



## Materials Declaration Form

<b>IPC Form Type *</b>	<b>1752</b> Distribute	<b>Version</b>	<b>2</b>
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2014-06-06</b>
<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>	Antonella Lanzafame	<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**

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.


**Legal Statement**

<b>Supplier Acceptance *</b>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
------------------------------	-------------	----------------------------	-----------------

**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*K60P0Y7	A	MU1A	2014-06-06
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		 life.augmented
3	250	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	9.33, 5.95, 3.5	2	gull wing	
Comment	PowerSO-10 R.F. (gull wing); MD valid for CP: PD57060-E, PD57060TR-E.			

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-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	TM3H*K60P0Y7					
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	2.417	mg	supplier	die	Silicon (Si)	7440-21-3		2.383	mg	985933	2003
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	11171	23
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.003	mg	1241	3
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	414	1
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.003	mg	1241	3
Leadframe	Copper & its alloys	923.116	mg	supplier	alloy	Copper (Cu)	7440-50-8		920.552	mg	997222	773573
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.922	mg	999	775
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.277	mg	300	233
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		1.365	mg	1479	1147
Soft solder	Solder	2.311	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.253	mg	974903	1893
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.035	mg	15145	29
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.023	mg	9952	19
Bonding wire	Other inorganic materials	0.241		supplier	wire	Gold (Au)	7440-57-5		0.241	mg	1000000	203
encapsulation	Other Organic materials	177.827	mg	supplier	mold compound	Epoxy Resin	Proprietary		13.337	mg	75000	11208
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		8.891	mg	49998	7471
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		153.644	mg	864008	129113
encapsulation				supplier	mold compound	Quartz	14808-60-7		0.533	mg	2997	448
encapsulation				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		0.889	mg	4999	747
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.533	mg	2997	448
connections coating	Solder	84.088	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		84.088	mg	1000000	70662