 1,000 ppm
• Cadmium (Cd),	< 100 ppm
• Hexavalent chromium (Cr_{6+}),	< 1,000 ppm
• Polybrominated biphenyls (PBB), and	< 1,000 ppm
• Polybrominated diphenyl ethers (PBDE), including Deca-BDE.	< 1,000 ppm
• Bis(2-ethylhexyl) phthalate (DEHP)	< 1,000 ppm
• Butyl benzyl phthalate (BBP)	< 1,000 ppm
• Dibutyl phthalate (DBP)	< 1,000 ppm
• Diisobutyl phthalate (DIBP)	< 1,000 ppm

Cypress products do not contain any of the RoHS materials with the exception of lead (Pb) used in some parts with external SnPb solder finishes. These Cypress products with SnPb solder finishes are 9/10 RoHS compliant. All other Cypress products utilize Pb-free solder and are fully (10/10 or 100%) RoHS compliant.

Cypress lead-free semiconductor products are designated with an “X” in the marketing part number (MPN). For Broadcom IoT products, refer to the corresponding Cypress MPN to determine Pb-free status.

Cypress Product Example:	
SnPb MPN:	CY8CTMA884AA-22
Pb-free MPN:	CY7C1041DV33-10ZSXI

Legacy-Spansion memory product MPNs use the 13th digit of the MPN to differentiate between SnPb and Pb-free solder finishes. SnPb solder finishes are coded with an “A”. Pb-free solder finishes are coded with an “F”, “J”, or “H”. The highlighted examples below show where to find the code character to determine SnPb and Pb-free applications. Pb-free solder finishes for eMMC product MPNs starting with “S4” are coded in the 13th digit with a “1”, ”2”, ”3”, ”A”, ”B” or “C”.

Flash Memory Product Example:	
SnPb MPN:	S29GL512N10FAI002
Pb-free MPN:	S29GL512N10FFI002
Pb-free MPN:	S29GL512N10FJI002
Pb-free MPN:	S29GL512N10FHI002
Pb-free MPN:	S40410081B1B1I000

Legacy-Spansion Microcontroller and Analog products MPNs starting with “MB” use suffixes “E1” or “E2” for Pb-free solder finishes. SnPb solder finishes are not coded with these suffixes. Pb-free solder finishes for MPNs starting with “S6” are coded with a “1”, ”2”, ”3”, ”A”, ”B” or “C” in the 13th digit.

Microcontroller and Analog Product Example:	
SnPb MPN:	No suffix “E1” or “E2”
Pb-free MPN	Suffix “E1”(Tin compound, Pd/Au)
Pb-free MPN	Suffix “E2” (Tin 100%)
Pb-free MPN	S6E1A11B0AGP20000

For questions specific to Cypress’s voluntary compliance with product restrictions, please create a case at http://www.cypress.com.

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