



## 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>	2014-12-15
<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/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
L5963D-EHX	AREH*UAE2AD1	A	MU1A	2014-12-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	1925.00	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	10.3x7.5x2.3	36	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	AREH*UAE2AD1					
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	10.189	mg	supplier	die	Silicon (Si)	7440-21-3		9.099	mg	893022	4727
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.022	mg	2159	11
Die				supplier	metallization	Copper (Cu)	7440-50-8		0.560	mg	54961	291
Die				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	98	1
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	589	3
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.032	mg	3141	17
Die				supplier	metallization	Nickel (Ni)	7440-02-0		0.070	mg	6870	36
Die				supplier	metallization	Platinum (Pt)	7440-06-4		0.039	mg	3828	20
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.018	mg	1767	9
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.140	mg	13740	73
Die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.005	mg	491	3
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.014	mg	1374	7
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.040	mg	3926	21
Die				supplier	back side metallization	Vanadium (V)	7440-62-2		0.003	mg	294	2
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.140	mg	13740	73
Leadframe	Copper & its alloys	206.080	mg	supplier	alloy	Copper (Cu)	7440-50-8		199.352	mg	967352	103559
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		4.689	mg	22753	2436
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.282	mg	1368	146
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.245	mg	1189	127
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		1.512	mg	7337	785
Die attach		6.545	mg	JIG - R	Soft Solder	Lead (Pb)	7439-92-1	7a-Lead in high me	6.382	mg	975095	3315
Die attach				supplier	Soft Solder	Silver (Ag)	7440-22-4		0.098	mg	14973	51
Die attach				supplier	Soft Solder	Tin (Sn)	7440-31-5		0.065	mg	9931	34
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		2.267	mg	1000000	1178
encapsulation		1694.570	mg	supplier	mold compound	Phenol Resin	205830-20-2		67.783	mg	40000	35212
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		50.837	mg	30000	26409
encapsulation				#N/A	mold compound	epoxy resin	na		50.837	mg	30000	26409
encapsulation				supplier	mold compound	carbon black	1333-86-4		3.389	mg	2000	1761
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		1521.724	mg	898000	790506
connections coating	Solder	5.349	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.349	mg	1000000	2779