



Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info	Subsectionals *	A-D
	Manufacturing Info		<i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2014-04-03
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Emilio Castelli Andrea Casali	Representative Title	APG MD CHAMPION
Representative Phone *	Refer to "Supplier Comment" section	Representative Email *	Refer to "Supplier Comment" section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/online_tech_support.html		

Uncertainty Statement	
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Legal Statement	
Supplier Acceptance *	true
Legal Declaration *	Standard
Legal Statement	<p>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.</p>

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
L9805E	G99M*UD05EA1	A	MU1A	2014-04-03
Amount	UoM	Unit type	ST ECOPACK Grade	
2150.82	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	245	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 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	G99M*UD05E1					
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	38.968	mg	supplier	die	Silicon (Si)	7440-21-3		37.254	mg	956015	17321
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.245	mg	6287	114
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.245	mg	6287	114
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.298	mg	7647	139
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.060	mg	1540	28
die (s)				supplier	passivation	Indium Tin oxide (In2O3.SnO2)	50926-11-9		0.574	mg	14730	267
die (s)				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.021	mg	539	10
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.057	mg	1463	27
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.190	mg	4876	88
die (s)				supplier	polymer die coating	Polymer resist (Black resist)	Proprietary		0.024	mg	616	11
Leadframe	Copper & its alloys	1533.220	mg	supplier	alloy	Copper (Cu)	7440-50-8		1525.546	mg	994995	709287
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.703	mg	459	327
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.283	mg	837	597
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		5.688	mg	3710	2645
Die attach		20.460	mg	JIG Table A	glue or tape	Lead (Pb)	7439-92-1	7a-Lead in high mel	19.948	mg	974976	9275
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		0.307	mg	15005	143
Die attach				supplier	glue or tape	Tin (Sn)	7440-31-5		0.205	mg	10020	95
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		3.328	mg	1000000	1547
encapsulation		538.455	mg	supplier	mold compound	Phenol Resin	205830-20-2		21.538	mg	40000	10014
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		16.154	mg	30001	7511
encapsulation				supplier	mold compound	epoxy resin	na		16.154	mg	30001	7511
encapsulation				supplier	mold compound	carbon black	1333-86-4		1.077	mg	2000	501
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		483.532	mg	897999	224813
connections coating	Solder	16.385	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		16.385	mg	1000000	7618