



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2013-12-13
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 *	Laurent Tosi	Representative Title	MMS MD CHAMPION
Representative Phone *	(+33) 442 685 795	Representative Email *	laurent.tosi@st.com
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
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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
-	S01L*433XXXA	A	9994	2013-12-09
Amount	UoM	Unit type	ST ECOPACK Grade	
681.44	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used or other bulk termination : add in comments	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
QFP	14x14x1.4	100	L bend	
Comment	Package: LQFP 100 14x14x1.4			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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)	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-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	S01L*433XXXA					
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	8.535	mg	supplier	die	Silicon (Si)	7440-21-3		8.203	mg	961101	12038
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.015	mg	1757	22
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.15	mg	17575	220
die (s)				supplier	metallization	Tantalum (Ta)	7440-25-7		0.043	mg	5038	63
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	234	3
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	117	1
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.034	mg	3984	50
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.087	mg	10193	128
Die Attach	Other inorganic materials	1.887	mg	supplier	Glue	Silver	7440-22-4		1.51	mg	800212	2216
Die Attach				supplier	Glue	Acrylic resins	Proprietary		0.283	mg	149974	415
Die Attach				supplier	Glue	resin	Proprietary		0.047	mg	24907	69
Die Attach				supplier	Glue	Treated silica	Proprietary		0.047	mg	24907	69
Leadframe	Other inorganic materials	128.179	mg	supplier	Alloys	Copper (Cu)	7440-50-8		127.257	mg	992807	186747
Leadframe				supplier	Alloys	Chromium(Cr)	7440-47-3		0.32	mg	2497	470
Leadframe				supplier	Alloys	Tin(Sn)	7440-31-5		0.32	mg	2497	470
Leadframe				supplier	Alloys	Zinc(Zn)	7440-66-6		0.282	mg	2200	414
Leadframe Coating	Other inorganic materials	4.540	mg	supplier	Alloys	Nickel	7440-02-0		4.313	mg	950000	6329
Leadframe Coating				supplier	Alloys	Palladium	2023568		0.045	mg	9912	66
Leadframe Coating				supplier	Alloys	Gold	7440-57-5		0.091	mg	20044	134
Leadframe Coating				supplier	Alloys	Silver	7440-22-4		0.091	mg	20044	134
Mold compound	Other inorganic materials	536.178	mg	supplier	Encapsulation	Epoxy resins	Proprietary		16.095	mg	30018	23619
Mold compound				supplier	Encapsulation	Silica, Vitreous	60676-86-0		474.48	mg	884930	696290
Mold compound				supplier	Encapsulation	Phenol resin	Proprietary		16.095	mg	30018	23619
Mold compound				supplier	Encapsulation	Carbon Black	1333-86-4		2.683	mg	5004	3937
Mold compound				supplier	Encapsulation	Metal Hydroxide	Proprietary		26.825	mg	50030	39365
Bonding Wire	Other inorganic materials	1.630	mg	supplier	Wire	Gold (Au)	7440-57-5		1.614	mg	990184	2369
Bonding Wire				supplier	Wire	Palladium (Pd)	2023568		0.016	mg	9816	23
Finishing	Other inorganic materials	0.491	mg	supplier	Connection coating	Nickel	7440-02-0		0.466	mg	949084	684
Finishing				supplier	Connection coating	Palladium	2023568		0.005	mg	10183	7
Finishing				supplier	Connection coating	Gold	7440-57-5		0.01	mg	20367	15
Finishing				supplier	Connection coating	Silver	7440-22-4		0.01	mg	20367	15