

Technical Brief

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

Technical 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
CY3210-28XXX	Y	COMPLIANT
CY3210-MINIPROG1	Y	COMPLIANT
CY3210-MPADAPT	Y	COMPLIANT
CY3210-PLOC10	Y	COMPLIANT
CY3210-PSOCEVAL1	Y	COMPLIANT
CY3210-PSOCEVAL1-U	Y	COMPLIANT
CY3213A-CAPSENSE	Y	COMPLIANT
CY3214-PSOCEVALUSB	Y	COMPLIANT
CY3215-DK	Y	COMPLIANT
CY3215A-DK	Y	COMPLIANT
CY3217	Y	COMPLIANT
CY3218-CAPEXP1	Y	COMPLIANT
CY3218-CAPEXP2	Y	COMPLIANT
CY3218-CAPEXP3	Y	COMPLIANT
CY3240-I2USB	Y	COMPLIANT
CY3250-100TQFP-FK	Y	COMPLIANT
CY3250-16QFN-FK	Y	COMPLIANT
CY3250-16SOIC-FK	Y	COMPLIANT
CY3250-20246QFN	Y	COMPLIANT
CY3250-20246QFN-POD	Y	COMPLIANT
CY3250-20334QFN	Y	COMPLIANT
CY3250-20334QFN-POD	Y	COMPLIANT
CY3250-20346QFN	Y	COMPLIANT
CY3250-20346QFN-POD	Y	COMPLIANT
CY3250-20434QFN	Y	COMPLIANT
CY3250-20434QFN-POD	Y	COMPLIANT
CY3250-20466QFN	Y	COMPLIANT

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY3250-20466QFN-POD	Y	COMPLIANT
CY3250-20566	Y	COMPLIANT
CY3250-20566-POD	Y	COMPLIANT
CY3250-20566QFN-POD	Y	COMPLIANT
CY3250-20666QFN	Y	COMPLIANT
CY3250-20666QFN-POD	Y	COMPLIANT
CY3250-20PDIP-FK	Y	COMPLIANT
CY3250-20SOIC-FK	Y	COMPLIANT
CY3250-20SSOP-FK	Y	COMPLIANT
CY3250-20X34	Y	COMPLIANT
CY3250-20X34-POD	Y	COMPLIANT
CY3250-21X23	Y	COMPLIANT
CY3250-21X23-POD	Y	COMPLIANT
CY3250-21X23QFN	Y	COMPLIANT
CY3250-21X23QFN-POD	Y	COMPLIANT
CY3250-21X34	Y	COMPLIANT
CY3250-21X34-POD	Y	COMPLIANT
CY3250-21X34QFN	Y	COMPLIANT
CY3250-21X34QFN-POD	Y	COMPLIANT
CY3250-22345	Y	COMPLIANT
CY3250-22345-POD	Y	COMPLIANT
CY3250-22545	Y	COMPLIANT
CY3250-22545-POD	Y	COMPLIANT
CY3250-23X33QFN	Y	COMPLIANT
CY3250-23X33QFN-POD	Y	COMPLIANT
CY3250-24994QFN	Y	COMPLIANT
CY3250-24994QFN-POD	Y	COMPLIANT

