



## 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>	2014-04-08
<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
L9954LXPTR	GREH*UH75AB6	A	MU1A	2014-04-08
Amount	UoM	Unit type	ST ECOPACK Grade	
484.70	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 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	GREH*UH75AB6					
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	14.845	mg	supplier	die	Silicon (Si)	7440-21-3		14.194	mg	956147	29284
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.121	mg	8151	250
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.121	mg	8151	250
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.012	mg	808	25
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.024	mg	1617	50
die (s)				supplier	passivation	Indium Tin oxide ( In2O3.SnO2 )	50926-11-9		0.262	mg	17649	541
die (s)				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.008	mg	539	17
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.022	mg	1482	45
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.072	mg	4850	149
die (s)				supplier	polymer die coating	Polymer resist (Black resist)	Proprietary		0.009	mg	606	19
Leadframe	Copper & its alloys	160.880	mg	supplier	alloy	Copper (Cu)	7440-50-8		154.644	mg	961238	319051
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		3.637	mg	22607	7504
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.219	mg	1361	452
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.190	mg	1181	392
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		2.190	mg	13613	4518
Die attach		9.227	mg	JIG Table A	glue or tape	Lead (Pb)	7439-92-1	7a-Lead in high mel	8.997	mg	975073	18562
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		0.138	mg	14956	285
Die attach				supplier	glue or tape	Tin (Sn)	7440-31-5		0.092	mg	9971	190
Bonding wire		2.105		supplier	wire	Gold (Au)	7440-57-5		0.359	mg	170546	741
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		1.745	mg	828979	3600
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	475	2
encapsulation		291.667	mg	supplier	mold compound	Phenol Resin	205830-20-2		11.666	mg	39998	24068
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		8.750	mg	30000	18052
encapsulation				supplier	mold compound	epoxy resin	na		8.750	mg	30000	18052
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.583	mg	1999	1203
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		261.918	mg	898004	540371
connections coating	Solder	5.973	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.973	mg	1000000	12323