



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2013-11-28
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 *	Antonella Lanzafame	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
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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
	TLDP*QL0FA32	A	SH1A	2013-11-28
Amount	UoM	Unit type	ST ECOPACK Grade	
331.00	mg	Each	ECOPACK® 1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
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	TO 252 DPAK; MD valid for CP: STD25NF10LA.			

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-20th June 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	TLPD*QL0FA32					
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	9.405	mg	supplier	die	Silicon (Si)	7440-21-3		9.216	mg	979904	27843
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.089	mg	9463	269
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.001	mg	106	3
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.044	mg	4678	133
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	319	9
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.009	mg	957	27
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.043	mg	4572	130
Leadframe	Copper & its alloys	165.557	mg	supplier	alloy	Copper (Cu)	7440-50-8		164.138	mg	991429	495885
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.164	mg	991	495
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.049	mg	296	148
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		1.199	mg	7242	3622
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	42	21
Soft solder	Solder	3.253	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	3.107	mg	955118	9387
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.081	mg	24900	245
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.065	mg	19982	196
Bonding wire	Other inorganic materials	0.931	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.931	mg	1000000	2813
encapsulation	Other Organic Materials	150.809	mg	supplier	mold compound	Silica, vitreous	60676-86-0		120.647	mg	799999	364492
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		10.557	mg	70002	31894
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		6.033	mg	40004	18227
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		9.048	mg	59996	27335
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		1.809	mg	11995	5465
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		2.263	mg	15006	6837
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.452	mg	2997	1366
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3157