



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 *	2013-04-22
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
	HNBH*Z67Q81Y	A	ZA41	2013-04-22
Amount	UoM	Unit type	ST ECOPACK Grade	
1120.03	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
NAC	NAC	NAC		
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	
AXL	9X16X5.2	2	Through-hole	
Comment	Package: DO201AD			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
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)	true
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
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

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	HNBH*Z67Q81Y					
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	1.475	mg		Silicon Die	silicon	7440-21-3		1.448	mg	981695	1293
Silicon Die					Passivation	Gamma-butyrolactone	96-48-0		0.01	mg	6780	9
Silicon Die					Passivation	Polyhydroxyamide	55295-98-2		0.004	mg	2712	4
Silicon Die					Back side metallization	Gold (Au)	7440-57-5		0.003	mg	2034	3
Silicon Die					Back side metallization	Nickel (Ni)	7440-02-0		0.01	mg	6780	9
Lead-frame	Copper & its alloys	930.153	mg		Alloy	Cu	7440-50-8		929.707	mg	999521	830075
Lead-frame					Alloy	Zn	7440-66-6		0.037	mg	40	33
Lead-frame					Alloy	Fe	7439-89-6		0.093	mg	100	83
Lead-frame					Alloy	Iron Phosphide(FeP)	26508-33-8		0.316	mg	340	282
Die Attach	Other Organic Materials	5.01	mg		soft solder	Ag	7440-22-4		0.125	mg	24950	112
Die Attach					soft solder	Sn	7440-31-5		0.251	mg	50100	224
Die Attach				JIG R	soft solder	Lead	7439-92-1	7a-Lead in high me	4.634	mg	924950	4137
Encapsulation	Other Organic Materials	172.39	mg		Molding Compound	Silica fused	7631-86-9		68.956	mg	400000	61566
Encapsulation					Molding Compound	silica quartz	14808-60-7		99.124	mg	574999	88501
Encapsulation					Molding Compound	phenolic resin	9003-35-4		3.448	mg	20001	3078
Encapsulation					Molding Compound	carbon black	1333-86-4		0.862	mg	5000	770
Finishing	Other inorganic materials	11	mg		connection coating	Sn	7440-31-5		11	mg	1000000	9821