



Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2013-01-08
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 *	Giovanni Giacopello	Representative Title	AMS & IPD Materials Declaration 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/internet/com/support/online_tech_support.jsp		

Uncertainty Statement


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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	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
TN1515-600B-TR	8GDP*TN8N2RS	A	LGGA	2013-01-08
	Amount	UoM	Unit type	ST ECOPACK Grade
	320.00	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used on	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. piezoelectronic devices, or in a g

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	8GDP*TN8N2R5					
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	4.08	mg	supplier	die	Silicon (Si)	7440-21-3		3.57	mg	875000	11156
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.119	mg	29167	372
die (s)				supplier	passivation	Alumina	1344-28-1		0.033	mg	8088	103
die (s)				supplier	passivation	Lead silicate Glass	65997-18-4	7c-I-Electrical and d	0.298	mg	73039	931
die (s)				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.02	mg	4902	63
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.007	mg	1716	22
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.033	mg	8088	103
Leadframe	Copper & its alloys	165.131	mg	supplier	alloy	Copper (Cu)	7440-50-8		163.712	mg	991407	511600
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.164	mg	993	513
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.045	mg	297	153
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		1.199	mg	7261	3747
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	42	22
Soft solder	Solder	3.328	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.178	mg	954928	9931
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.083	mg	24940	259
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.067	mg	20132	209
Bonding wire	Aluminium & its alloys	0.435	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.435	mg	1000000	1359
encapsulation	Other Organic Materials	145.981	mg	supplier	mold compound	Epoxy Resin	Proprietary		4.379	mg	29997	13684
encapsulation				supplier	mold compound	2,2'-(3,3',5,5'-tetramethyl-1,1'-biphenyl)-4,4'	EC 413-900-7		5.839	mg	39998	18247
encapsulation				supplier	mold compound	phenol resin	Proprietary		7.299	mg	50000	22809
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		127.734	mg	875004	399169
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.73	mg	5001	2281
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266