



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 *	2013-09-10
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 *	Giovanni Giacopello	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/web/en/support/online_tech_support.html		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
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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
	CCWB*0310C55	A	ZS1A	2013-09-10
Amount	UoM	Unit type	ST ECOPACK Grade	
14.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used o	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	2.9 - 1.625 - 1.175	6	gull wing	
Comment	Package: SOT 23 - 6L. MDF valid also for FG & CP: DSL03-010SC6C/C (CP: DSL03-010SC6); DSL03-024SC6C/C (CP: DSL03-024SC6); DSL03-022SC6C/C (CP: DSL03-022SC6)			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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)	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-19 Dec 2012				
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	CCWB*0310C55					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Silicon Die	Other inorganic materials	0.272	mg	supplier	die	Silicon (Si)	7440-21-3		0.259	mg	952206	18500
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	22059	429
Silicon Die				supplier	metallization	Copper (Cu)	7440-50-8		0.002	mg	7353	143
Silicon Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	3676	71
Silicon Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	14706	286
Lead-frame	Other inorganic materials	6.763	mg	supplier	alloy	Copper (Cu)	7440-50-8		6.518	mg	963773	465571
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.154	mg	22771	11000
Lead-frame				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	296	143
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.008	mg	1183	571
Lead-frame				supplier	metallization	Nickel (Ni)	7440-02-0		0.076	mg	11238	5429
Lead-frame				supplier	metallization	Palladium (Pd)	7440-05-3		0.005	mg	739	357
Die Attach	Other inorganic materials	0.068	mg	supplier	glue	Silver (Ag)	7440-22-4		0.047	mg	691176	3357
Die Attach				supplier	glue	methylene diacrylate	42594-17-2		0.017	mg	250000	1214
Die Attach				supplier	glue	Dicyclopentenylxyethyl methacrylate	68586-19-6		0.002	mg	29412	143
Die Attach				supplier	glue	Polymer of Polybutadiene + Anhydride	Proprietary		0.002	mg	29412	143
Bonding wire	Other inorganic materials	0.16	mg	supplier	wire	Copper (Cu)	7440-50-8		0.157	mg	981250	11214
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.003	mg	18750	214
encapsulation	Other inorganic materials	6.737	mg	supplier	mold compound	Silica, vitreous	60676-86-0		5.747	mg	853050	410500
encapsulation				supplier	mold compound	phenolic resin	Proprietary		0.236	mg	35030	16857
encapsulation				supplier	mold compound	epoxy resin	Proprietary		0.269	mg	39929	19214
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.135	mg	20039	9643
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.014	mg	2078	1000
encapsulation				supplier	mold compound	Zinc hydroxide	20427-58-1		0.067	mg	9945	4786
encapsulation				supplier	mold compound	Magnesium hydroxide	1309-42-8		0.269	mg	39929	19214