



## 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  *: Required Field

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2013-12-18
<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>	Antonella Lanzafame	<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
	EYE3*V992ARL	A	ZS1A	2013-12-18
Amount	UoM	Unit type	ST ECOPACK Grade	
25.20	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	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
Comment	MSOP/TSSOP 8 BODY3.00 PITCH0.65; MD valid for CP: TSV9921ST.			

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-20th June 2013				
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	EYE3*V992ARL					
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	0.721	mg	supplier	Die	Silicon (Si)	7440-21-3		0.695	mg	963939	27579
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	8322	238
Silicon die				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1387	40
Silicon die				supplier	metallization	Titanium Nitride (TiN)	25583-20-4		0.001	mg	1387	40
Silicon die				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1387	40
Silicon die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.002	mg	2774	79
Silicon die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.015	mg	20804	595
Lead frame	Copper & its alloys	10.699		supplier	Alloy	Copper	7440-50-8		10.333	mg	965791	410040
Lead frame				supplier	Alloy	Iron (2.1-2.6%)	7439-89-6		0.242	mg	22619	9603
Lead frame				supplier	Alloy	Zinc (0.05-0.2%)	7440-66-6		0.014	mg	1309	556
Lead frame				supplier	Alloy	Silver	7440-22-4		0.107	mg	10001	4246
Lead frame				supplier	Alloy	Phosphorus	7723-14-0		0.003	mg	280	119
Die attach	Other Organic Materials	0.469		supplier	Glue	Silver (80-100%)	7440-22-4		0.38	mg	810235	15079
Die attach				supplier	Glue	Carbocyclic Acrylates0%	Proprietary		0.047	mg	100213	1865
Die attach				supplier	Glue	Bismaleimide resin	Proprietary		0.015	mg	31983	595
Die attach				supplier	Glue	2-preponoic acid, 2-methyl	68586-19-6		0.009	mg	19190	357
Die attach				supplier	Glue	Additive	proprietary		0.015	mg	31983	595
Die attach				supplier	Glue	Dicumyl peroxide	80-43-3		0.003	mg	6397	119
Bonding wire	Other inorganic materials	0.281		supplier	Bonding wire	Gold (Au)	7440-57-5		0.281	mg	1000000	11151
Encapsulation	Other Organic Materials	12.411		supplier	Molding compound	Silica	60676-86-0		10.835	mg	873016	429960
Encapsulation				supplier	Molding compound	Epoxy resin-1	Proprietary		0.373	mg	30054	14802
Encapsulation				supplier	Molding compound	Epoxy resin-2	Proprietary		0.373	mg	30054	14802
Encapsulation				supplier	Molding compound	Phenol resin	Proprietary		0.558	mg	44960	22143
Encapsulation				supplier	Molding compound	Carbon black	1333-86-4		0.024	mg	1934	952
Encapsulation				supplier	Molding compound	Others	Proprietary		0.248	mg	19982	9841
Finishing	Other inorganic materials	0.619		supplier	Connection coating	Sn	7440-31-5		0.619	mg	1000000	24563