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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 *	2013-09-04
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 *	Antonella Lanzafame	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
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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
	HDO7*LCP152C	A	SH1A	2013-09-04
Amount	UoM	Unit type	ST ECOPACK Grade	
80.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
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	4.90,3.9,1.75	8	gull wing	
Comment	valid also for commercial : LCP1521S			

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	HDO7*LCP152C					
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	1.665	mg	supplier	die	Silicon (Si)	7440-21-3		1.593	mg	956757	19913
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.053	mg	31832	663
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	601	13
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	1802	38
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.015	mg	9009	188
Leadframe	Copper & its alloys	29.072	mg	supplier	alloy	Copper (Cu)	7440-50-8		28.188	mg	969593	352350
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.663	mg	22805	8288
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.04	mg	1376	500
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.035	mg	1204	438
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.134	mg	4609	1675
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.004	mg	138	50
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	138	50
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.004	mg	138	50
Die attach	Other Organic Materials	0.392	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.356	mg	908163	4450
Die attach				supplier	glue or tape	acrylate	Proprietary		0.02	mg	51020	250
Die attach				supplier	glue or tape	Methacrylate	Proprietary		0.016	mg	40816	200
Bonding wire	Other inorganic materials	0.245	mg	supplier	wire	Copper (Cu)	7440-50-8		0.245	mg	1000000	3063
encapsulation	Other Organic Materials	48.626	mg	supplier	mold compound	Epoxy Resin	Proprietary		3.647	mg	75001	45588
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		2.431	mg	49994	30388
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		42.109	mg	865977	526363
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.244	mg	5018	3050
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.195	mg	4010	2438