



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D * : Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2014-09-30
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Giuseppe Vitali Palma	Representative Title	AMS/IPD Materials Declaration Champion)
Representative Phone *	Refer to "Supplier Comment" section	Representative Email *	Refer to "Supplier Comment" section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/internet/com/support/online_tech_support.jsp		

Uncertainty Statement


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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard

Legal Statement

Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
	7BVP*086VBC1	A	SH1A	2014-09-30
Amount	UoM	Unit type	ST ECOPACK Grade	
1900.000	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
NAC	NAC	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
Not Applicable ; if coating is used or d	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
SIP	10.2,15.5,4.5	3	Through-hole
Comment	Package: TO 220 NI CLIP; MD valid for BTB08-600BWRG		

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	false
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)
7c-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices

QueryList : REACH-16th June 2014				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	7BVP*086VBC1					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	4.415	mg	supplier	die	Silicon (Si)	7440-21-3		3.926	mg	889241	2066
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.05	mg	11325	26
die (s)				supplier	metallization	Gold (Au)	7440-57-5		0.011	mg	2492	6
die (s)				supplier	passivation	Alumina	1344-28-1		0.032	mg	7248	17
die (s)				supplier	passivation	Lead silicate Glass	65997-18-4	7c-I-Electrical and e	0.284	mg	64326	149
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	1133	3
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.107	mg	24236	56
Leadframe	Copper & its alloys	1623.73	mg	supplier	alloy	Copper (Cu)	7440-50-8		1622.106	mg	999000	853740
Leadframe				supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		1.624	mg	1000	855
Soft solder	Solder	2.318	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.167	mg	934858	1141
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.035	mg	15099	18
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.116	mg	50043	61
Bonding wire	Other inorganic materials	35.509	mg	supplier	Frame Trigger	Copper (Cu)	7440-50-8		35.509	mg	1000000	18689
encapsulation	Other Organic Materials	227.714	mg	supplier	mold compound	Silica, vitreous	60676-86-0		185.674	mg	815382	97723
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		12.512	mg	54946	6585
encapsulation				supplier	mold compound	Carbon black	1333-86-4		2.002	mg	8792	1054
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		27.526	mg	120880	14487
connections coating	Solder	6.314	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.314	mg	1000000	3323