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY3250-24994QFN-POD	Y	COMPLIANT
CY3250-24QFN-FK	Y	COMPLIANT
CY3250-24X23A	Y	COMPLIANT
CY3250-24X23A-POD	Y	COMPLIANT
CY3250-24X23AQFN	Y	COMPLIANT
CY3250-24X23AQFN-POD	Y	COMPLIANT
CY3250-24X33	Y	COMPLIANT
CY3250-24X33-POD	Y	COMPLIANT
CY3250-24X94QFN	Y	COMPLIANT
CY3250-24X94QFN-POD	Y	COMPLIANT
CY3250-27XXX	Y	COMPLIANT
CY3250-27XXX-POD	Y	COMPLIANT
CY3250-27XXXQFN	Y	COMPLIANT
CY3250-27XXXQFN-POD	Y	COMPLIANT
CY3250-286XXQFN	Y	COMPLIANT
CY3250-286XXQFN-POD	Y	COMPLIANT
CY3250-28PDIP-FK	Y	COMPLIANT
CY3250-28SOIC-FK	Y	COMPLIANT
CY3250-28SSOP-FK	Y	COMPLIANT
CY3250-28XXX	Y	COMPLIANT
CY3250-28XXX-POD	Y	COMPLIANT
CY3250-28XXXQFN	Y	COMPLIANT
CY3250-28XXXQFN-POD	Y	COMPLIANT
CY3250-29XXX	Y	COMPLIANT
CY3250-29XXX-POD	Y	COMPLIANT
CY3250-29XXXQFN	Y	COMPLIANT
CY3250-29XXXQFN-POD	Y	COMPLIANT
CY3250-32QFN-FK	Y	COMPLIANT
CY3250-44TQFP-FK	Y	COMPLIANT
CY3250-48QFN-FK	Y	COMPLIANT
CY3250-48SSOP-FK	Y	COMPLIANT
CY3250-56QFN-FK	Y	COMPLIANT
CY3250-60445QFN	Y	COMPLIANT
CY3250-60445QFN-POD	Y	COMPLIANT
CY3250-60455QFN	Y	COMPLIANT
CY3250-60455QFN-POD	Y	COMPLIANT
CY3250-64315QFN	Y	COMPLIANT
CY3250-64315QFN-POD	Y	COMPLIANT
CY3250-64345QFN	Y	COMPLIANT
CY3250-64345QFN-POD	Y	COMPLIANT
CY3250-64355QFN	Y	COMPLIANT
CY3250-64355QFN-POD	Y	COMPLIANT

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY3250-68QFN-FK	Y	COMPLIANT
CY3250-8PDIP-FK	Y	COMPLIANT
CY3250-8SOIC-FK	Y	COMPLIANT
CY3250-FLEXCABLE	Y	COMPLIANT
CY3250-LED02	Y	COMPLIANT
CY3250-LED02-POD	Y	COMPLIANT
CY3250-LED02QFN	Y	COMPLIANT
CY3250-LED02QFN-POD	Y	COMPLIANT
CY3250-LED04	Y	COMPLIANT
CY3250-LED04-POD	Y	COMPLIANT
CY3250-LED04QFN	Y	COMPLIANT
CY3250-LED04QFN-POD	Y	COMPLIANT
CY3250-LED08	Y	COMPLIANT
CY3250-LED08-POD	Y	COMPLIANT
CY3250-LED08QFN	Y	COMPLIANT
CY3250-LED08QFN-POD	Y	COMPLIANT
CY3250-LED16	Y	COMPLIANT
CY3250-LED16P01NQ	Y	COMPLIANT
CY3250-LED16P01NQ-POD	Y	COMPLIANT
CY3250-LED16P01QFN	Y	COMPLIANT
CY3250-LED16P01QFNPOD	Y	COMPLIANT
CY3250-LED16-POD	Y	COMPLIANT
CY3250-LED16QFN	Y	COMPLIANT
CY3250-LED16QFN-POD	Y	COMPLIANT
CY3250-PLC20NQ	Y	COMPLIANT
CY3250-PLC20NQPOD	Y	COMPLIANT
CY3250-PLC20NQ-POD	Y	COMPLIANT
CY3250-PLC20QFN	Y	COMPLIANT
CY3250-PLC20QFNPOD	Y	COMPLIANT
CY3250-PLC20QFN-POD	Y	COMPLIANT
CY3261A-RGB	Y	COMPLIANT
CY3263-COLORLOCK	Y	COMPLIANT
CY3265C-RGB	Y	COMPLIANT
CY3265N-RGB	Y	COMPLIANT
CY3265O-RGB	Y	COMPLIANT
CY3267	Y	COMPLIANT
CY3268	Y	COMPLIANT
CY3269N	Y	COMPLIANT
CY3270	Y	COMPLIANT
CY3271	Y	COMPLIANT
CY3271-EXP	Y	COMPLIANT
CY3271-EXP1	Y	COMPLIANT

