




Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2013-05-15
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	<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
STGD19N40LZ	XLDP*IZB4A32	A	SH1A	2013-05-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	370.00	mg	Each	ECOPACK® 1

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	gull wing	
Comment	Package: TO 252 DPAK			

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)

QueryList : REACH-19 December 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	XLP*IZB4A32					
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	6.469	mg	supplier	die	Silicon (Si)	7440-21-3		6.346	mg	980986	17151
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.118	mg	18241	319
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	155	3
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	618	11
Leadframe	Copper & its alloys	166.734	mg	supplier	alloy	Copper (Cu)	7440-50-8		165.312	mg	991471	446789
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.166	mg	996	449
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.05	mg	300	135
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		1.199	mg	7191	3241
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	42	19
Soft solder	Solder	4.942	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.719	mg	954877	12754
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.124	mg	25091	335
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.099	mg	20032	268
Bonding wire	Other inorganic materials	0.841	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.841	mg	1000000	2273
encapsulation	Other Organic Materials	189.969	mg	supplier	mold compound	Silica, vitreous	60676-86-0		151.974	mg	799994	410741
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		13.298	mg	70001	35941
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		7.599	mg	40001	20538
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		11.398	mg	59999	30805
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		2.28	mg	12002	6162
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		2.85	mg	15002	7703
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.57	mg	3000	1541
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	2824