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## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2014-04-29</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>Antonella Lanzafame</b>	<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>	<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
	HSLV*139L11J	A	SH1A	2014-04-29
Amount	UoM	Unit type	ST ECOPACK Grade	
4400.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	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	
SIP	15.75,20.15,5.15	2	Through-hole	
Comment	DQ 247; MD valid for CP: STTH30R04W.			

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	HSLV*139L111					
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	10.876	mg	supplier	die	Silicon (Si)	7440-21-3		10.435	mg	959452	2372
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.259	mg	23814	59
die (s)				supplier	passivation	Gamma-butyrolactone	96-48-0		0.061	mg	5609	14
die (s)				supplier	passivation	Polyhydroxyamide	55295-98-2		0.027	mg	2483	6
die (s)				supplier	passivation	Alcoxysilane	proprietary		0.002	mg	184	0
die (s)				supplier	passivation	Aryl Silicic Acid	proprietary		0.001	mg	92	0
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.005	mg	460	1
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.015	mg	1379	3
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.071	mg	6528	16
Leadframe	Copper & its alloys	2699.834	mg	supplier	alloy	Copper (Cu)	7440-50-8		2695.338	mg	998335	612577
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		1.241	mg	460	282
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.267	mg	840	515
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.914	mg	339	208
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.074	mg	27	17
Soft solder	Solder	5.376	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	5.134	mg	954985	1167
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.134	mg	24926	30
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.108	mg	20089	25
Bonding wire	Other inorganic materials	3.831	mg	supplier	wire	Aluminium (Al)	7429-90-5		3.831	mg	1000000	871
encapsulation	Other Organic Materials	1673.886	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1456.281	mg	870000	330973
encapsulation				supplier	mold compound	Epoxy resin	Proprietary		167.389	mg	100000	38043
encapsulation				supplier	mold compound	Phenol resin	Proprietary		41.847	mg	25000	9511
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		8.369	mg	5000	1902
connections coating	Solder	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1408