



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 *	2014-09-22
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 *	Giovanni Giacopello	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
	EBE3*V912ARY	A	ZY1A	2014-09-22
Amount	UoM	Unit type	ST ECOPACK Grade	
26.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
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	3X3X0.86	8	gull wing	
Comment	Package: MSOP/TSSOP 8 BODY3.00 PITCH0.65; MDF valid for TSV912AIYST			

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	EBE3*V912ARY					
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	0.797	mg	supplier	die	Silicon (Si)	7440-21-3		0.77	mg	966123	29615
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	8783	269
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1255	38
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1255	38
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.002	mg	2509	77
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.016	mg	20075	615
Leadframe	Copper & its alloys	10.539	mg	supplier	alloy	Copper (Cu)	7440-50-8		9.937	mg	942879	382192
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		0.31	mg	29415	11923
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		0.067	mg	6357	2577
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.015	mg	1423	577
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.204	mg	19357	7846
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.004	mg	380	154
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	190	77
Die attach	Other inorganic materials	0.368	mg	supplier	glue	Epoxy resin A	9003-36-5		0.026	mg	70652	1000
Die attach				supplier	glue	Epoxy resin B	68475-94-5		0.015	mg	40761	577
Die attach				supplier	glue	Silver(Ag)	7440-22-4		0.282	mg	766304	10846
Die attach				supplier	glue	Lactone	96-48-0		0.015	mg	40761	577
Die attach				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.015	mg	40761	577
Die attach				supplier	glue	2,5-Diglycidyl phenyl allyl ether oligomer	proprietary		0.015	mg	40761	577
Bonding wire	Precious metals	0.078	mg	supplier	wire	Gold (Au)	7440-57-5		0.078	mg	1000000	3000
encapsulation	Other inorganic materials	14.218	mg	supplier	mold compound	Epoxy Resin	proprietary		1.28	mg	90027	49231
encapsulation				supplier	mold compound	Silica fused (SiO2)	60676-86-0		11.942	mg	839921	459308
encapsulation				supplier	mold compound	Phenol Resin	Trade secret		0.925	mg	65058	35577
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		0.071	mg	4994	2731