



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 *	2015-10-28
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 *	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/internet/com/support/online_tech_support.jsp		

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
	IYW8*V521AAJ	A	ZS1A	2015-10-28
Amount	UoM	Unit type	ST ECOPACK Grade	
6.00	mg	Each	ECOPACK® 3	

Manufacturing information					
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles			
1	260	3	 life.augmented		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy			Comment
Not Applicable ; if coating is used or other bulk termination : add in comments	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy			

Package Designator	Size	Nbr of instances	Shape	
SOJ	2 - 1.26 - 0.93	5	gull wing	
Comment	Package: SOT 323 5LDS; MD valid for TSV521ICT			

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-15th June 2015				
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	IYW8*V521AAJ					
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	0.214	mg	supplier	die	Silicon (Si)	7440-21-3		0.197	mg	920561	32833
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	9346	333
Die or Dies				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	4673	167
Die or Dies				supplier	Passivation	Silicon Oxide	7631-86-9		0.005	mg	23364	833
Die or Dies				supplier	glass coating	Glass: Silicon Dioxide	7631-86-9		0.005	mg	23364	833
Die or Dies				supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.004	mg	18692	667
Leadframe	Copper & its alloys	1.95	mg	supplier	alloy	Copper (Cu)	7440-50-8		1.878	mg	963077	313000
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.043	mg	22051	7167
Leadframe				supplier	alloy	Phosphorus (P)	12185-10-3		0.001	mg	513	167
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.003	mg	1538	500
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.022	mg	11282	3667
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.002	mg	1026	333
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	513	167
Die attach	Other inorganic materials	0.118	mg	supplier	glue or tape (choose)	Silver (Ag)	7440-22-4		0.094	mg	796610	15667
Die attach				supplier	glue or tape	isobornyl Methacrylate	7534-94-3		0.01	mg	84746	1667
Die attach				supplier	glue or tape	methylene diacrylate	42594-17-2		0.007	mg	59322	1167
Die attach				supplier	glue or tape	Urethane Methacrylate Resin	5888-33-5		0.006	mg	50847	1000
Die attach				supplier	glue or tape	Bis(p,p'-dimethylbenzyl) peroxide	80-43-3		0.001	mg	8475	167
Bonding wire	Precious metals	0.024	mg	supplier	wire	Gold (Au)	7440-57-5		0.024	mg	1000000	4000
encapsulation	Other inorganic materials	3.694	mg	supplier	mold compound	Silica, vitreous	60676-86-0		3.177	mg	860043	529500
encapsulation				supplier	mold compound	phenolic resin	Proprietary		0.111	mg	30049	18500
encapsulation				supplier	mold compound	epoxy resin	Proprietary		0.213	mg	57661	35500
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.185	mg	50081	30833
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.008	mg	2166	1333