



## 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>	11/13/2014
<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>	Giuseppe Vitali Palma	<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
	7SD2*D39B11P	A	SH1A	11/13/2014
Amount	UoM	Unit type	ST ECOPACK Grade	
1380.00	mg	Each	ECOPACK® 1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	10.2X9.15X4.5	1	gull wing	
Comment	Package: D2PAK; MD valid for STTH800G-TR			

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-20th June 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	7SD2*D39B11P					
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	5.097	mg	supplier	die	Silicon (Si)	7440-21-3		4.93	mg	967236	3572
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.067	mg	13145	49
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.016	mg	3139	12
die (s)				supplier	passivation	Silicon Oxide (SiO2)	7631-86-9		0.023	mg	4512	17
die (s)				supplier	passivation	Gamma-butyrolactone	96-48-0		0.02	mg	3924	14
die (s)				supplier	passivation	Polyhydroxyamide	55295-98-2		0.009	mg	1766	7
die (s)				supplier	passivation	Alcoxysilane	proprietary		0.001	mg	196	1
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	392	1
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	981	4
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.024	mg	4709	17
Leadframe	Copper & its alloys	790.544	mg	supplier	alloy	Copper (Cu)	7440-50-8		789.418	mg	998576	572042
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.79	mg	999	572
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.237	mg	300	172
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	116	67
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	9	5
Soft solder	Other Organic Materials	4.148	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.961	mg	954918	2870
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.104	mg	25072	75
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.083	mg	20010	60
Bonding wire	Other inorganic materials	1.385	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.385	mg	1000000	1004
encapsulation	Other Organic Materials	577.781	mg	supplier	mold compound	Silica, vitreous	60676-86-0		462.225	mg	800000	334946
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		40.445	mg	70001	29308
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		23.111	mg	40000	16747
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		34.667	mg	60000	25121
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		6.933	mg	11999	5024
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		8.667	mg	15000	6280
encapsulation				supplier	mold compound	Carbon black	1333-86-4		1.733	mg	2999	1256
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	757