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY3271-RFBOARD	Y	COMPLIANT
CY3272	Y	COMPLIANT
CY3273	Y	COMPLIANT
CY3274	Y	COMPLIANT
CY3275	Y	COMPLIANT
CY3276	Y	COMPLIANT
CY3277	Y	COMPLIANT
CY3280-20X66	Y	COMPLIANT
CY3280-22X45	Y	COMPLIANT
CY3280-24X94	Y	COMPLIANT
CY3280-28XXX	Y	COMPLIANT
CY3280-BBM	Y	COMPLIANT
CY3280-BK1	Y	COMPLIANT
CY3280-BMM	Y	COMPLIANT
CY3280-BSM	Y	COMPLIANT
CY3280-CPM1	Y	COMPLIANT
CY3280-MBR	Y	COMPLIANT
CY3280-SLM	Y	COMPLIANT
CY3280-SMARTSENSE	Y	COMPLIANT
CY3280-SRM	Y	COMPLIANT
CY3290-TMA300	Y	COMPLIANT
CY3290-TMG1X0	Y	COMPLIANT
CY3290-TMG200	Y	COMPLIANT
CY3655-01	Y	COMPLIANT
CY3655-05	Y	COMPLIANT
CY3655-06	Y	COMPLIANT
CY3655-07	Y	COMPLIANT
CY3655-08	Y	COMPLIANT
CY3655-09	Y	COMPLIANT
CY3655-10	Y	COMPLIANT
CY3655-PODUSB	Y	COMPLIANT
CY3655-PODWIR	Y	COMPLIANT
CY3656-28SSOP	Y	COMPLIANT
CY3656-32MLF	Y	COMPLIANT
CY3656-32MLF2	Y	COMPLIANT
CY3664-28SSOP	Y	COMPLIANT
CY3664-56MLF	Y	COMPLIANT
CY3675-CLKMAKER1	Y	COMPLIANT
CY3675-LCC4A	Y	COMPLIANT
CY3675-LCC6A	Y	COMPLIANT
CY3675-QFN24A	Y	COMPLIANT
CY3675-QFN8A	Y	COMPLIANT
CY3675-SOIC8A	Y	COMPLIANT
CY3675-TSSOP20B	Y	COMPLIANT

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY3679	Y	COMPLIANT
CY3688	Y	COMPLIANT
CY4605	Y	COMPLIANT
CY4606	Y	COMPLIANT
CY4672-40QFN-FK	Y	COMPLIANT
CY4672-69103	Y	COMPLIANT
CY4672-69103-POD	Y	COMPLIANT
CY4672-69213	Y	COMPLIANT
CY4672-69213-POD	Y	COMPLIANT
CY8CKIT-001B	Y	COMPLIANT
CY8CKIT-001C	Y	COMPLIANT
CY8CKIT-002	Y	COMPLIANT
CY8CKIT-003	Y	COMPLIANT
CY8CKIT-003A	Y	COMPLIANT
CY8CKIT-008	Y	COMPLIANT
CY8CKIT-009A	Y	COMPLIANT
CY8CKIT-010A	Y	COMPLIANT
CY8CKIT-012	Y	COMPLIANT
CY8CKIT-017	Y	COMPLIANT
CY8CKIT-019	Y	COMPLIANT
CY8CKIT-020	Y	COMPLIANT
CY8CKIT-023	Y	COMPLIANT
CY8CKIT-024	Y	COMPLIANT
CY8CKIT-022	Y	COMPLIANT
CY8CKIT-025	Y	COMPLIANT
CY8CKIT-028 EPD	Y	COMPLIANT
CY8CKIT-028 TFT	Y	COMPLIANT
CY8CKIT-029A	Y	COMPLIANT
CY8CKIT-030A	Y	COMPLIANT
CY8CKIT-031	Y	COMPLIANT
CY8CKIT-033A	Y	COMPLIANT
CY8CKIT-032	Y	COMPLIANT
CY8CKIT-036	Y	COMPLIANT
CY8CKIT-037	Y	COMPLIANT
CY8CKIT-038	Y	COMPLIANT
CY8CKIT-040	Y	COMPLIANT
CY8CKIT-042	Y	COMPLIANT
CY8CKIT-042BLEA	Y	COMPLIANT
CY8CKIT-044	Y	COMPLIANT
CY8CKIT-049-41XX	Y	COMPLIANT
CY8CKIT-049-42XX	Y	COMPLIANT
CY8CKIT-050B	Y	COMPLIANT
CY8CKIT-059	Y	COMPLIANT
CY8CKIT-038	Y	COMPLIANT

