

Technical Brief

Associated Project: No
Associated Part Family: None
Software Version: None

Tech Brief Abstract

This document addresses the compliance status of the Cypress Development Kit products so that they match global directives for the Restriction of Hazardous Substances (RoHS).

Introduction

The European Union (EU) initiated the RoHS directive 2002/95/EC, hereafter referred to as EU RoHS, in 2003 for implementation by July 1, 2006. EU RoHS limited the amounts of six hazardous substances in electrical and electronic equipment. The China government promulgated the RoHS directive, hereafter referred to as China RoHS, on February 28, 2006 for implementation on March 1, 2007. The China RoHS also restricted use of the same substances as EU RoHS at the same maximum concentration limits. Besides the EU and China RoHS, California has also issued a legislation banning four (Lead, Mercury, Cadmium, and Hexavalent Chromium) of the six metals in the EU and China RoHS.

Cypress Compliance Summary

Cypress is committed to providing environmentally safe products and meeting the requirements of the RoHS directives. Our goal is to have all new products comply with the RoHS requirements. In addition, Cypress is converting existing development kits to RoHS compliant products. As a result, non RoHS free products are handled as non standard products and will be phased out after Product Change Notifications (PCNs) are issued for them.

New Cypress development kit products comply with the RoHS directives. As global directives similar to RoHS evolve, Cypress will update its operating procedures where applicable.

The policy for existing non standard, non compliant development kit products is NOT to rework existing inventories. When additional demand is recognized for these products, Cypress will review the kit specifications and where feasible convert to RoHS compliant products. Note that development kits are classified as engineering tools and not held to EU directives.

RoHS Definition

The EU and China RoHS directives restrict use of the following six substances to the respective maximum concentration values (MCV):

- Cadmium (Cd) 100 PPM
- Hexavalent Chromium (Cr +6) 1000 PPM
- Lead (Pb) 1000 PPM
- Mercury (Hg) 1000 PPM
- Polybrominated biphenyls (PBB) 1000 PPM
- Polybrominated biphenyl ethers (PBDE) 1000 PPM

RoHS 6 or RoHS compliant products are defined as products containing less than the applicable MCV for the six substances in the homogenous or packing materials. Board assembly reflow temperature conditions are not defined.

RoHS 5 or RoHS non compliant products are defined as products containing Pb, but do not contain the other five substances in the homogenous materials. Board assembly follows the SnPb eutectic solder paste profile.

Pb-free products are RoHS 6 compliant and can withstand the Pb-free board assembly temperature requirements based on JEDEC standard, J-STD-020C. Both conditions must be satisfied to be considered Pb-free.

Non Pb-free products are either not RoHS 6 compliant or cannot withstand the Pb-free board assembly temperature conditions. Therefore, this may be an RoHS 5 or 6 compliant product that does not withstand the Pb-free reflow conditions.

Green compliant products are Pb-free and RoHS 6 compliant. In addition, they do not contain halides, antimony, and other EIA/EICTA/JEITA Joint Industry Guide (JIG) controlled substances beyond the threshold limits.

Compliance Solutions for Development Kit Products

Cypress selects the most widely accepted industry RoHS solutions for its development kit products.

Compliance Quality Systems

The information in Exhibit B is based on data considered to be accurate. Cypress has not performed testing on these development kit products, but relies on information provided by their suppliers.

Product Availability

As stated in the Cypress RoHS policy, "Cypress Semiconductor standard products are RoHS compliant". Consequently, non RoHS products will be handled as non standard and phased out.

Cypress will continue to work with customers and support the requirements where business conditions justify. Final decisions to terminate a product will be based on business opportunities for each Marketing Part Number.

Product Identification and Labeling

Cypress differentiates RoHS compliant products from non compliant products through distinct labeling. RoHS 6 compliant products are identified with a label, as illustrated in Exhibit A. Individual product status by kit marketing part number is identified in Exhibit B.

Exhibit A



Exhibit B

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY30700	N	Never
CY30701	N	Never
CY30703	N	Never
CY3083-01	N	Never
CY3083-02	N	Never
CY3083-03	N	Never
CY3083-04	N	Never
CY3083-05	N	Never
CY3083-06	N	Never
CY3083-07	N	Never
CY3083-08	N	Never
CY3083-DP48	N	Never
CY3083-LF56	N	Never
CY3083-SC28	N	Never
CY3083-SS56	N	Never
CY3093	N	Based on Demand
CY3095	N	Based on Demand
CY3096	N	Based on Demand
CY3203A-CAPSENSE	Y	Prior to 6/01/08
CY3207ISSP	N	Based on Demand
CY3209-EXPRESSEVK	Y	Prior to 6/01/08
CY3210-20X34	N	Based on Demand
CY3210-21X23	N	Based on Demand
CY3210-21X34	N	Based on Demand
CY3210-24X23	N	Based on Demand
CY3210-24X33	N	Based on Demand
CY3210-24X94	N	Based on Demand
CY3210-27X43	N	Based on Demand

