

Accuris has added the following environmental document to the active parts as mentioned in the document from Cypress Semiconductor Corp as of 29-July-2016.

Thank You.



July 29, 2016

Statement Regarding the RoHS Compliance of Cypress Products

Note: Spansion has merged with Cypress. This compliance statement applies to all 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 $1^{\underline{st}}$ 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. (EU) 2015/863 amending Annex II to Directive 2011/65/EU announced plan to add four substances from 22 July 2019 as the restriction.

The substances are:

| | RoHS Material | Maximum Concentration in | <u>Hom</u> | ogenous Material |
|---|------------------------------------|---------------------------|------------|------------------|
| • | Lead (Pb), | | < 1 | 1,000 ppm |
| • | Mercury (Hg), | | < 1 | 1,000 ppm |
| • | Cadmium (Cd), | | < | 100 ppm |
| • | Hexavalent chromium (Cr6+), | | < ′ | 1,000 ppm |
| • | Polybrominated biphenyls (PBB), a | nd | < ′ | 1,000 ppm |
| • | Polybrominated diphenyl ethers (PE | BDE), 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 | 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 product is designated with and "X" in the marketing part number (MPN).

| 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 13th digit with an "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 product MPNs stating with "MB" use suffixes an "E1" or "E2" for Pb-free solder finishes to differentiate from SnPb solder finish products. Pb-free solder finishes for MPNs starting with "S6" are coded 13th digit with an "1", "2", "3", "A", "B" or "C".

| Microcontroller and Analog Product Example: | | | | |
|---|--|--|--|--|
| o suffix "E1" or "E2" | | | | |
| ix "E1"(Tin compound, | | | | |
| Iffix "E2" (Tip 100%) | | | | |
| | | | | |
| | | | | |

For questions specific to Cypress's voluntary compliance with product restrictions, please contact <u>gacs_team@cypress.com</u>.

Rick Lattanzio Director, Quality Systems Cypress Semiconductor Corporation