



## 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>	2014-07-31
<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
M24512-DFCS6TP/K	P71C*2I123KB	A	9989	2014-07-31
	Amount	UoM	Unit type	ST ECOPACK Grade
	2.66	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Tin/Silver/Copper (SAC405)	NAC	NAC		

Package Designator	Size	Nbr of instances	Shape	
BGA	NAC	8	No lead	
Comment	Package: WLCSP-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 June 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	P71C*21123KB					
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	2.134	mg	supplier	die	Silicon (Si)	7440-21-3		2.069	mg	969541	778607
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	2812	2258
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	469	376
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	469	376
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.004	mg	1874	1505
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.053	mg	24836	19945
Polyimide Coating	Other organic materials	0.033	mg	Supplier	Chemicals	PD-9 Resin	Proprietary		0.022	mg	676923	8279
Polyimide Coating				Supplier	Chemicals	Trifluoroacetic Anhydride	407-25-0		0.002	mg	58462	715
Polyimide Coating				Supplier	Chemicals	Tetraethylene Glycol Dimethacrylate	109-17-1		0.005	mg	147692	1806
Polyimide Coating				Supplier	Chemicals	4,4-Oxydiphthalic Anhydride	1823-59-2		0.002	mg	58462	715
Polyimide Coating				Supplier	Chemicals	2-Hydroxyethyl Methacrylate	868-77-9		0.002	mg	58462	715
RDL	Other Inorganic materials	0.001	mg	Supplier	Alloys	Titanium	7440-32-6		0.000	mg	563380	151
RDL				Supplier	Alloys	Aluminum	7429-90-5		0.000	mg	422535	113
RDL				Supplier	Alloys	Copper	7440-50-8		0.000	mg	14085	4
UBM	Copper & Its Alloys	0.003	mg	Supplier	Alloys	Copper (Cu)	7440-50-8		0.002	mg	645161	753
UBM				Supplier	Alloys	Titanium	7440-32-6		0.000	mg	32258	38
UBM				Supplier	Alloys	Nickel	7440-02-0		0.001	mg	290323	339
UBM				Supplier	Alloys	Vanadium	7440-62-2		0.000	mg	32258	38
Solder Ball	Other Inorganic Materials	0.487	mg	Supplier	Alloys	Tin	7440-31-5		0.465	mg	954825	174989
Solder Ball				Supplier	Alloys	Silver	7440-22-4		0.020	mg	41068	7526
Solder Ball				Supplier	Alloys	Copper	7440-57-5		0.002	mg	4107	753