



## 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>	2014-06-10
<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>	Giovanni Giacopello	<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
	DCDS*M6LACTS	A	ZS1A	2014-06-10
Amount	UoM	Unit type	ST ECOPACK Grade	
25.50	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	Tin (Sn), matte, annealed	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SOJ	3 - 3 - 0.85	8	J bend	
Comment	Package: MSOP/TSSOP 8 BODY3.00 PITCH0.65; MDF valid for STTS75DS2F			

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-16th December 2013				
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	DCDS*M6LACTS					
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	2.043	mg	supplier	die	Silicon (Si)	7440-21-3		1.998	mg	977974	78353
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	3426	275
Silicon Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	1468	118
Silicon Die				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	489	39
Silicon Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.003	mg	1468	118
Silicon Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.019	mg	9300	745
Silicon Die				supplier	passivation	Gamma-butyrolactone	96-48-0		0.009	mg	4405	353
Silicon Die				supplier	passivation	Polyhydroxyamide	55295-98-2		0.003	mg	1468	118
Lead-frame	Copper & its alloys	9.573	mg	supplier	alloy	Copper (Cu)	7440-50-8		9.247	mg	965946	362627
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.216	mg	22563	8471
Lead-frame				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	209	78
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.012	mg	1254	471
Lead-frame				supplier	metallization	Silver (Ag)	7440-22-4		0.096	mg	10028	3765
Die attach	Solder	0.2	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.138	mg	690000	5412
Die attach				supplier	glue or tape	methylene diacrylate	42594-17-2		0.05	mg	250000	1961
Die attach				supplier	glue or tape	Dicyclopentenylxyethyl methacrylate	68586-19-6		0.006	mg	30000	235
Die attach				supplier	glue or tape	Polymer of Polybutadiene + Anhydride	Proprietary		0.006	mg	30000	235
Bonding wire	Precious metals	0.299	mg	supplier	wire	Gold (Au)	7440-57-5		0.299	mg	1000000	11725
Encapsulation	Other inorganic materials	12.724	mg	supplier	molding compound	Silica, vitreous	60676-86-0		10.847	mg	852483	425373
Encapsulation				supplier	molding compound	phenolic resin	Proprietary		0.447	mg	35130	17529
Encapsulation				supplier	molding compound	epoxy resin	Proprietary		0.511	mg	40160	20039
Encapsulation				supplier	molding compound	Biphenyl epoxy resin	85954-11-6		0.255	mg	20041	10000
Encapsulation				supplier	molding compound	carbon black	1333-86-4		0.025	mg	1965	980
Encapsulation				supplier	molding compound	Zinc hydroxide	20427-58-1		0.128	mg	10060	5020
Encapsulation				supplier	molding compound	Magnesium hydroxide	1309-42-8		0.511	mg	40160	20039
connections coating	Solder	0.661	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.661	mg	1000000	25922