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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 *	2013-02-08
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
TSV912HYDT	IDO7*V912ARY	A	BO2A	2013-02-08
Amount	UoM	Unit type	ST ECOPACK Grade	
77.50	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	SO 08 .15 JEDEC			

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	ID07*V912ARY					
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	0.795	mg	supplier	die	Silicon (Si)	7440-21-3		0.768	mg	966038	9910
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	8805	90
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1258	13
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1258	13
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.002	mg	2516	26
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.016	mg	20126	206
Leadframe	Copper & its alloys	29.012	mg	supplier	alloy	Copper (Cu)	7440-50-8		28.23	mg	973046	364258
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.664	mg	22887	8568
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.04	mg	1379	516
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.035	mg	1206	452
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.04	mg	1379	516
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	34	13
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	34	13
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.001	mg	34	13
Soft solder	Solder	0.348	mg	supplier	solder	Silver (Ag)	7440-22-4		0.317	mg	910920	4090
Soft solder				supplier	solder	acrylate	Proprietary		0.017	mg	48851	219
Soft solder				supplier	solder	Methacrylate	Proprietary		0.014	mg	40230	181
Bonding wire	Other inorganic materials	0.054	mg	supplier	wire	Copper (Cu)	7440-50-8		0.054	mg	1000000	697
encapsulation	Other Organic Materials	47.291	mg	supplier	mold compound	Epoxy Resin	Proprietary		3.547	mg	75004	45768
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		2.365	mg	50010	30516
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		40.953	mg	865979	528426
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.237	mg	5012	3058
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.189	mg	3997	2439