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY3210-29X66	N	Based on Demand
CY3210-EXPRESSDK	N	Never
CY3210-FANMOD	N	Never
CY3210-MINIPROG1	Y	Prior to 9/01/08
CY3210-MPADAPT	Y	Prior to 9/01/08
CY3210-PLOC10	Y	Prior to 6/01/08
CY3210-PLOC10POD	N	Based on Demand
CY3210-PROTOMOD	N	Never
CY3210-PSOCEVAL1	Y	Prior to 6/01/08
CY3210-PSOCEVAL1-U	Y	Prior to 6/01/08
CY3210-SDCARD	N	Based on Demand
CY3213A-CAPSENSE	Y	Prior to 6/01/08
CY3214-PSOCEVALUSB	Y	Prior to 6/01/08
CY3215-DK	N	Based on Demand
CY3216	N	Based on Demand
CY3217	Y	Prior to 6/01/08
CY3218-CAPEXP1	Y	Prior to 6/01/08
CY3218-CAPEXP2	Y	Prior to 6/01/08
CY3218-CAPEXP3	Y	Prior to 6/01/08
CY3220LINBUS-RD	N	Never
CY3220-SLIDER	N	Never
CY3235-PROXDET	N	Based on Demand
CY3236A-PIRMOTION	N	Based on Demand
CY3240-I2USB	Y	Prior to 6/01/08
CY3242-IOX	N	Based on Demand
CY3242-IOXLITE	N	Based on Demand
CY3250-100TQFP-FK	Y	Prior to 6/01/08
CY3250-16SOIC-FK	Y	Prior to 6/01/08
CY3250-20334QFN	Y	Prior to 6/01/08
CY3250-20334QFN-POD	Y	Prior to 6/01/08
CY3250-20434QFN	Y	Prior to 6/01/08
CY3250-20434QFN-POD	Y	Prior to 6/01/08
CY3250-20466QFN	Y	Always
CY3250-20466QFN-POD	Y	Always
CY3250-20PDIP-FK	Y	Prior to 6/01/08
CY3250-20SOIC-FK	Y	Prior to 6/01/08
CY3250-20SSOP-FK	Y	Prior to 6/01/08
CY3250-20X34	Y	Prior to 12/01/08
CY3250-20X34-POD	Y	Prior to 12/01/08
CY3250-21X23	Y	Prior to 6/01/08
CY3250-21X23-POD	Y	Prior to 6/01/08
CY3250-21X23QFN	Y	Prior to 6/01/08
CY3250-21X23QFN-POD	Y	Prior to 6/01/08
CY3250-21X34	Y	Prior to 6/01/08

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY3250-21X34-POD	Y	Prior to 6/01/08
CY3250-21X34QFN	Y	Prior to 6/01/08
CY3250-21X34QFN-POD	Y	Prior to 6/01/08
CY3250-23X33QFN	Y	Prior to 6/01/08
CY3250-23X33QFN-POD	Y	Prior to 6/01/08
CY3250-24994QFN	Y	Prior to 12/01/08
CY3250-24994QFN-POD	Y	Prior to 12/01/08
CY3250-24QFN-FK	Y	Prior to 6/01/08
CY3250-24X23A	Y	Prior to 6/01/08
CY3250-24X23A-POD	Y	Prior to 6/01/08
CY3250-24X23AQFN	Y	Prior to 6/01/08
CY3250-24X23AQFN-POD	Y	Prior to 6/01/08
CY3250-24X33	Y	Prior to 6/01/08
CY3250-24X33-POD	Y	Prior to 6/01/08
CY3250-24X94QFN	Y	Prior to 6/01/08
CY3250-24X94QFN-POD	Y	Prior to 6/01/08
CY3250-27XXX	Y	Prior to 6/01/08
CY3250-27XXX-POD	Y	Prior to 6/01/08
CY3250-27XXXQFN	Y	Prior to 6/01/08
CY3250-27XXXQFN-POD	Y	Prior to 6/01/08
CY3250-28PDIP-FK	Y	Prior to 6/01/08
CY3250-28SOIC-FK	Y	Prior to 6/01/08
CY3250-28SSOP-FK	Y	Prior to 6/01/08
CY3250-29XXX	Y	Prior to 6/01/08
CY3250-29XXX-POD	Y	Prior to 6/01/08
CY3250-29XXXQFN	Y	Prior to 6/01/08
CY3250-29XXXQFN-POD	Y	Prior to 6/01/08
CY3250-32QFN-FK	Y	Prior to 6/01/08
CY3250-44TQFP-FK	Y	Prior to 6/01/08
CY3250-48QFN-FK	Y	Prior to 6/01/08
CY3250-48SSOP-FK	Y	Prior to 6/01/08
CY3250-56QFN-FK	Y	Prior to 6/01/08
CY3250-60445QFN	Y	Always
CY3250-660445QFN-POD	Y	Always
CY3250-64315QFN	Y	Always
CY3250-64315QFN-POD	Y	Always
CY3250-68QFN-FK	Y	Prior to 12/01/08
CY3250-8PDIP-FK	Y	Prior to 6/01/08
CY3250-8SOIC-FK	Y	Prior to 6/01/08
CY3250-FLEXCABLE	Y	Prior to 6/01/08
CY3250-LED02	Y	Prior to 9/01/08
CY3250-LED02-POD	Y	Prior to 9/01/08
CY3250-LED02QFN	Y	Prior to 09/01/08
CY3250-LED02QFN-POD	Y	Prior to 09/01/08

