



## 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>	2014-02-18
<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
	7ZDP*C93F022	A	SH1A	2014-02-18
Amount	UoM	Unit type	ST ECOPACK Grade	
320.00	mg	Each	ECOPACK® 1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	6.5x6.1x2.3	2	gull wing	
Comment	Package: TO 252 DPAK; MD valid also for STTH1002CB			

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-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	7ZDP*C93F022					
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	2.884	mg	supplier	die	Silicon (Si)	7440-21-3		2.773	mg	961512	8666
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.055	mg	19071	172
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.013	mg	4508	41
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.019	mg	6588	59
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	347	3
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.004	mg	1387	13
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.019	mg	6588	59
Leadframe	Copper & its alloys	157.965	mg	supplier	alloy	Copper (Cu)	7440-50-8		157.661	mg	998076	492691
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.158	mg	1000	494
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.047	mg	298	147
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	582	288
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	44	22
Soft solder	Other Organic Materials	2.548	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.433	mg	954867	7603
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.064	mg	25118	200
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.051	mg	20016	159
Bonding wire	Other inorganic materials	0.692	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.692	mg	1000000	2163
encapsulation	Other Organic Materials	154.866	mg	supplier	mold compound	Silica, vitreous	60676-86-0		123.892	mg	799995	387163
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		10.841	mg	70002	33878
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		6.195	mg	40002	19359
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		9.292	mg	60000	29038
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		1.858	mg	11997	5806
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		2.323	mg	15000	7259
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.465	mg	3003	1453
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266