



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 *	2013-09-05
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 *	Giuseppe Vitali Palma	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
	HDO7*CPU016J	A	SH1A	2013-09-05
Amount	UoM	Unit type	ST ECOPACK Grade	
80.00	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 on	Nickel/Palladium/Silver/Gold (Ni/Pd/Ag/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85X3.9X1.52	16	gull wing	
Comment	Package: SO 08 .15 JEDEC.			

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 December 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	HDO7*CPU016J					
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	2.004	mg	supplier	die	Silicon (Si)	7440-21-3		1.908	mg	952096	23850
				supplier	metallization	Aluminium (Al)	7429-90-5		0.021	mg	10479	263
				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.008	mg	3992	100
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.035	mg	17465	438
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.011	mg	5489	138
				supplier	back side metallization	Gold (Au)	7440-57-5		0.004	mg	1996	50
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.017	mg	8483	213
Leadframe	Copper & its alloys	33.349	mg	supplier	alloy	Copper (Cu)	7440-50-8		33.259	mg	997301	415738
				supplier	alloy	Iron (Fe)	7439-89-6		0.015	mg	450	188
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.028	mg	840	350
				supplier	metallization	Nickel (Ni)	7440-02-0		0.044	mg	1319	550
				supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	30	13
				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	30	13
				supplier	metallization	Silver (Ag)	7440-22-4		0.001	mg	30	13
Die attach	Other Organic Materials	0.7	mg	supplier	glue	Silver (Ag)	7440-22-4		0.637	mg	910000	7963
				supplier	glue	acrylate	Proprietary		0.035	mg	50000	438
				supplier	glue	Methacrylate	Proprietary		0.028	mg	40000	350
Bonding wire	Other inorganic materials	0.435	mg	supplier	wire	Copper (Cu)	7440-50-8		0.435	mg	1000000	5438
encapsulation	Other Organic Materials	43.512	mg	supplier	mold compound	Epoxy Resin	Proprietary		3.263	mg	74991	40788
				supplier	mold compound	Phenol Resin	Proprietary		2.176	mg	50009	27200
				supplier	mold compound	Silica, vitreous	60676-86-0		37.681	mg	865991	471013
				supplier	mold compound	Carbon black	1333-86-4		0.218	mg	5010	2725
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.174	mg	3999	2175