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Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2014-05-05
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 *	Antonella Lanzafame	Representative Title	AMS & IPD 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/internet/com/support/online_tech_support.jsp		

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
	8HZG*TWU221G	A	BO2A	2014-05-05
Amount	UoM	Unit type	ST ECOPACK Grade	
98.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used o	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOJ	4.2X3.7X2.37	2	J bend	
Comment	SMB CLIP (SOD 6); MD valid for CP: SM6T220A.			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
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)	true
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
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

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
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	8HZG*TWU221G					
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	1.831	mg	supplier	die	Silicon (Si)	7440-21-3		1.789	mg	977062	18255
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.01	mg	5461	102
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.007	mg	3823	71
die (s)				supplier	metallization	Gold (Au)	7440-57-5		0.005	mg	2731	51
die (s)				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.007	mg	3823	71
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1092	20
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.011	mg	6008	112
Leadframe	Copper & its alloys	34.685	mg	supplier	alloy	Copper (Cu)	7440-50-8		34.65	mg	998991	353571
Leadframe				supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		0.035	mg	1009	357
Soft solder	Solder	0.845	mg	JIG Table A	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	0.79	mg	934911	8061
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.013	mg	15385	133
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.042	mg	49704	429
Bonding wire	Other inorganic materials	18.33	mg	supplier	wire	Copper (Cu)	7440-50-8		18.33	mg	1000000	187041
encapsulation	Other inorganic materials	41.498	mg	JIG Table B	mold compound	Silica, vitreous	60676-86-0		31.538	mg	759988	321816
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		2.49	mg	60003	25408
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.332	mg	8000	3388
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		4.233	mg	102005	43194
encapsulation				supplier	mold compound	Metal hydroxide	proprietary		0.83	mg	20001	8469
encapsulation				supplier	mold compound	Others	proprietary		2.075	mg	50002	21173
connections coating	Solder	0.811	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.811	mg	1000000	8276