



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 *	2014-03-31
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
	KD6R*V994ARY	A	BO2A	2014-03-31
Amount	UoM	Unit type	ST ECOPACK Grade	
54.00	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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	5,4,4,0.9	14	gull wing	
Comment	Package:TSSOP 14 BODY 4.4 PITCH 0.65; MDF valid for TSV994IYPT; TSV994AIYPT			

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 December 2013				
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	KD6R*V994ARY					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	1.381	mg	supplier	die	Silicon (Si)	7440-21-3		1.336	mg	967415	24741
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.012	mg	8689	222
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	724	19
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	724	19
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.003	mg	2172	56
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.028	mg	20275	519
Leadframe	Copper & its alloys	23.775	mg	supplier	alloy	Copper (Cu)	7440-50-8		22.851	mg	961136	423167
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		0.713	mg	29989	13204
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.036	mg	1514	667
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		0.154	mg	6477	2852
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.018	mg	757	333
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	42	19
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	42	19
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.001	mg	42	19
Die attach	Other Organic Materials	0.525	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.478	mg	910476	8852
Die attach				supplier	glue or tape	acrylate	Proprietary		0.026	mg	49524	481
Die attach				supplier	glue or tape	Methacrylate	Proprietary		0.021	mg	40000	389
Bonding wire	Other inorganic materials	0.14	mg	supplier	wire	Copper (Cu)	7440-50-8		0.14	mg	1000000	2593
encapsulation	Other Organic Materials	28.179	mg	supplier	mold compound	Silica, vitreous	60676-86-0		24.712	mg	876965	457630
encapsulation				supplier	mold compound	Epoxy resin A	EC 413-900-7		1.127	mg	39994	20870
encapsulation				supplier	mold compound	Epoxy resin B	29690-82-2		1.127	mg	39994	20870
encapsulation				supplier	mold compound	phenol resin	Proprietary		0.846	mg	30022	15667
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.085	mg	3016	1574
encapsulation				supplier	mold compound	additive	Proprietary		0.282	mg	10007	5222