



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 *	02/09/2015
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
	FYW8*6391AAL	A	ZS1A	02/09/2015
Amount	UoM	Unit type	ST ECOPACK Grade	
10.00	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	
SOT	2X1.26X0.93	5	gull wing	
Comment	Package: SOT 323 5LDS; MD valid for TSV6391AICT			

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	FYW8*6391AAL					
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 Material	0.30	mg	Supplier	Silicon Die	Silicon (Si)	7440-21-3		0.285	mg	956376	28500
Silicon Die			mg	supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	13423	400
Silicon Die			mg	supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.001	mg	3356	100
Silicon Die			mg	supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.008	mg	26846	800
Leadframe	Copper and its alloy	2.739	mg	Supplier	Alloy	Copper	7440-50-8		2.666	mg	973348	266600
Leadframe			mg	Supplier	Alloy	Iron	7439-89-6		0.037	mg	13509	3700
Leadframe			mg	Supplier	Alloy	Iron phosphide (Fe2P)	1310-43-6		0.001	mg	365	100
Leadframe			mg	Supplier	Alloy	Zinc	7440-66-6		0.002	mg	730	200
Leadframe			mg	Supplier	Alloy	Nickel	7440-02-0		0.029	mg	10588	2900
Leadframe			mg	Supplier	Alloy	Palladium	7440-05-3		0.003	mg	1095	300
Leadframe			mg	Supplier	Alloy	Gold	7440-57-5		0.001	mg	365	100
Die Attach	Other Organic Material	0.058	mg	Supplier	Glue	Epoxyde Bisphenol A Resin	25068-38-6		0.005	mg	90452	522
Die Attach			mg	Supplier	Glue	Diaminodiphenylsulfone	80-08-0		0.001	mg	20101	116
Die Attach			mg	Supplier	Glue	Ethoxyethoxy-ethyl Acetate	112-15-2		0.013	mg	221106	1276
Die Attach			mg	Supplier	Glue	Bisphenol A diglycidyl ether polymer	25036-25-3		0.008	mg	140704	812
Die Attach			mg	Supplier	Glue	Glycol ether ester	Proprietary		0.001	mg	20101	116
Die Attach			mg	Supplier	Glue	Silica, vitreous	60676-86-0		0.018	mg	306533	1769
Die Attach			mg	Supplier	Glue	Aluminium oxide	1344-28-1		0.012	mg	201005	1160
Bonding Wire	Other Inorganic Material	0.03	mg	Supplier	Bonding Wire	Au	7440-57-5		0.030	mg	1000000	3000
Encapsulation	Other Organic Material	6.875	mg	Supplier	Molding Compound	phenolic resin	Proprietary		0.123	mg	17891	12300
Encapsulation			mg	Supplier	Molding Compound	epoxy resin	Proprietary		0.123	mg	17891	12300
Encapsulation			mg	Supplier	Molding Compound	Biphenyl epoxy resin	85954-11-6		0.184	mg	26764	18400
Encapsulation			mg	Supplier	Molding Compound	Silica	60676-86-0		6.290	mg	914909	629000
Encapsulation			mg	Supplier	Molding Compound	Carbon Black	1333-86-4		0.008	mg	1164	800
Encapsulation			mg	Supplier	Molding Compound	Zinc hydroxide	20427-58-1		0.030	mg	4364	3000
Encapsulation			mg	Supplier	Molding Compound	Magnesium hydroxide	1309-42-8		0.117	mg	17018	11700