



## Materials Declaration Form

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

\* : Required Field

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2013-10-14
<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>	Carole DEL PUPPO	<b>Representative Title</b>	DCG 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/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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<b>Legal Statement</b>			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard

**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
STI71111UC/A5E	5E1D*7111XCL	A	MA1A	2013-10-14
Amount	UoM	Unit type	ST ECOPACK Grade	
2837.0	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	250	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Tin - 3.5Ag	NAC	NAC	BSA CD00242331 6.0 1F029964	

Package Designator	Size	Nbr of instances	Shape	
BGA	27x27x2.29	572	bulk solder	
Comment	PBGA 27sqx2.29 572 4R26 P.1 b.6			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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
<b>Exemption Id.</b>	<b>Description</b>

QueryList :REACH-20th June 2013	
Query	Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH	true

Material Composition Declaration						Mfr Item Name	5E1D*711XCL					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die	Other inorganic materials	36	mg	supplier	die	Silicon (Si)	7440-21-3		34.09	mg	958419	12016
die				supplier	metallisation	Aluminium (Al)	7429-90-5		0.102	mg	2868	36
die				supplier	metallisation	Copper (Cu)	7440-50-8		0.62	mg	17431	219
die				supplier	metallisation	Tantalum (Ta)	7440-25-7		0.105	mg	2952	37
die				supplier	metallisation	Titanium (Ti)	7440-32-6		0.027	mg	759	10
die				supplier	metallisation	Tungsten (W)	7440-33-7		0.004	mg	112	1
die				supplier	metallisation	Nickel (Ni)	7440-02-0		0.002	mg	56	1
die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.14	mg	3936	49
die				supplier	passivation	Silicon Oxide	7631-86-9		0.479	mg	13467	169
substrate	Other Organic Materials	1135	mg	supplier	core material	Fiber glass	65997-17-3		177.06	mg	156060	62411
substrate				supplier	core material	Bisphenol F type epoxy resin	9003-36-5		98.59	mg	86897	34751
substrate				supplier	core material	metal hydroxide	21645-51-2		4.024	mg	3547	1418
substrate				supplier	core material	Zinc hydroxide	20427-58-1		0.805	mg	710	284
substrate				supplier	core material	Calcium sulfate	7778-18-9		2.012	mg	1773	709
substrate				supplier	core material	Bismaleimide (B)	105391-33-1		59.959	mg	52848	21135
substrate				supplier	core material	Triazine (T)	25722-66-1		59.959	mg	52848	21135
substrate				supplier	prepreg	Fiber glass	65997-17-3		81.903	mg	72189	28870
substrate				supplier	prepreg	Silica, vitreous	60676-86-0		7.655	mg	6747	2698
substrate				supplier	prepreg	Bismaleimide	105391-33-1		22.964	mg	20240	8094
substrate				supplier	prepreg	Triazine (T)	25722-66-1		22.964	mg	20240	8094
substrate				supplier	prepreg	Bisphenol F type epoxy resin	9003-36-5		15.309	mg	13493	5396
substrate				supplier	prepreg	metal hydroxide	21645-51-2		1.531	mg	1349	540
substrate				supplier	prepreg	Calcium sulfate	7778-18-9		0.765	mg	674	270
substrate				supplier	Solder mask	Barium sulfate	7727-43-7		15.773	mg	13902	5560
substrate				supplier	Solder mask	(2-methoxymethylethoxy)propanol	34590-94-8		2.629	mg	2317	927
substrate				supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6		8.763	mg	7724	3089
substrate				supplier	Solder mask	Quartz	14808-60-7		8.763	mg	7724	3089
substrate				supplier	Solder mask	Acrylates derivative	9003-01-4		36.277	mg	31975	12787
substrate				supplier	Solder mask	Epoxy resin	29690-82-2		11.917	mg	10504	4201
substrate				supplier	Solder mask	aromatic hydrocarbon	Proprietary		3.461	mg	3051	1220
substrate				supplier	Solder mask	Chlorine	22537-15-1		0.035	mg	31	12
substrate				supplier	Solder mask	Bromine	7726-95-6		0.009	mg	8	3
substrate				supplier	metallisation	Copper (Cu)	7440-50-8		490.259	mg	432114	172809
substrate				supplier	metallisation	Gold (Au)	7440-57-5		1.174	mg	1035	414
Die attach		8	mg	supplier	glue	Silver (Ag)	7440-22-4		6.294	mg	774932	2219
Die attach				supplier	glue	2,6-Diglycidyl phenyl allyl ether	EC 417-470-1		0.244	mg	30042	86
Die attach				supplier	glue	Epoxyde Bisphenol A Resin	25068-38-6		1.584	mg	195026	558
Bonding wire	Precious metals	2	mg	supplier	wire	Gold (Au)	7440-57-5		7.048	mg	990027	2484
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.071	mg	9973	25
encapsulation	Other Organic Materials	1173	mg	supplier	mold compound	silica vitreous	60676-86-0		1024.222	mg	873000	361023
encapsulation				supplier	mold compound	Phenol Resin	205830-20-2		35.197	mg	30000	12406
encapsulation				supplier	mold compound	phenolic resin	Proprietary		17.598	mg	15000	6203
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		35.197	mg	30000	12406
encapsulation				supplier	mold compound	Reaction product of 2,2'dimethyl-4,4'dihydroxy	170577-61-4		23.464	mg	20000	8271
encapsulation				supplier	mold compound	Oxirane	93705-66-9		35.197	mg	30000	12406
encapsulation				supplier	mold compound	carbon black	1333-86-4		2.346	mg	2000	827
solder balls	Solder	479	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		461.867	mg	964800	162801
solder balls				supplier	solder alloy	Silver (Ag)	7440-22-4		16.755	mg	35000	5906
solder balls				R	solder alloy	Lead (Pb)	7439-92-1		0.096	mg	201	34