



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 *	2013-05-03
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
	HJW3*NHBAT48	A	Z55A	2013-05-03
Amount	UoM	Unit type	ST ECOPACK Grade	
5.25	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	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	1.682X1.247X1.059	1	gull wing	
Comment	Package: SOD 323			

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	HIW3*NHBAT48					
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	0.137	mg		Si	Si	7440-21-3		0.137	mg	1000000	26090
leadframe	Copper & its alloys	1.281	mg		Alloy	Mn	7439-96-5		0.008	mg	6245	1524
leadframe			mg		Alloy	Cr	7440-47-3		0.001	mg	781	190
leadframe			mg		Alloy	Co	7440-48-4		0.007	mg	5464	1333
leadframe			mg		Alloy	Si	7440-21-3		0.002	mg	1561	381
leadframe			mg		Alloy	Fe	7439-89-6		0.738	mg	576112	140545
leadframe			mg		Nickel (external applications only)	Nickel	7440-02-0		0.525	mg	409836	99981
leadframe coating		0.051	mg		coating	Ag	7440-22-4		0.051	mg	1000000	9712
bonding wire	Precious metals	0.012	mg		bonding wire	Au	7440-57-5		0.012	mg	1000000	2285
Encapsulation	Other Organic Materials	3.616	mg		Molding compound	SiO2	60676-86-0		3.156	mg	872788	601028
Encapsulation			mg		Molding compound	Epoxy Resin	29690-82-2		0.181	mg	50055	34470
Encapsulation			mg		Molding compound	Phenol Resin	26834-02-6		0.181	mg	50055	34470
Encapsulation			mg		Molding compound	Aromatic poly-phosphate	Proprietary		0.091	mg	25166	17330
Encapsulation			mg		Molding compound	Carbon Black	1333-86-4		0.007	mg	1936	1333
Finishing	Other inorganic materials	0.154	mg		Connection coating	Sn	7440-31-5		0.154	mg	1000000	29328