Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D *: Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2013-09-13
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

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 omprehensive 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
	CDW9*4AW25V2	A	ZS1A	2013-09-13
	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		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
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 - 3 LEADS			

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	CDW9*4AW25V2					
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	0.218	mg	supplier	die	Silicon (Si)	7440-21-3		0.209	mg	958716	34833
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.003	mg	13761	500
Silicon Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.004	mg	18349	667
Silicon Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.002	mg	9174	333
Lead-frame	Other inorganic materials	2.668	mg	supplier	alloy	Copper (Cu)	7440-50-8		2.577	mg	965892	429500
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.06	mg	22489	10000
Lead-frame				supplier	alloy	Phosphorus (P)	12185-10-3		0.001	mg	375	167
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.003	mg	1124	500
Lead-frame				supplier	metallization	Silver (Ag)	7440-02-0		0.027	mg	10120	4500
Die Attach	Other inorganic materials	0.057	mg	supplier	glue	Silver (Ag)	7440-22-4		0.039	mg	684211	6500
Die Attach				supplier	glue	methylene diacrylate	42594-17-2		0.014	mg	245614	2333
Die Attach				supplier	glue	Dicyclopentenyloxyethyl methacrylate	68586-19-6		0.002	mg	35088	333
Die Attach				supplier	glue	Polymer of Polybutadiene + Anhydride	Proprietary		0.002	mg	35088	333
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