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY8CKIT-142	Y	COMPLIANT
CYCD-DESIGNER	NA	
CY15FRAMKIT-001	Y	COMPLIANT
CYUSBSRPC	Y	COMPLIANT
CYWBDVK001AB	Y	COMPLIANT
CYWBDVK002AB	Y	COMPLIANT
CYWM6934	Y	COMPLIANT
CYWM6935	Y	COMPLIANT
CYUSB3KIT-001	Y	COMPLIANT
CYUSBS232	Y	COMPLIANT
CYUSBS234	Y	COMPLIANT
CYUSBS236	Y	COMPLIANT
CY4603	Y	COMPLIANT
CY4609	Y	COMPLIANT
CY3280-MBR2	Y	COMPLIANT
CY3280-MBR3	Y	COMPLIANT
CY5670	Y	COMPLIANT
CY5671	Y	COMPLIANT
CY5672	Y	COMPLIANT
CY5682	Y	COMPLIANT
CYBLE-022001-EVAL	Y	COMPLIANT
CY4541	Y	COMPLIANT
CY4531	Y	COMPLIANT
CY4500	Y	COMPLIANT
CY8CKIT-041-40XX	Y	COMPLIANT
CY8CKIT-041-41XX	Y	COMPLIANT
CY8CKIT-046	Y	COMPLIANT
CY8CKIT-048	Y	COMPLIANT
CY8CKIT-141	Y	COMPLIANT
CY8CKIT-142	Y	COMPLIANT
CY8CKIT-142 TRAY	Y	COMPLIANT
CY8CKIT-143A	Y	COMPLIANT
CY8CKIT-143A TRAY		COMPLIANT

Kit Marketing Part Number	RoHS Compliant	Compliance Date
CY8CKIT-143B	Y	COMPLIANT
CY8CKIT-145-40XX	Y	COMPLIANT
CY8CKIT-145-41XX	Y	COMPLIANT
CY3677	Y	COMPLIANT
CY5676	Y	COMPLIANT
CY5677	Y	COMPLIANT
CY8CKIT-147	Y	COMPLIANT
CY8CKIT-146	Y	COMPLIANT
CY8CKIT-043	Y	COMPLIANT
CYTK44	Y	COMPLIANT
CY8CKIT-062 BLE	Y	COMPLIANT
CY8CKIT-149	Y	COMPLIANT
CY8CKIT-052	Y	COMPLIANT
CY8CKIT-062 WIFI BT	Y	COMPLIANT
CY8CKIT-148	Y	COMPLIANT
CYUSB3KIT-003	Y	COMPLIANT
CYUSB3ACC-004A	Y	COMPLIANT
CYUSB3ACC-005	Y	COMPLIANT
CY15FRMKIT-002	Y	COMPLIANT
CY8CKIT-063	Y	COMPLIANT
CY8CKIT-005	Y	COMPLIANT
CY6611	Y	COMPLIANT
CY4533	Y	COMPLIANT
CY8CPROTO-062 4343W	Y	COMPLIANT
CY920819EVB-02	Y	COMPLIANT
CY8CKIT-148 COIL	Y	COMPLIANT
CY8CKIT-148	Y	COMPLIANT
CYBT-343026	Y	COMPLIANT
CYW920719Q40EVB-01	Y	COMPLIANT

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