Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
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 *	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		

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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 omprehensive 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**
	IYWY*0391ADY	A	ZS1A	2013-09-10
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	16.108	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**	
SOT	2.8X1.5X0.9	5	Through-hole	
Comment	Package: SOT 23-5			

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 December 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	IYWY*0391ADY					
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 Material	0.538	mg	Supplier	Silicon Die	Silicone (Si)	7440-21-3		0.538	mg	1000000	33400
Leadframe	Copper and its alloy	7.2	mg	Supplier	Alloy	Copper	7440-50-8		6.936	mg	963333	430593
Leadframe			mg	Supplier	Alloy	Iron	7439-89-6		0.162	mg	22500	10057
Leadframe			mg	Supplier	Alloy	Phosphorus	7723-14-0		0.002	mg	278	124
Leadframe			mg	Supplier	Alloy	Zinc	7440-66-6		0.009	mg	1250	559
Leadframe			mg	Supplier	Alloy	Nickel	7440-02-0		0.083	mg	11528	5153
Leadframe			mg	Supplier	Alloy	Palladium	7440-05-3		0.007	mg	972	435
Leadframe			mg	Supplier	Alloy	Gold	7440-57-5		0.001	mg	139	62
Die Attach	Other Organic Material	0.07	mg	Supplier	Glue	Silver	7440-22-4		0.056	mg	800000	3477
Die Attach			mg	Supplier	Glue	Carbocyclic Acrylates	proprietary		0.007	mg	100000	435
Die Attach			mg	Supplier	Glue	Bismaleimide resin	proprietary		0.002	mg	28571	124
Die Attach			mg	Supplier	Glue	2-preponoic acid, 2-methyl	68586-19-6		0.002	mg	28571	124
Die Attach			mg	Supplier	Glue	Additive	proprietary		0.002	mg	28571	124
Die Attach			mg	Supplier	Glue	Dicumlyl peroxide	80-43-3		0.001	mg	14286	62
Bonding Wire	Other Inorganic Material	0.15	mg	Supplier	Bonding Wire	Au	7440-57-5		0.15	mg	1000000	9312
Encapsulation	Other Organic Material	8.15	mg	Supplier	Molding Compound	Epoxy Resin-1	Proprietary		0.24	mg	29448	14899
Encapsulation			mg	Supplier	Molding Compound	Epoxy Resin-2	Proprietary		0.24	mg	29448	14899
Encapsulation			mg	Supplier	Molding Compound	Phenol resin	Proprietary		0.36	mg	44172	22349
Encapsulation			mg	Supplier	Molding Compound	Silica	60676-86-0		6.984	mg	856933	433573
Encapsulation			mg	Supplier	Molding Compound	Carbon Black	1333-86-4		0.016	mg	1963	993
Encapsulation			mg	Supplier	Molding Compound	Zinc hydroxide	20427-58-1		0.06	mg	7362	3725
Encapsulation			mg	Supplier	Molding Compound	Magnesium hydroxide	1309-42-8		0.25	mg	30675	15520