Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D *** : Required Field**

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2013-10-14
Contact Name *	Refer to " Supplier Comment" section	Contact Title	Refer to " Supplier Comment" section
Contact Phone *	Refer to " Supplier Comment" section	Contact Email *	Refer to " Supplier Comment" section
Authorized Representative *	Carole DEL PUPPO	Representative Title	DCG Materials Declaration Champion
Representative Phone *	Refer to " Supplier Comment" section	Representative Email *	Refer to " Supplier Comment" section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/online_tech_support.html		

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	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 omprehensive 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**
STI7111BUC/F4U	4U1D*7111XDM	A	MA1A	2013-10-14
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	2833.0	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	**Classification Temp**	**Nbr of Reflow Cycles**		
3	250	3		
bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
Tin - 3.5Ag	NAC	NAC	BSA CD00323810 7.0 1F029962	

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

Exemption Id.	Description

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	4U1D*7111XDM					
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	12033
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	62499
substrate				supplier	core material	Bisphenol F type epoxy resin	9003-36-5		98.59	mg	86897	34801
substrate				supplier	core material	metal hydroxide	21645-51-2		4.024	mg	3547	1420
substrate				supplier	core material	Zinc hydroxyde	20427-58-1		0.805	mg	710	284
substrate				supplier	core material	Calcium sulfate	7778-18-9		2.012	mg	1773	710
substrate				supplier	core material	Bismaleimide (B)	105391-33-1		59.959	mg	52848	21164
substrate				supplier	core material	Triazine (T)	25722-66-1		59.959	mg	52848	21164
substrate				supplier	prepreg	Fiber glass	65997-17-3		81.903	mg	72189	28910
substrate				supplier	prepreg	Silica, vitreous	60676-86-0		7.655	mg	6747	2702
substrate				supplier	prepreg	Bismaleimide	105391-33-1		22.964	mg	20240	8106
substrate				supplier	prepreg	Triazine (T)	25722-66-1		22.964	mg	20240	8106
substrate				supplier	prepreg	Bisphenol F type epoxy resin	9003-36-5		15.309	mg	13493	5404
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	5568
substrate				supplier	Solder mask	(2-methoxymethylethoxy)propanol	34590-94-8		2.629	mg	2317	928
substrate				supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6		8.763	mg	7724	3093
substrate				supplier	Solder mask	Quartz	14808-60-7		8.763	mg	7724	3093
substrate				supplier	Solder mask	Acrylates derivative	9003-01-4		36.277	mg	31975	12805
substrate				supplier	Solder mask	Epoxy resin	29690-82-2		11.917	mg	10504	4206
substrate				supplier	Solder mask	aromatic hydrocarbon	Proprietary		3.461	mg	3051	1222
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	173053
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	2222
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	559
Bonding wire	Copper & its alloys	2	mg	supplier	wire	Copper (Cu)	7440-50-8		2.553	mg	980415	901
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.047	mg	18049	17
Bonding wire				supplier	wire	Silver (Ag)	7440-22-4		0.004	mg	1536	1
encapsulation	Other Organic Materials	1173	mg	supplier	mold compound	silica vitreous	60676-86-0		1024.4	mg	872998	361595
encapsulation				supplier	mold compound	Phenol Resin	205830-20-2		35.203	mg	30000	12426
encapsulation				supplier	mold compound	phenolic resin	Proprietary		17.602	mg	15001	6213
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		35.203	mg	30000	12426
encapsulation				supplier	mold compound	Reaction product of 2,2'dimethyl-4,4'dihydroxy	170577-61-4		23.469	mg	20000	8284
encapsulation				supplier	mold compound	Oxirane	93705-66-9		35.203	mg	30000	12426
encapsulation				supplier	mold compound	carbon black	1333-86-4		2.347	mg	2000	828
solder balls	Solder	479	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		461.867	mg	964800	163031
solder balls				supplier	solder alloy	Silver (Ag)	7440-22-4		16.755	mg	35000	5914
solder balls				R	solder alloy	Lead (Pb)	7439-92-1		0.096	mg	201	34