



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2013-08-28
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 *	Giuseppe Vitali Palma	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
	7SER*AGS0250	A	SH1A	2013-08-28
Amount	UoM	Unit type	ST ECOPACK Grade	
99.00	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		
Not Applicable ; if coating is use	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	5 X 6 -X0.8	2	pin	
Comment	Package: QFN POWER FLAT 5x6 8L SINGLE			

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	7SER*AGS0250					
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	3.908	mg	supplier	die	Silicon (Si)	7440-21-3		3.669	mg	938843	37061
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.083	mg	21238	838
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.034	mg	8700	343
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.022	mg	5629	222
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.02	mg	5118	202
die (s)				supplier	passivation	Esterified polyamid	63428-83-1		0.033	mg	8444	333
die (s)				supplier	passivation	Tetraethylene glycol dimethacrylate	109-17-1		0.004	mg	1024	40
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	512	20
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.007	mg	1791	71
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.034	mg	8700	343
Leadframe	Copper & its alloys	28.292	mg	supplier	alloy	Copper (Cu)	7440-50-8		27.249	mg	963134	275242
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.641	mg	22657	6475
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.039	mg	1378	394
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.034	mg	1202	343
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.327	mg	11558	3303
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.002	mg	71	20
Soft solder	Solder	3.416	mg	JIG Table R	solder	Lead (Pb)	7439-92-1	7a-Lead in high m	3.263	mg	955211	32960
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.085	mg	24883	859
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.068	mg	19906	687
Bonding wire	Other inorganic materials	1.695	mg	supplier	ribbon	Aluminium (Al)	7429-90-5		1.695	mg	1000000	17121
encapsulation	Other inorganic materials	61.664	mg	supplier	mold compound	Silica, vitreous	60676-86-0		57.102	mg	926018	576788
encapsulation				supplier	mold compound	epoxy resin	85954-11-6		2.466	mg	39991	24909
encapsulation				supplier	mold compound	phenol resin	26834-02-6		1.85	mg	30001	18687
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.246	mg	3989	2485
connections coating	Solder	0.025	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.025	mg	1000000	253