



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2014-04-22
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 *	Emilio Castelli	Representative Title	APG MD 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/web/en/support/online_tech_support.html		

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
L9352B-TR-LF	B98C*US69AB6	A	MU1A	2014-04-22
Amount	UoM	Unit type	ST ECOPACK Grade	
1978.10	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	11x15.9x3.15	36	flat	
Comment				

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 '7a' exemption (other selected exemptions may apply)	true
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
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

QueryList : REACH-16th December 2013				
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	B98C*US69AB6					
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	25.502	mg	supplier	die	Silicon (Si)	7440-21-3		24.717	mg	969218	12495
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.149	mg	5843	75
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.149	mg	5843	75
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.055	mg	2157	28
die (s)				supplier	passivation	Indium Tin oxide (In2O3.SnO2)	50926-11-9		0.254	mg	9960	128
die (s)				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.014	mg	549	7
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.038	mg	1490	19
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.126	mg	4941	64
Leadframe	Copper & its alloys	1235.743	mg	supplier	alloy	Copper (Cu)	7440-50-8		1230.889	mg	996072	622258
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.567	mg	459	287
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.035	mg	838	523
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		3.252	mg	2632	1644
Die attach		14.522	mg	JIG R	glue or tape	Lead (Pb)	7439-92-1	7a-Lead in high met	14.159	mg	975003	7158
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		0.218	mg	15012	110
Die attach				supplier	glue or tape	Tin (Sn)	7440-31-5		0.145	mg	9985	73
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		2.320	mg	1000000	1173
encapsulation		694.067	mg	supplier	mold compound	Phenol Resin	205830-20-2		27.763	mg	40000	14035
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		20.822	mg	30000	10526
encapsulation				supplier	mold compound	epoxy resin	Proprietary		20.822	mg	30000	10526
encapsulation				supplier	mold compound	carbon black	1333-86-4		1.388	mg	2000	702
encapsulation				supplier	mold compound	silica vitreous	60676-86-0		623.272	mg	898000	315086
connections coating	Solder	5.946	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.946	mg	1000000	3006