



## 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>	2014-10-24
<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/web/en/support/support.html">http://www.st.com/web/en/support/support.html</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*Z51S11Y	A	SH1A	2014-10-24
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		
1	260	3		
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	
DSO	6.5x6.1x2.3	3	gull wing	
Comment	Package: TO 252 DPAK; MDF valid for STPS340B-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)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	true
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 June 2014				
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*Z51511Y					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies	Other inorganic materials	1.913	mg	supplier	die	Silicon (Si)	7440-21-3		1.838	mg	960795	5744
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	14114	84
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	523	3
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	1045	6
Die or Dies				supplier	metallization	Nickel (Ni)	7440-02-0		0.005	mg	2614	16
Die or Dies				supplier	metallization	Gold (Au)	7440-57-5		0.005	mg	2614	16
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.018	mg	9409	56
Die or Dies				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	523	3
Die or Dies				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	1558	9
Die or Dies				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.013	mg	6796	41
Leadframe	Copper & its alloys	161.940	mg	supplier	alloy	Copper (Cu)	7440-50-8		160.525	mg	991262	501641
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.161	mg	994	503
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.048	mg	296	150
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		1.199	mg	7404	3747
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	43	22
Soft solder	Solder	1.247	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.191	mg	955092	3722
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.031	mg	24860	97
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.025	mg	20048	78
Bonding wire	Other inorganic materials	0.194		supplier	wire	Aluminium (Al)	7429-90-5		0.194	mg	1000000	606
encapsulation	Other inorganic materials	153.661	mg	supplier	mold compound	Silica, vitreous	60676-86-0		122.929	mg	800001	384153
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		10.756	mg	69998	33613
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		6.146	mg	39997	19206
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		9.220	mg	60002	28813
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		1.844	mg	12000	5763
encapsulation				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		2.305	mg	15001	7203
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.461	mg	3000	1441
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266