



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 *	2014-09-05
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 *	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
	BZZM*16VABAT	A	BO2A	2014-09-05
Amount	UoM	Unit type	ST ECOPACK Grade	
80.00	mg	Each	ECOPACK® 1	

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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85X3.9X1.52	8	gull wing	
Comment	PACKAGE: SO 08 .15 JEDEC; MD valid for M41T82ZM6F, M41T82ZM6E			

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 June 2014				
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	BZZM*16VABAT					
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	3.803	mg	supplier	die	Silicon (Si)	7440-21-3		3.676	mg	966351	45950
				supplier	metallization	Aluminium (Al)	7429-90-5		0.015	mg	3943	188
				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.01	mg	2629	125
						Silicon Oxide(SiO2)	7631-86-9		0.07	mg	18402	875
				supplier	passivation	Gamma-butyrolactone	96-48-0		0.022	mg	5783	275
						Polyhydroxyamide	55295-98-2		0.01	mg	2629	125
Leadframe	Copper & its alloys	33.927	mg	supplier	alloy	Alcoxsilane	proprietary		0.001	mg	263	13
						Copper (Cu)	7440-50-8		33.836	mg	997318	422950
						Iron (Fe)	7439-89-6		0.016	mg	472	200
						Iron Phosphide (FeP)	26508-33-8		0.028	mg	825	350
				supplier	metallization	Nickel (Ni)	7440-02-0		0.044	mg	1297	550
						Palladium (Pd)	7440-05-3		0.001	mg	29	13
						Gold (Au)	7440-57-5		0.001	mg	29	13
						Silver (Ag)	7440-22-4		0.001	mg	29	13
				supplier	glue	Silver (Ag)	7440-22-4		0.637	mg	749412	7963
						Epoxy Cresol Novolak	29690-82-2		0.21	mg	247059	2625
Die attach	Other Organic Materials	0.85	mg			tert-butanol	75-65-0		0.001	mg	1176	13
						1-isopropyl-2,2-dimethyltrimethylene diisobut	6846-50-0		0.002	mg	2353	25
				supplier	wire	Gold (Au)	7440-57-5		0.116	mg	1000000	1450
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		4.13	mg	99993	51625
encapsulation	Other Organic Materials	41.303	mg			phenol resin	9003-35-4		2.065	mg	49996	25813
						Carbon Black	1333-86-4		0.413	mg	9999	5163
						Silica, vitreous	60676-86-0		33.043	mg	800015	413038
						Antimony Trioxide	1309-64-4		0.826	mg	19999	10325
						Brominated epoxy resin	68928-70-1		0.826	mg	19999	10325