



## 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>	2015-10-29
<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**


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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
L9959U-TR-D	CREH*UM29DC1	A	MU1A	2015-10-29
Amount	UoM	Unit type	ST ECOPACK Grade	
484.70	mg	Each		

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	2.2x10.3x7.5	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	CREH*UM29DC1					
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	6.251	mg	supplier	die	Silicon (Si)	7440-21-3		5.816	mg	930411	11999
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.060	mg	9598	124
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.048	mg	7679	99
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.012	mg	1920	25
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.102	mg	16317	210
Die				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	480	6
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.008	mg	1280	17
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.034	mg	5439	70
Die				supplier	back side metallization	Vanadium (V)	7440-62-2		0.003	mg	480	6
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.102	mg	16317	210
Die				supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.063	mg	10078	130
Leadframe	Copper & its alloys	161.617	mg	supplier	alloy	Copper (Cu)	7440-50-8		155.362	mg	961297	320532
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		3.654	mg	22609	7539
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.220	mg	1361	454
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.191	mg	1182	394
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		2.190	mg	13551	4518
Die attach		4.621	mg	JIG - R	Soft solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	4.506	mg	975114	9296
Die attach				supplier	Soft solder	Silver (Ag)	7440-22-4		0.069	mg	14932	142
Die attach				supplier	Soft solder	Tin (Sn)	7440-31-5		0.046	mg	9955	95
Bonding wire		1.145		supplier	wire	Gold (Au)	7440-57-5		0.383	mg	334498	790
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.761	mg	664629	1570
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	873	2
encapsulation		304.951	mg	supplier	mold compound	Phenol Resin	205830-20-2		12.198	mg	40000	25166
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		9.149	mg	30002	18876
encapsulation				supplier	mold compound	epoxy resin	na		9.149	mg	30002	18876
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.610	mg	2000	1259
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		273.845	mg	897997	564978
connections coating	Solder	6.114	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.114	mg	1000000	12614