



## 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>	2013-09-11
<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
	TM3H*K18C0Y7	A	MU1A	2013-09-11
Amount	UoM	Unit type	ST ECOPACK Grade	
1190.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	250	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	8.62X6.58X3.5	11	gull wing	
Comment	Package: PowerSO-10 R.F. (gull wing)			

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-19 December 2012				
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	TM3H*K18C0Y7					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Silicon Die	Other inorganic materials	3.289	mg	Supplier	Silicon die	Silicon	7440-21-3		3.248	mg	987534	2729
Silicon Die				Supplier	Die metallization	Aluminium(Al)	7429-90-5		0.002	mg	608	2
Silicon Die						Chromium (Cr)	7440-47-3		0.003	mg	912	3
Silicon Die						Nickel (Ni)	7440-02-0		0.028	mg	8513	24
Silicon Die						Gold (Au)	7440-57-5		0.008	mg	2432	7
Leadframe	Copper & its alloys	937.517	mg	Supplier	alloy	Copper (Cu)	7440-50-8		934.903	mg	997212	785633
Leadframe						Iron (Fe)	7439-89-6		0.431	mg	460	362
Leadframe						Iron Phosphide (FeP)	26508-33-8		0.786	mg	838	661
Leadframe				Supplier	coating	Silver (Ag)	7440-22-4		1.397	mg	1490	1174
Die Attach	Other Organic Materials	3.548	mg	JIG R	Lead/Lead Compounds	Lead (Pb)	7439-92-1	7a : Lead in high m	3.46	mg	975197	2908
Die Attach				Supplier	soft solder	Silver (Ag)	7440-22-4		0.053	mg	14938	45
Die Attach						Tin (Sn)	7440-31-5		0.035	mg	9865	29
Bonding wire	Precious metals	0.208	mg	Supplier	Bonding wire	Gold (Au)	7440-57-5		0.208	mg	1000000	175
Encapsulation	Other Organic Materials	236.18	mg	Supplier	Molding compound	Epoxy Resin	Proprietary		17.7135	mg	75000	14885
Encapsulation						Phenol Resin	Proprietary		11.809	mg	50000	9924
Encapsulation						Silica, vitreous	60676-86-0		204.05952	mg	864000	171479
Encapsulation						Quartz	14808-60-7		0.70854	mg	3000	595
Encapsulation						3-Mercaptopropyl trimethoxysilane	4420-74-0		1.1809	mg	5000	992
Encapsulation						Carbon black	1333-86-4		0.70854	mg	3000	595
Finishing	Other inorganic materials	9.258	mg	Supplier	Connections coating	Tin (Sn)	7440-31-5		9.258	mg	1000000	7780