



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2012-02-15
<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>	Giovanni Giacopello	<b>Representative Title</b>	AMS & IPD Materials Declaration Champion
<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>	true	<b>Legal Declaration *</b>	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
STTH1502D	HSDK*J49F01F	A	LGGA	2012-02-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	1870.00	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	Comment	
Not Applicable ; if coating is used o	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10.20 - 16.25 - 4.5	3	Through-hole	
Comment				

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

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	HSDK*149F01F					
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	4.24	mg	supplier	die	Silicon (Si)	7440-21-3		4.103	mg	967689	2206
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.101	mg	23821	54
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	472	1
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.006	mg	1415	3
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.028	mg	6604	15
Leadframe	Copper & its alloys	1192.563	mg	supplier	alloy	Copper (Cu)	7440-50-8		1189.908	mg	997774	639735
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		1.191	mg	999	640
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.357	mg	299	192
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		1.107	mg	928	595
Soft solder	Solder	3.433	mg	JIG Table A	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.278	mg	954850	1762
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.086	mg	25051	46
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.069	mg	20099	37
Bonding wire	Other inorganic materials	9.604	mg	supplier	wire	Copper (Cu)	7440-50-8		9.604	mg	1000000	5163
encapsulation	Other inorganic materials	655.919	mg	supplier	mold compound	Silica, vitreous	60676-86-0		570.65	mg	870001	306801
encapsulation				supplier	mold compound	Epoxy resin	Proprietary		65.591	mg	99999	35264
encapsulation				supplier	mold compound	Phenol resin	Proprietary		16.398	mg	25000	8816
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		3.28	mg	5001	1763
connections coating	Solder	4.241	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.241	mg	1000000	2280