



CERTIFICATE OF COMPLIANCE REACH DECLARATION

This letter is to certify all Microsemi products (Except some product define in NOTE section below) are REACH compliant on the EU REGULATION (EC) No1907/2006 last update to be REACH 191 on June, 2018. It does not contain the substances specified in the below REACH candidate list of "Substances of Very High Concern" (SVHC), above the threshold of 0.1 wt% (1,000 ppm).

The complete list is available at <https://echa.europa.eu/candidate-list-table>.

Note 1:

Some Microsemi products define as below may contain BPA (CAS# 80-05-7) above 0.1% w/w. Under normal usage, no dispersion into the environment is expected. The products are not designed for use while in contact with food or beverage containers. Please contact Microsemi (Ben-Rohs.REACH@Microchip.com) if needed.

in varying amounts that may be above 0.1% w/w but less than 0.2% w/w, which is contained in the IC's laminated substrates. The supplier of the raw material has indicated that the actual amount is variable. Please note that under normal usage, no dispersion into the environment is expected and these components are not designed for usage while in contact with food or drink containers. Revised REACH statements can be provided for the small number of product affected, on demand.

A. Three legacy in-production of ESC BU devices PM4351-NGI/PM4351-NI, PM5384-NGI/PM5384-NI, PM8375-NGI/PM8375-NI, PM8380-NGI/PM8380-NI)

B. 4 CPG products in Jade MCM Project: which assembly from Advanced Semiconductor Engineering, Chung-Li Branch, Taiwan
ZL30182LFF7, ZL30182LFG7, ZL30244LFF7, ZL30244LFG7, ZL30245LFF7, ZL30245LFG7, ZL30255LFF7, ZL30255LFG7, ZL30621LFF7, ZL30621LFG7, ZL30623LFF7, ZL30623LFG7, ZL30721LFF7, ZL30721LFG7, ZL30723LFF7, ZL30723LFG7

C. 5 SOC products assembly in Amkor Technology Korea Plant 4, South Korea. M2GL050-FG896, M2S005-VF400, M2GL005-VF400, M2GL005-VFG400, M2S010-VF256, M2S005-VF256

Note 2:

Di-boron trioxide was added to REACH Annex XIV as a Substance of Very High Concern (SVHC) on June 18, 2012. ON SEMICONDUCTOR products in glass encapsulated packages may list Di-boron trioxide as a constituent material in the glass encapsulation, in a concentration greater than 0.1%; REACH classifies; glass as a substance of unknown or variable composition, complex reaction products or biological matter (UVCB) containing the elements silica, calcium, sodium, potassium, magnesium and other cautions bonded together with oxygen. In glass, these elements are bonded into a non-crystalline molecular structure with completely different properties than the starting material; Therefore Di-boron trioxide is not present in the finished Microsemi Product. and does not require notification of the presence of a SVHC. Customer or interest shall check Material Composition Declaration in detail for Diboron Trioxide.

Note 3:

Lead, which was added to the REACH Annex XIV as a Substance of Very High Concern(SVHC) on June 27th, 2018, may be contained in some of Microsemi products. In such cases the lead is RoHS exempted with 7a (lead in high melting temperature type die attach solders) or 7c (lead in glass or ceramic). If present, Lead is listed in a material declaration.

Note 4: Supplier Declaration Concerning REACH

Microsemi supplies products globally and is committed to ensuring that we comply to environmental regulations and standards as required internationally. As such, Microsemi is working with its customers and suppliers to comply with REACH EU directives. Under REACH, substances that are considered to have potential negative impact on human health or the environment are called "Substances of Very High Concern" (SVHC). The initial candidate list was published in 2008 and accepted in 2009.

Microsemi requires suppliers to identify if any substances on this list are present in an Article (Deliverable) at or above the 0.1% weight by weight (w/w) concentration and report the name and CAS number of the SVHC candidate and the quantity on the Microsemi Product Content Declaration for the Deliverable.

Microsemi confirms that product(s) listed under Supplier Product Information above are, to the best of our knowledge and based on our Supplier's reports, manufactured in compliance to Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and do not contain any of the substances as described in Article 67 and Annex XVII (with amendments) as identified in the accompanying SVHC Table in the finished delivered product above the 0.1% w/w reporting limit with one exception, as outlined below.

Microsemi also advises that we are actively engaged with our suppliers in an on-going effort to ensure compliance regarding future additional SVHC materials as are published by the European Chemicals Agency (ECHA). If the recipient of this Declaration and Microsemi have a written contract or other agreement that governs the provision of the identified part(s), the terms and conditions of that agreement, including any limitation of liability and warranty rights and/or remedies that are a part of that agreement, will be the sole and exclusive source of Microsemi's liability and the recipient's sole remedies for issues that arise regarding the information Microsemi provides in this Declaration. In the absence of such a written agreement, the limitation of liability and warranty rights and/or remedies of Microsemi's standard Terms and Conditions of Sale shall apply. In no event shall Microsemi be liable for any indirect, special, incidental, consequential, or other exemplary damages arising out of the information provided herein, or arising out of its provision of REACH compliance statements.

Signature:



Date: Oct 16, 2018

Name: Wisit Wangkanon , Senior Quality Engineer
Microsemi QA Corporation.

Email: Ben-Rohs.REACH@microsemi.com

| Rev | Change item | Change by | Date |
|-----|--|-----------|--------------|
| 01 | New Released | Wisit W. | Apr 12, 2018 |
| 02 | Add more 4 CPG parts from JadeMCM Project | Wisit W. | Apr 23, 2018 |
| 03 | Revise part list of CPG in Note 1 section B. | Wisit W. | Apr 24, 2018 |
| 04 | Update to be REACH191 | Wisit W. | Oct 16, 2018 |