



## Materials Declaration Form

<b>IPC Form Type *</b>	<b>1752 Distribute</b>	<b>Version</b>	<b>2</b>
<b>Sectionals *</b>	<b>Material Info Manufacturing Info</b>	<b>Subsectionals *</b>	<b>A-D</b>
<b>* : Required Field</b>			

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2014-05-26</b>
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	<b>Giuseppe Vitali Palma</b>	<b>Representative Title</b>	<b>AMS &amp; IPD Materials Declaration Champion</b>
<b>Representative Phone *</b>	Refer to "Supplier Comment" section	<b>Representative Email *</b>	Refer to "Supplier Comment" section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
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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*D81F814	A	ZA41	2014-05-26
Amount	UoM	Unit type	ST ECOPACK Grade	
1120.16	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
AXL	9X16X5.2	2	Through-hole	
Comment	Package: DO201AD ; MD valid also for STTH302RL			

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-16th December 2013				
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*D81F814					
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	2.769	mg	supplier	Silicon Die	Silicon	7440-21-3		2.61	mg	942579	2330
Silicon Die			mg	supplier	metallization	Aluminium (Al)	7429-90-5		0.065	mg	23474	58
Silicon Die			mg	supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	361	1
Silicon Die			mg	supplier	metallization	Gold (Au)	7440-57-5		0.003	mg	1083	3
Silicon Die			mg	supplier	metallization	Nickel (Ni)	7440-02-0		0.015	mg	5417	13
Silicon Die			mg	supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.037	mg	13362	33
Silicon Die			mg	supplier	passivation	Esterified polyamid	63428-83-1		0.017	mg	6139	15
Silicon Die			mg	supplier	passivation	Tetraethylene glycol dimethacrylate	109-17-1		0.002	mg	722	2
Silicon Die			mg	supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	361	1
Silicon Die			mg	supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	1083	3
Silicon Die			mg	supplier	back side metallization	Nickel (Ni)	7440-02-0		0.015	mg	5417	13
Leadframe	Copper & its alloys	940	mg	supplier	Frame Alloy	Cu	7440-50-8		939.53	mg	999500	838746
Leadframe			mg	supplier	Frame Alloy	Zn	7440-66-6		0.047	mg	50	42
Leadframe			mg	supplier	Frame Alloy	Fe	7439-89-6		0.141	mg	150	126
Leadframe			mg	supplier	Frame Alloy	P	7723-14-0		0.282	mg	300	252
Die attach	Other Organic Materials	5.01	mg	JIG R	soft solder	Pb	7439-92-1	7a-Lead in high me	4.634	mg	924950	4137
Die attach			mg	supplier	soft solder	Sn	7440-31-5		0.125	mg	24950	112
Die attach			mg	supplier	soft solder	Ag	7440-22-4		0.251	mg	50100	224
Encapsulation	Other Organic Materials	161.381	mg	supplier	Moulding Compound	Silica fused(SiO2)	7631-86-9		64.552	mg	399998	57627
Encapsulation			mg	supplier	Moulding Compound	silica quartz	14808-60-7		92.794	mg	575000	82840
Encapsulation			mg	supplier	Moulding Compound	phenolic resin	9003-35-4		3.228	mg	20002	2882
Encapsulation			mg	supplier	Moulding Compound	carbon black	1333-86-4		0.807	mg	5001	720
Finishing	Other inorganic materials	11	mg	supplier	Connection Coating	Sn	7440-31-5		11	mg	1000000	9820