



## 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>	2014-03-07
<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>	Laurent TOSI	<b>Representative Title</b>	MMS MD CHAMPION
<b>Representative Phone *</b>	33 442 685 795	<b>Representative Email *</b>	<a href="mailto:laurent.tosi@st.com">laurent.tosi@st.com</a>
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/online_tech_support.html">http://www.st.com/web/en/support/online_tech_support.html</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
STM32L152QEH6	S0PG*437XXXA	A	9993	2014-03-07
Amount		UoM	Unit type	ST ECOPACK Grade
68.00		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	
Tin(Sn)/Silver(Ag)	NAC	NAC		

Package Designator	Size	Nbr of instances	Shape	
BGA	7x7x0.6	132	No lead	
Comment	Package: UFBGA 7X7X0.6 132L P 0.5 R			

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	SOPG*437XXXA					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	4.326	mg	supplier	die	Silicon (Si)	7440-21-3		3.702	mg	855756	54441
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.051	mg	11789	750
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.222	mg	51318	3265
die (s)				supplier	metallization	Tantalum (Ta)	7440-25-7		0.006	mg	1387	88
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.024	mg	5548	353
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	231	15
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.045	mg	10402	662
die (s)				supplier	passivation	Indium Tin oxide ( In2O3:SnO2 )	50926-11-9		0.275	mg	63569	4044
Die Attach	Other inorganic materials	1.170	mg	supplier	Glue	Resins	Trade secret		0.527	mg	450427	7750
Die Attach				supplier	Glue	Phenol-formaldehyde polymer	9003-35-4		0.117	mg	100000	1721
Die Attach				supplier	Glue	Silica	67762-90-7		0.023	mg	19658	338
Die Attach				supplier	Glue	Proprietary Material	Trade secret		0.503	mg	429915	7397
Substrate	Other inorganic materials	24.099	mg	supplier	Core	Glass fiber	65997-17-3		4.131	mg	171418	60750
Substrate				supplier	Core	Proprietary Material-Other Epoxy resins	Trade Secret		4.160	mg	172621	61176
Substrate				supplier	Solder mask	Proprietary Material-Cured resin	Trade secret		3.194	mg	132537	46971
Substrate				supplier	Solder mask	Barium sulfate	7727-43-7		1.613	mg	66932	23721
Substrate				supplier	Solder mask	Talc (Mg3H2(SiO3)4)	14807-96-6		0.187	mg	7760	2750
Substrate				supplier	Solder mask	Copper phthalocyanine bule	147-14-8		0.010	mg	415	147
Substrate				supplier	Solder mask	Silicon dioxide (SiO2)	7631-86-9		0.047	mg	1950	691
Substrate				supplier	Solder mask	Other aluminium compounds	Trade secret		0.010	mg	415	147
Substrate				supplier	Solder mask	Other miscellaneous substances	Trade secret		0.124	mg	5145	1824
Substrate				supplier	Cu foil	Copper (cu)	7440-50-8		6.646	mg	275779	97735
Substrate				supplier	Plating	Nickel (Ni)	7440-02-0		3.455	mg	143367	50809
Substrate				supplier	Plating	Gold (Au)	7440-57-5		0.522	mg	21661	7676
Encapsulation	Other inorganic materials	33.405	mg	supplier	Molding compound	Epoxy Resin (Proprietary)	Proprietary		1.021	mg	30564	15015
Encapsulation				supplier	Molding compound	Phenol Resin (Proprietary)	Proprietary		1.021	mg	30564	15015
Encapsulation				supplier	Molding compound	Fused Silica (SiO2)	60676-86-0		29.492	mg	882862	433706
Encapsulation				supplier	Molding compound	Carbon Black	1333-86-4		0.170	mg	5089	2500
Encapsulation				supplier	Molding compound	Metal Hydroxide	Proprietary		1.701	mg	50921	25015
Bonding wire	Other inorganic materials	0.900	mg	supplier	Wire	Gold (Au)	7440-57-5		0.900	mg	1000000	13235
Solder ball	Other inorganic materials	4.100	mg	supplier	Alloy	Tin (Sn)	7440-31-5		3.957	mg	965122	58191
Solder ball				supplier	Alloy	Silver (Ag)	7440-22-4		0.143	mg	34878	2103