



## 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>	18/03/2013
<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>	Arcidiacono Salvatore	<b>Representative Title</b>	IPG IPC 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>	true	<b>Legal Declaration *</b>	Standard
------------------------------	------	----------------------------	----------

**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
L6986	A5I0*UAF5ADA	A	ZY1A	18/03/2013
Amount		UoM	Unit type	ST ECOPACK Grade
59.40		mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
3	260	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	
SOJ	5 x 4.4 x 1	16	gull wing	
Comment				

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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	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	AS10*UAFSADA					
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	3.245	mg	supplier	die	Silicon (Si)	7440-21-3		3.124	mg	962712	52593
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.051	mg	15716	859
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.043	mg	13251	724
die (s)				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	616	34
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.006	mg	1849	101
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.018	mg	5547	303
die (s)				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	308	17
Leadframe	Copper & its alloys	25.818	mg	supplier	alloy	Copper (Cu)	7440-50-8		24.501	mg	948989	412475
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		0.764	mg	29592	12862
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.038	mg	1472	640
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		0.166	mg	6430	2795
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.349	mg	13518	5875
Die attach	Other inorganic materials	0.871	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.697	mg	800230	11734
Die attach				supplier	glue or tape	Bisphenol F type epoxy resin	9003-36-5		0.07	mg	80367	1178
Die attach				supplier	glue or tape	Epoxy resin	68475-94-5		0.026	mg	29851	438
Die attach				supplier	glue or tape	2,6-Diglycidyl phenyl allyl ether	EC 417-470-1		0.026	mg	29851	438
Die attach				supplier	glue or tape	Gamma Butyrolactone	96-48-0		0.026	mg	29851	438
Die attach				supplier	glue or tape	Polyoxypropylenediamine	9046-10-0		0.026	mg	29851	438
Bonding wire	Precious metals	0.524		supplier	wire	Gold (Au)	7440-57-5		0.524	mg	1000000	8822
encapsulation	Other Organic Materials	28.175	mg	supplier	mold compound	Epoxy Resin	Proprietary		2.113	mg	74996	35572
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		1.408	mg	49973	23704
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		24.401	mg	866051	410791
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.141	mg	5004	2374
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.112	mg	3975	1886
connections coating	Solder	0.767	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.767	mg	1000000	12912