



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2014-02-04</b>
<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>	<b>Giovanni Giacopello</b>	<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>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
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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
	MB61*UI64AA5	A	ZY1A	2014-02-04
Amount	UoM	Unit type	ST ECOPACK Grade	
79.520	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	1.25X3.90X4.90	10	gull wing	
Comment	Package: HSOP 8L .150; MDF valid for ST1S41PHR			

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)	<b>false</b>
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	<b>false</b>
Product(s) does not meet EU RoHS requirements and is not under exemptions	<b>false</b>
Product(s) is obsolete, no information is available	<b>false</b>
Product(s) is unknown, no information is available	<b>false</b>
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	MB61*UI64AA5					
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	2.185	mg	supplier	die	Silicon (Si)	7440-21-3		2.071	mg	955634	30605
SILICON DIE				supplier	metallization	Aluminium (Al)	7429-90-5		0.021	mg	9815	314
SILICON DIE				supplier	metallization	Tungsten (W)	7440-33-7		0.017	mg	7852	251
SILICON DIE				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.004	mg	2155	38
SILICON DIE				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.036	mg	17241	302
SILICON DIE				supplier	passivation	Gamma-butyrolactone	96-48-0		0.012	mg	1963	63
SILICON DIE				supplier	passivation	Polyhydroxyamide	55295-98-2		0.005	mg	16883	541
SILICON DIE				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	5497	176
SILICON DIE				supplier	back side metallization	Gold (Au)	7440-57-5		0.004			
SILICON DIE				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.012			
SILICON DIE				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	2356	75
LEADFRAME	Copper and its alloy	32.43	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		31.043	mg	957231	390336
LEADFRAME				supplier	ALLOY	Iron (Fe)	7439-89-6		0.77	mg	23743	9682
LEADFRAME				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.043	mg	1326	541
LEADFRAME				supplier	ALLOY	Phosphorus (P)	7723-14-0		0.013	mg	401	163
LEADFRAME				supplier	COATING	Silver (Ag)	7440-22-4		0.561	mg	17299	7054
DIE ATTACH	Other organic materials	0.771	mg	supplier	GLUE	Silver (Ag)	7440-22-4		0.578	mg	177691	1723
DIE ATTACH				supplier	GLUE	Bis F Epoxy Resin	28064-14-4		0.116	mg	111543	1081
DIE ATTACH				supplier	GLUE	1,4-bis(2,3-epoxypropoxy)butane	2425-79-8		0.058	mg	666667	6463
DIE ATTACH				supplier	GLUE	Aromatic amine	Proprietary		0.019	mg	44099	428
BONDING WIRE	Precious metals	0.1	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.1	mg	1000000	1257
ENCAPSULATION	Other organic materials	42.29	mg	supplier	MOLDING COMPOUND	Biphenyl epoxy resin	85954-11-6		3.414	mg	75006	39885
ENCAPSULATION				supplier	MOLDING COMPOUND	Phenol Resin	26834-02-6		1.707	mg	859991	457305
ENCAPSULATION				supplier	MOLDING COMPOUND	Silica, vitreous	60676-86-0		37.08	mg	40009	21275
ENCAPSULATION				supplier	MOLDING COMPOUND	Carbon black	1333-86-4		0.213	mg	20005	10638
ENCAPSULATION				supplier	MOLDING COMPOUND	Bismuth (Bi)	7440-69-9		0.256	mg	4989	2653
FINISHING	Other organic materials	1.364	mg	supplier	CONNECTION COATING	Tin (Sn)	7440-31-5		1.364	mg	1000000	17151