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY3250-LED16	Y	Prior to 09/01/08
CY3250-LED16-POD	Y	Prior to 09/01/08
CY3250-LED16QFN	Y	Prior to 6/01/08
CY3250-LED16QFN-POD	Y	Prior to 9/01/08
CY3253-BLDC	N	Based on Demand
CY3261A-RGB	Y	Prior to 6/01/08
CY3263-COLORLOCK	Y	Prior to 6/01/08
CY3265C-RGB	Y	Prior to 09/01/08
CY3265N-RGB	Y	Prior to 09/01/08
CY3265O-RGB	Y	Prior to 09/01/08
CY3269N	Y	Prior to 09/01/08
CY3270	Y	Prior to 6/01/08
CY3271	Y	Prior to 9/01/08
CY3271-EXP1	Y	Prior to 9/01/08
CY3271-RFBOARD	Y	Prior to 9/01/08
CY3280-22x45	Y	Always
CY3280-24X94	Y	Prior to 6/01/08
CY3280-BK1	Y	Prior to 6/01/08
CY3280-BBM	Y	Prior to 9/01/08
CY3280-BMM	Y	Always
CY3280-CPM1	Y	Always
CY3280-SLM	Y	Always
CY3280-SRM	Y	Always
CY3280-TPM	Y	Always
CY3619	N	Based on Demand
CY3630	N	Based on Demand
CY3630M	N	Based on Demand
CY3631	N	Based on Demand
CY3635	N	Based on Demand
CY3635M	N	Based on Demand
CY3649	N	Based on Demand
CY3653	N	Based on Demand
CY3655-01	Y	Prior to 6/01/08
CY3655-05	Y	Prior to 6/01/08
CY3655-06	Y	Prior to 6/01/08
CY3655-07	Y	Prior to 6/01/08
CY3655-08	Y	Prior to 6/01/08
CY3655-09	Y	Prior to 6/01/08
CY3655-10	Y	Prior to 6/01/08
CY3655-DK	N	Based on Demand
CY3655-EXT	N	Based on Demand
CY3655-PLG	N	Based on Demand
CY3655-PODUSB	Y	Prior to 6/01/08
CY3655-PODWIR	Y	Prior to 6/01/08

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY3656-28SSOP	Y	Prior to 6/01/08
CY3656-32MLF	Y	Prior to 6/01/08
CY3656-32MLF2	Y	Prior to 6/01/08
CY3656-DK	N	Based on Demand
CY3656-EXT	N	Based on Demand
CY3662	N	Never
CY3663	N	Never
CY3664-28SSOP	Y	Prior to 6/01/08
CY3664-56MLF	Y	Prior to 6/01/08
CY3664-DK	N	Based on Demand
CY3664-EXT	N	Based on Demand
CY3670	N	Based on Demand
CY3672-USB	N	Based on Demand
CY3674	N	Based on Demand
CY3675-LCC4A	Y	Always
CY3675-LCC6A	Y	Always
CY3675-QFN24A	Y	Always
CY3675-SOIC8A	Y	Always
CY3675-TSSOP20B	Y	Always
CY3675-CLKMKR1	Y	Always
CY36800	N	Never
CY36800J	N	Never
CY36800M	N	Never
CY3683	N	Never
CY3684	N	Based on Demand
CY3685	N	Based on Demand
CY3686	N	Based on Demand
CY3687	N	Based on Demand
CY3688	Y	Prior to 9/01/08
CY3690	N	Based on Demand
CY3691	N	Based on Demand
CY3694	N	Based on Demand
CY3695	N	Based on Demand
CY3696	N	Based on Demand
CY3697	N	Based on Demand
CY3698	N	Based on Demand
CY3699	N	Based on Demand
CY3724	N	Based on Demand
CY3900I	N	Never
CY3950I	N	Never
CY4602	N	Never
CY4605	N	Based on Demand
CY4606	N	Based on Demand
CY4611B	N	Never

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY4615B	N	Never
CY4623	N	Never
CY4636	N	Never
CY4636B	N	Based on Demand
CY4636L	N	Based on Demand
CY4638	N	Never
CY4639	N	Never
CY4640	N	Never
CY4672	N	Based on Demand
CY4672-40QFN-FK	Y	Prior to 6/01/08
CY4672-69103	Y	Prior to 6/01/08
CY4672-69103-POD	Y	Prior to 6/01/08
CY4672-69213	Y	Prior to 6/01/08
CY4672-69213-POD	Y	Prior to 6/01/08
CY8CKIT-001	Y	Always
CYC3ISR	N	Never
CYUSBISRPC	N	Never
CYWBDVK001AB	Y	Prior to 6/01/08
CYWBDVK002AB	Y	Always
CYWM6934	N	Based on Demand
CYWM6935	N	Based on Demand

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