



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 *	2014-10-17
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
	KKK7*U333AB6	A	SH1A	2014-10-17
Amount	UoM	Unit type	ST ECOPACK Grade	
130.00	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	Comment	
Not Applicable ; if coating is used o	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	8.6 - 3.9 - 1.52	14	gull wing	
Comment	Package: SO 14 .15 TO JEDEC MS-012; MDF valid for L6386AD; L6386ADTR			

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	KKK7*U333AB6					
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	3.604	mg	supplier	die	Silicon (Si)	7440-21-3		3.520	mg	976693	27077
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	1387	38
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.023	mg	6382	177
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.031	mg	8602	238
Die or Dies				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	555	15
Die or Dies				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	1387	38
Die or Dies				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.018	mg	4994	138
Leadframe	Copper & its alloys	35.166	mg	supplier	alloy	Copper (Cu)	7440-50-8		33.974	mg	966104	261338
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.799	mg	22721	6146
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.048	mg	1365	369
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.042	mg	1194	323
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.278	mg	7905	2138
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.009	mg	256	69
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.008	mg	227	62
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.008	mg	227	62
Die attach	Other inorganic materials	1.147	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		1.044	mg	910201	8031
Die attach				supplier	glue or tape	acrylate	Proprietary		0.057	mg	49695	438
Die attach				supplier	glue or tape	Methacrylate	Proprietary		0.046	mg	40105	354
Bonding wire	Other inorganic materials	0.103	mg	supplier	wire	Copper (Cu)	7440-50-8		0.103	mg	1000000	792
encapsulation	Other inorganic materials	89.980	mg	supplier	mold compound	Silica, vitreous	60676-86-0		77.365	mg	859802	595115
encapsulation				supplier	mold compound	Epoxy resin A	EC 413-900-7		3.528	mg	39209	27138
encapsulation				supplier	mold compound	Epoxy resin B	29690-82-2		3.528	mg	39209	27138
encapsulation				supplier	mold compound	phenol resin	Proprietary		2.647	mg	29418	20362
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.265	mg	2945	2038
encapsulation				supplier	mold compound	additive	Proprietary		2.647	mg	29418	20362