



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2013-12-17
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		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	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
STI7111BUC/GVU, STI7111BUC/GVU	VU1D*7111XFM	A	MA1A	2013-12-17
Amount	UoM	Unit type	ST ECOPACK Grade	
2842.0	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/Silver/Copper (SAC305)	NAC	Copper Alloy	BSA CD00382822 1.0 1F131624	

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-16th December 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	VUID*711XFM					
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	11995
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	218
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	1137	mg	supplier	core material	Fiber glass	65997-17-3		177.06	mg	155756	62301
substrate				supplier	core material	Bisphenol F type epoxy resin	9003-36-5		98.59	mg	86728	34690
substrate				supplier	core material	metal hydroxide	21645-51-2		4.024	mg	3540	1416
substrate				supplier	core material	Zinc hydroxide	20427-58-1		0.805	mg	708	283
substrate				supplier	core material	Calcium sulfate	7778-18-9		2.012	mg	1770	708
substrate				supplier	core material	Bismaleimide (B)	105391-33-1		59.959	mg	52745	21097
substrate				supplier	core material	Triazine (T)	25722-66-1		59.959	mg	52745	21097
substrate				supplier	pregreg	Fiber glass	65997-17-3		81.903	mg	72049	28819
substrate				supplier	pregreg	Silica, vitreous	60676-86-0		7.655	mg	6734	2694
substrate				supplier	pregreg	Bismaleimide	105391-33-1		22.964	mg	20201	8080
substrate				supplier	pregreg	Triazine (T)	25722-66-1		22.964	mg	20201	8080
substrate				supplier	pregreg	Bisphenol F type epoxy resin	9003-36-5		15.309	mg	13467	5387
substrate				supplier	pregreg	metal hydroxide	21645-51-2		1.531	mg	1347	539
substrate				supplier	pregreg	Calcium sulfate	7778-18_9		0.765	mg	673	269
substrate				supplier	Solder mask	Barium sulfate	7727-43-7		15.773	mg	13875	5550
substrate				supplier	Solder mask	(2-methoxymethylethoxy)propanol	34590-94-8		2.629	mg	2313	925
substrate				supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6		8.763	mg	7709	3083
substrate				supplier	Solder mask	Quartz	14808-60-7		8.763	mg	7709	3083
substrate				supplier	Solder mask	Acrylates derivative	9003-01-4		36.277	mg	31912	12765
substrate				supplier	Solder mask	Epoxy resin	29690-82-2		11.917	mg	10483	4193
substrate				supplier	Solder mask	aromatic hydrocarbon	Proprietary		3.461	mg	3045	1218
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	431272	172505
substrate				supplier	metallisation	Nickel (Ni)	7440-02-0		3.001	mg	2640	1056
substrate				supplier	metallisation	Gold (Au)	7440-57-5		0.388	mg	341	137
Die attach		8	mg	supplier	glue	Silver (Ag)	7440-22-4		6.294	mg	774932	2215
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	557
Bonding wire	Copper & its alloys	2	mg	supplier	wire	Copper (Cu)	7440-50-8		2.553	mg	980415	898
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	360450
encapsulation				supplier	mold compound	Phenol Resin	205830-20-2		35.203	mg	30000	12387
encapsulation				supplier	mold compound	phenolic resin	Proprietary		17.602	mg	15001	6194
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		35.203	mg	30000	12387
encapsulation				supplier	mold compound	Reaction product of 2,2'dimethyl-4,4'dihydroxy	170577-61-4		23.469	mg	20000	8258
encapsulation				supplier	mold compound	Oxirane	93705-66-9		35.203	mg	30000	12387
encapsulation				supplier	mold compound	carbon black	1333-86-4		2.347	mg	2000	826
solder balls	Solder	485	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		467.867	mg	964296	164626
solder balls				supplier	solder alloy	Silver (Ag)	7440-22-4		14.556	mg	30001	5122
solder balls				supplier	solder alloy	Copper (Cu)	7440-50-8		2.426	mg	5000	854
solder balls				supplier	solder alloy	Nickel (Ni)	7440-02-0		0.146	mg	301	51
solder balls				supplier	solder alloy	Antimony (Sb)	7440-36-0		0.146	mg	301	51
solder balls				R	solder alloy	Lead (Pb)	7439-92-1		0.049	mg	101	17