



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 *	2015-08-07
Contact Name *	Refer to Supplier Comment section	Authorized Representative *	Refer to Supplier Comment section
Authorized Representative *	Flavio Di Francesco	Representative Title	AMS 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/support.html		

Uncertainty Statement


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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 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
	EBE3*V522ABY	A	ZY1A	2015-08-07
	Amount	UoM	Unit type	ST ECOPACK Grade
	23.71	mg	Each	ECOPACK® 3

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	3X3X0.86	8	gull wing	
Comment	Package: MSOP/TSSOP 8 BODY3.00 PITCH0.65; MD valid for TSV522IYST			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption id.	Description

QueryList : REACH-15th June 2015				
Query				Response
1 - Product(s) 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	EBE3*V522ABY					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies	Other inorganic materials	0.456	mg	supplier	die	Silicon (Si)	7440-21-3		0.430	mg	942982	18140
				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	8772	169
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	2193	42
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	2193	42
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	15351	295
				supplier	glass coating	Glass: Silicon Dioxide	7631-86-9		0.007	mg	15351	295
				supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.006	mg	13158	253
Leadframe	Copper & its alloys	9.682	mg	supplier	alloy	Copper (Cu)	7440-50-8		9.128	mg	942780	385066
				supplier	alloy	Nickel (Ni)	7440-02-0		0.285	mg	29436	12023
				supplier	alloy	Silicon (Si)	7440-21-3		0.062	mg	6404	2615
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.014	mg	1446	591
				supplier	metallization	Nickel (Ni)	7440-02-0		0.187	mg	19314	7889
				supplier	metallization	Palladium (Pd)	7440-05-3		0.004	mg	413	169
				supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	207	84
Die attach	Other inorganic materials	0.339	mg	supplier	glue	Epoxy resin A	9003-36-5		0.024	mg	70796	1012
				supplier	glue	Epoxy resin B	68475-94-5		0.014	mg	41298	591
				supplier	glue	Silver (Ag)	7440-22-4		0.259	mg	764012	10926
				supplier	glue	Lactone	96-48-0		0.014	mg	41298	591
				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.014	mg	41298	591
				supplier	glue	2,6-Diglycidyl phenyl allyl ether oligomer	proprietary		0.014	mg	41298	591
Bonding wire	Precious metals	0.072	mg	supplier	wire	Gold (Au)	7440-57-5		0.072	mg	1000000	3037
encapsulation	Other inorganic materials	13.156	mg	supplier	mold compound	Epoxy Resin	proprietary		1.256	mg	95470	52985
				supplier	mold compound	Silica fused (SiO2)	60676-86-0		10.985	mg	834980	463404
				supplier	mold compound	Phenol Resin	Trade secret		0.850	mg	64609	35857
				supplier	mold compound	Carbon Black	1333-86-4		0.065	mg	4941	2742