



## 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>	2015-07-09
<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>	Flavio Di Francesco	<b>Representative Title</b>	AMS 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
	FBE3*V992ARY	A	ZY1A	2015-07-09
Amount	UoM	Unit type	ST ECOPACK Grade	
23.70	mg	Each	ECOPACK® 1	

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 or other bulk termination : add in comments	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	3X3X0.86	8	gull wing	
Comment	Package: MSOP/TSSOP 8 BODY3.00 PITCH0.65; MD valid for TSV992AIYST			

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-17th December 2014				
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	FBE3*V992ARY					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies	Other inorganic materials	0.795	mg	supplier	die	Silicon (Si)	7440-21-3		0.768	mg	966038	32405
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	8805	295
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1258	42
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1258	42
Die or Dies				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	2516	84
Die or Dies				supplier	Passivation	Silicon Oxide	7631-86-9		0.016	mg	20126	675
Leadframe	Copper & its alloys	10.804	mg	supplier	alloy	Copper (Cu)	7440-50-8		10.187	mg	942892	429831
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		0.318	mg	29434	13418
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		0.069	mg	6387	2911
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.015	mg	1388	633
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.209	mg	19345	8819
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.004	mg	370	169
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	185	84
Die attach	Other inorganic materials	0.376	mg	supplier	glue	Epoxy resin A	9003-36-5		0.027	mg	71809	1139
Die attach				supplier	glue	Epoxy resin B	68475-94-5		0.015	mg	39894	633
Die attach				supplier	glue	Silver(Ag)	7440-22-4		0.289	mg	768617	12194
Die attach				supplier	glue	Lactone	96-48-0		0.015	mg	39894	633
Die attach				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.015	mg	39894	633
Die attach				supplier	glue	2,6-Diglycidyl phenyl allyl ether oligomer	EC 417-470-1		0.015	mg	39894	633
Bonding wire	Precious metals	0.04	mg	supplier	wire	Gold (Au)	7440-57-5		0.04	mg	1000000	1688
encapsulation	Other inorganic materials	11.685	mg	supplier	mold compound	Epoxy Resin	proprietary		1.312	mg	112281	55359
encapsulation				supplier	mold compound	Silica fused (SiO2)	60676-86-0		9.352	mg	800342	394599
encapsulation				supplier	mold compound	Phenol Resin	proprietary		0.948	mg	81130	40000
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		0.073	mg	6247	3080