



## 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>	2013-01-07
<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>	Giovanni Giacopello	<b>Representative Title</b>	AMS & IPD 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**

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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
T405Q-600H	8HIK*Z0505RS	A	LGGA	2013-01-07
	Amount	UoM	Unit type	ST ECOPACK Grade
	310.00	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used o	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	6.5 - 6.1 - 2.3	3	Through-hole	
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 '7b' exemption (other selected exemptions may apply)	false
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
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
7a	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)
7c-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devices

QueryList :REACH-18 June 2012				
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	8HK*20505R5					
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	2.217	mg	supplier	die	Silicon (Si)	7440-21-3		1.971	mg	889039	6358
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.033	mg	14885	106
die (s)				supplier	passivation	Alumina	1344-28-1		0.018	mg	8119	58
die (s)				supplier	passivation	Lead silicate Glass	65997-18-4	7c-I-Electrical and e	0.162	mg	73072	523
die (s)				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.011	mg	4962	95
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.004	mg	1804	13
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.018	mg	8119	58
Leadframe	Copper & its alloys	173.264	mg	supplier	alloy	Copper (Cu)	7440-50-8		171.834	mg	991747	554303
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.172	mg	993	555
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.052	mg	300	168
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		1.199	mg	6920	3868
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	40	23
Soft solder	Solder	1.996	mg	JIG Table A	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.906	mg	954910	6148
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.05	mg	25050	161
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.04	mg	20040	129
Bonding wire	Aluminium & its alloys	0.479	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.477	mg	995825	1539
Bonding wire				supplier	wire	Magnesium (Mg)	7439-95-4		0.002	mg	4175	6
encapsulation	Other inorganic materials	130.999	mg	supplier	mold compound	Epoxy Resin	Proprietary		3.93	mg	30000	12677
encapsulation				supplier	mold compound	2,2'-((3,3',5,5'-tetramethyl-(1,1'-biphenyl)-4,4'	EC 413-900-7		5.24	mg	40000	16903
encapsulation				supplier	mold compound	phenol resin	Proprietary		6.55	mg	50000	21129
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		114.624	mg	874999	369755
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.655	mg	5000	2113
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3371