



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 *	2014-02-19
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 *	Giuseppe Vitali Palma	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
	FBE3*UY28AAAY	A	ZY1A	2014-02-19
Amount	UoM	Unit type	ST ECOPACK Grade	
27.908	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	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.4X3X0.9	8	gull wing	
Comment	Package: MSOP/TSSOP 8 BODY3.00 PITCH0.65			

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

Material Composition Declaration						Mfr Item Name	FBE3*UY28AAY					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
SILICON DIE	Other inorganic materials	1.307	mg	supplier	DIE	Silicon (Si)	7440-21-3		1.296	mg	991584	46438
SILICON DIE				supplier	PASSIVATION	Gamma-butyrolactone	96-48-0		0.008	mg	6121	287
SILICON DIE				supplier	PASSIVATION	Polyhydroxyamide	55295-98-2		0.003	mg	2295	107
LEADFRAME	Copper and its alloy	10.299	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		9.908	mg	962035	355024
LEADFRAME				supplier	ALLOY	Nickel (Ni)	7440-02-0		0.309	mg	30003	11072
LEADFRAME				supplier	ALLOY	Silicon (Si)	7440-21-3		0.067	mg	6505	2401
LEADFRAME				supplier	ALLOY	Magnesium (Mg)	7439-95-4		0.015	mg	1456	537
DIE ATTACH	Other organic materials	0.497	mg	supplier	GLUE	Epoxy resin A	9003-36-5		0.035	mg	70423	1254
DIE ATTACH				supplier	GLUE	Epoxy resin B	68475-94-5		0.02	mg	40241	717
DIE ATTACH				supplier	GLUE	Silver(Ag)	7440-22-4		0.382	mg	768612	13688
DIE ATTACH				supplier	GLUE	Lactone	96-48-0		0.02	mg	40241	717
DIE ATTACH				supplier	GLUE	Polyoxypropylenediamine	9046-10-0		0.02	mg	40241	717
DIE ATTACH				supplier	GLUE	2,6-Diglycidyl phenyl allyl ether oligomer	Trade secret		0.02	mg	40241	717
BONDING WIRE	Other inorganic materials	0.077	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.077	mg	1000000	2759
ENCAPSULATION	Other inorganic materials	15.519	mg	supplier	MOLDING COMPOUND	Epoxy Resin	Proprietary		1.397	mg	90019	50057
ENCAPSULATION				supplier	MOLDING COMPOUND	Silica Fused	60676-86-0		13.035	mg	839938	467070
ENCAPSULATION				supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		1.009	mg	65017	36155
ENCAPSULATION				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		0.078	mg	5026	2795
FINISHING	Other inorganic materials	0.209	mg	supplier	CONNECTION COATING	Nickel (Ni)	7440-02-0		0.203	mg	971292	7274
FINISHING				supplier	CONNECTION COATING	Palladium (Pd)	7440-05-3		0.004	mg	19139	143
FINISHING				supplier	CONNECTION COATING	Gold (Au)	7440-57-5		0.002	mg	9569	72