



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2013-05-09
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Giuseppe Vitali Palma	<b>Representative Title</b>	AMS & IPD Materials Declaration Champion
<b>Representative Phone *</b>	Refer to "Supplier Comment" section	<b>Representative Email *</b>	Refer to "Supplier Comment" section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
	AYW8*V740ABJ	A	ZS1A	2013-05-09
Amount	UoM	Unit type	ST ECOPACK Grade	
6.928	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	ium/Gold (Ni/Pd/Au) Tin/Bismuth (S	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	2X1.26X0.93	5	gull wing	
Comment	Package: SOT 323 5LDS			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	AYW8*V740ABJ					
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	0.352	mg		Silicon die	Silicon (Si)	7440-21-3		0.311	mg	981073	44890
Silicon die					Passivation	Gamma-butyrolactone	96-48-0		0.004	mg	12618	577
Silicon die					Passivation	Polyhydroxyamide	55295-98-2		0.002	mg	6309	289
Leadframe	Copper & its alloys	2.561	mg		Alloy	Copper	7440-50-8		2.466	mg	962905	355947
Leadframe					Alloy	Iron	7439-89-6		0.058	mg	22647	8372
Leadframe					Alloy	Iron Phosphide(FeP)	26508-33-8		0.001	mg	390	144
Leadframe					Alloy	Zinc	7440-66-0		0.003	mg	1171	433
Leadframe					Plating	Nickel	7440-02-0		0.029	mg	11324	4186
Leadframe					Plating	Palladium	7440-05-3		0.003	mg	1171	433
Leadframe					Plating	Gold	7440-57-5		0.001	mg	390	144
Die attach	Other Organic Materials	0.02	mg		Glue	Aluminium oxide	1344-28-1		0.006	mg	300000	866
Die attach					Glue	Diethylene glycol monoethyl ether acetate (2	112-15-2		0.008	mg	400000	1155
Die attach					Glue	Epoxy resin ( 1-10% )	25068-38-6		0.001	mg	50000	144
Die attach					Glue	Epoxy resin ( 10-30% )	Proprietary		0.004	mg	200000	577
Die attach					Glue	Aromatic amine ( 1-5% )	Proprietary		0.001	mg	50000	144
Bonding wire	Precious metals	0.03	mg		Bonding wire	Gold (Au)	7440-57-5		0.03	mg	1000000	4330
Encapsulation	Other Organic Materials	4	mg		Molding compound	Epoxy resin-1	Proprietary		0.08	mg	20000	11547
Encapsulation					Molding compound	Epoxy resin-2	Proprietary		0.08	mg	20000	11547
Encapsulation					Molding compound	Epoxy resin-3	Proprietary		0.08	mg	20000	11547
Encapsulation					Molding compound	Phenol resin	Proprietary		0.16	mg	40000	23095
Encapsulation					Molding compound	Silica	60676-86-0		3.592	mg	898000	518476
Encapsulation					Molding compound	Carbon Black	1333-86-4		0.008	mg	2000	1155