



## 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>	2013-06-27
<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
	44BX*49260YX	A	BO2A	2013-06-27
Amount	UoM	Unit type	ST ECOPACK Grade	
3296.55	mg	Each	ECOPACK® 1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used o	Nicke/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SMC	18,9.90,5	2	NAC	
Comment				

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-18 June 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	44BX*49260YX					
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	10.72	mg	Supplier	Silicon die	Silicon (Si)	7440-21-3		10.552	mg	984328	3201
Silicon Die				Supplier	metallization	Chromium (Cr)	7440-47-3		0.001	mg	93	0
Silicon Die				Supplier	metallization	Gold (Au)	7440-57-5		0.046	mg	4291	14
Silicon Die				Supplier	metallization	Nickel (Ni)	7440-02-0		0.008	mg	746	2
Silicon Die				Supplier	passivation	Gamma-butyrolactone	96-48-0		0.076	mg	7090	23
Silicon Die				Supplier	passivation	Polyhydroxyamide	55295-98-2		0.034	mg	3172	10
Silicon Die				Supplier	passivation	Alcoxysilane	Proprietary		0.002	mg	187	1
Silicon Die				Supplier	passivation	Aryl Silicic Acid	Proprietary		0.001	mg	93	0
Lead-frame	Other inorganic materials	359.435	mg	supplier	Alloy	Copper	65357-62-2		195.162	mg	542969	59202
Lead-frame				supplier	Alloy	Iron	7439-89-6		4.669	mg	12990	1416
Lead-frame				supplier	Alloy	Phosphorus	7723-14-0		0.06	mg	167	18
Lead-frame				supplier	Alloy	Zinc	9029-97-4		0.2	mg	556	61
Lead-frame				supplier	metallization	Gold (Au)	7440-57-5		6.261	mg	17419	1899
Lead-frame				supplier	metallization	Nickel (Ni)	7440-02-0		7.225	mg	20101	2192
Lead-frame				supplier	Plastic	Base Resin	70679-92-4		83.294	mg	231736	25267
Lead-frame				supplier	Plastic	Glass	65997-17-3		55.467	mg	154317	16826
Lead-frame				supplier	Adhesive	Epoxy Resin	Proprietary		7.097	mg	19745	2153
Bonding wire	Other inorganic materials	0.529	mg	Supplier	Bonding wire	Aluminium (Al)	7429-90-5		0.529	mg	1000000	160
Base thermal	Other inorganic materials	736.471	mg	R	Beryllium/Beryllium Compounds	BeO	1304-56-9		580.818	mg	788650	176189
Base thermal				Supplier	Base	Si	7440-57-5		0.934	mg	1268	283
Base thermal				Supplier	Paste	Molybdenum (Mo)	7439-98-7		42.021	mg	57057	12747
Base thermal				Supplier	Paste	Manganese (Mn)	7439-96-5		3.735	mg	5071	1133
Base thermal				Supplier	metallization	Ni	7440-02-0		13.742	mg	18659	4169
Base thermal				Supplier	metallization	Cobalt (Co)	7440-48-4		8.244	mg	11194	2501
Base thermal				Supplier	metallization	Tin (Sn)	7440-31-5		83.925	mg	113956	25458
Base thermal				Supplier	metallization	Silver (Ag)	7440-22-4		2.609	mg	3543	791
Base thermal				Supplier	metallization	Copper (Cu)	7440-50-8		0.435	mg	591	132
Base thermal				Supplier	metallization	Lead (Pb)	7439-92-1		0.008	mg	11	2
LID	Other inorganic materials	2189.4	mg	supplier	Plastic	Base Resin	Proprietary		1396.2	mg	637709	423533
LID				supplier	Glass	Glass	Proprietary		751.8	mg	343382	228056
LID				supplier	Adhesive	Epoxy Resins	Proprietary		41.4	mg	18909	12559