



## 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>	2016-03-22
<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>	Emilio Castelli	<b>Representative Title</b>	APG MD 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/online_tech_support.html">http://www.st.com/web/en/support/online_tech_support.html</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
L9779WD-SPI-TR	A99M*U1A9AT2	A	MU1A	2016-03-22
	Amount	UoM	Unit type	ST ECOPACK Grade
	2140.00	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	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	14x14x2.7	64	FLAT	
Comment				

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 '7a' exemption (other selected exemptions may apply)	true
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 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	A99M*U1A9AT2					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	40.604	mg	supplier	die	Silicon (Si)	7440-21-3		38.434	mg	946557	17960
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.295	mg	7265	138
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.235	mg	5788	110
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.062	mg	1527	29
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.504	mg	12413	236
Die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.022	mg	542	10
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.058	mg	1428	27
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.169	mg	4162	79
Die				supplier	back side metallization	Vanadium (V)	7440-62-2		0.013	mg	320	6
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.504	mg	12413	236
Die				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.308	mg	7585	144
Leadframe	Copper & its alloys	1537.048	mg	supplier	alloy	Copper (Cu)	7440-50-8		1529.370	mg	995005	714659
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.704	mg	458	329
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.286	mg	837	601
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		5.688	mg	3701	2658
Die attach		20.988	mg	JIG - R	Soft solder	Lead (Pb)	7439-92-1	7a-Lead in high me	20.463	mg	974986	9562
Die attach				supplier	Soft solder	Silver (Ag)	7440-22-4		0.315	mg	15009	147
Die attach				supplier	Soft solder	Tin (Sn)	7440-31-5		0.210	mg	10006	98
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		3.882	mg	1000000	1814
encapsulation		521.092	mg	supplier	mold compound	Phenol Resin	205830-20-2		20.844	mg	40001	9740
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		15.633	mg	30000	7305
encapsulation				supplier	mold compound	epoxy resin	na		15.633	mg	30000	7305
encapsulation				supplier	mold compound	carbon black	1333-86-4		1.042	mg	2000	487
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		467.940	mg	897999	218664
connections coating	Solder	16.385	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		16.385	mg	1000000	7657