



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 *	2015-01-21
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/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
	CSW4*U1C4BF5	A	BO2A	2015-01-21
Amount	UoM	Unit type	ST ECOPACK Grade	
81.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	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	
DSO	4.85 - 3.9 - 1.52	10	gull wing	
Comment	Package: SSOP 10L 3.9 BODY 1 PITCH; MDF valid for SRK2001; SRK2001TR			

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	CSW4*U1C4BF5					
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	2.070	mg	supplier	die	Silicon (Si)	7440-21-3		2.024	mg	977778	24988
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.016	mg	7729	198
Die or Dies				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	483	12
Die or Dies				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	1449	37
Die or Dies				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.009	mg	4348	111
Die or Dies				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	483	12
Die or Dies				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.016	mg	7729	198
Leadframe	Copper & its alloys	24.298	mg	supplier	alloy	Copper (Cu)	7440-50-8		24.052	mg	989876	296938
Leadframe				supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		0.048	mg	1975	593
Leadframe				supplier	alloy	Cobalt (Co)	7440-48-4		0.068	mg	2799	840
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.119	mg	4898	1469
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.008	mg	329	99
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.003	mg	123	37
Die attach	Other inorganic materials	0.780	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.710	mg	910256	8765
Die attach				supplier	glue or tape	acrylate	Proprietary		0.039	mg	50000	481
Die attach				supplier	glue or tape	Methacrylate	Proprietary		0.031	mg	39744	383
Bonding wire	Other inorganic materials	0.068	mg	supplier	wire	Copper (Cu)	7440-50-8		0.068	mg	1000000	840
encapsulation	Other inorganic materials	53.784	mg	supplier	mold compound	Epoxy Resin	Proprietary		3.935	mg	73163	48580
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		3.935	mg	73163	48580
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		45.441	mg	844880	561000
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.263	mg	4890	3247
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.210	mg	3905	2593