



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 *	2013-09-16
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/web/en/support/online_tech_support.html		

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
	CDWO*ASC6V15	A	ZS1A	2013-09-16
Amount	UoM	Unit type	ST ECOPACK Grade	
6.00	mg	Each	ECOPACK® 2	

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		
Not Applicable ; if coating is used o	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	1.8 - 1.15 - 0.8	3	gull wing	
Comment	Package: SOT 323 6LDS. MDF valid for FG & CP: ESDA6V1-5W6C/C, AESDA6V1-5W6C/C (CP: ESDA6V1-5W6)			

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-19 Dec 2012				
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	CDWO*ASC6V15					
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 materials	0.162	mg	supplier	die	Silicon (Si)	7440-21-3		0.156	mg	962963	26000
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	12346	333
Silicon Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.003	mg	18519	500
Silicon Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.001	mg	6173	167
Lead-frame	Other inorganic materials	2.744	mg	supplier	alloy	Copper (Cu)	7440-50-8		2.65	mg	965743	441667
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.062	mg	22595	10333
Lead-frame				supplier	alloy	Phosphorus (P)	12185-10-3		0.001	mg	364	167
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.003	mg	1093	500
Lead-frame				supplier	metallization	Silver (Ag)	7440-02-0		0.028	mg	10204	4667
Die Attach	Other inorganic materials	0.037	mg	supplier	glue	Silver (Ag)	7440-22-4		0.026	mg	702703	4333
Die Attach				supplier	glue	methylene diacrylate	42594-17-2		0.009	mg	243243	1500
Die Attach				supplier	glue	Dicyclopentenloxyethyl methacrylate	68586-19-6		0.001	mg	27027	167
Die Attach				supplier	glue	Polymer of Polybutadiene + Anhydride	Proprietary		0.001	mg	27027	167
Bonding wire	Other inorganic materials	0.16	mg	supplier	wire	Copper (Cu)	7440-50-8		0.157	mg	981250	26167
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.003	mg	18750	500
encapsulation	Other inorganic materials	2.71	mg	supplier	mold compound	Silica, vitreous	60676-86-0		2.313	mg	853506	385500
encapsulation				supplier	mold compound	phenolic resin	Proprietary		0.095	mg	35055	15833
encapsulation				supplier	mold compound	epoxy resin	Proprietary		0.108	mg	39852	18000
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.054	mg	19926	9000
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.005	mg	1845	833
encapsulation				supplier	mold compound	Zinc hydroxide	20427-58-1		0.027	mg	9963	4500
encapsulation				supplier	mold compound	Magnesium hydroxide	1309-42-8		0.108	mg	39852	18000
connections coating	Solder	0.187	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.187	mg	1000000	31167