



## 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

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2013-11-29
<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*Q99P025	A	SH1A	2013-11-29
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	Comment	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	10.2X9.15X4.5	3	gull wing	
Comment	Package: D2PAK			

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*Q99P025					
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	6.746	mg	supplier	die	Silicon (Si)	7440-21-3		6.345	mg	940557	4598
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.263	mg	38986	191
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	889	4
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.009	mg	1334	7
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.029	mg	4299	21
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.039	mg	5781	28
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	445	2
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.009	mg	1334	7
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.043	mg	6374	31
Leadframe	Copper & Its alloys	808.045	mg	supplier	alloy	Copper (Cu)	7440-50-8		806.896	mg	998578	584707
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.808	mg	1000	586
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.242	mg	299	175
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	114	67
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	9	5
Soft solder	Other Organic Materials	4.931	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.709	mg	954979	3412
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.123	mg	24944	89
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.099	mg	20077	72
Bonding wire	Other inorganic materials	2.769	mg	supplier	wire	Aluminium (Al)	7429-90-5		2.769	mg	1000000	2007
encapsulation	Other Organic Materials	556.464	mg	supplier	mold compound	Silica, vitreous	60676-86-0		445.171	mg	800000	322588
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		38.952	mg	69999	28226
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		22.259	mg	40001	16130
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		33.388	mg	60000	24194
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		6.678	mg	12001	4839
encapsulation				JIG J	mold compound	Brominated Epoxy Resin	40039-93-8		8.347	mg	15000	6049
encapsulation				supplier	mold compound	Carbon black	1333-86-4		1.669	mg	2999	1209
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	757