



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 *	2013-02-26
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
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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
	AZDP*Z03QB1Q	A	SH1A	2013-02-26
Amount	UoM	Unit type	ST ECOPACK Grade	
320.00	mg	Each		

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	bright, annealed Tin/Silver/Bismuth	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	6.085X6.614X2.3	1	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	AZDP*Z03QB1Q									
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	3.555	mg	supplier	die	Silicon (Si)	7440-21-3		3.421	mg	962307	10691				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.021	mg	5907	66				
						Titanium (Ti)	7440-32-6		0.003	mg	844	9				
						Tungsten (W)	7440-33-7		0.005	mg	1406	16				
						Nickel (Ni)	7440-02-0		0.015	mg	4219	47				
						Gold (Au)	7440-57-5		0.015	mg	4219	47				
					supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.021	mg	5907	66			
							Esterified polyamid	63428-83-1		0.022	mg	6188	69			
							Tetraethylene glycol dimethacrylate	109-17-1		0.002	mg	563	6			
					supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	563	6			
Leadframe	Copper & its alloys	156.159	mg	supplier	alloy	Gold (Au)	7440-57-5		0.005	mg	1406	16				
						Nickel (Ni)	7440-02-0		0.023	mg	6470	72				
						Copper (Cu)	7440-50-8		154.754	mg	991003	483606				
						Iron (Fe)	7439-89-6		0.071	mg	455	222				
						Iron Phosphide (FeP)	26508-33-8		0.13	mg	832	406				
					supplier	metallization	Nickel (Ni)	7440-02-0		1.197	mg	7665	3741			
							Phosphorus (P)	12185-10-3		0.007	mg	45	22			
				Soft solder	Other organic materials	2.984	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.849	mg	954759	8903
								supplier	solder	Silver (Ag)	7440-22-4		0.075	mg	25134	234
										Tin (Sn)	7440-31-5		0.06	mg	20107	188
Bonding wire	Other inorganic materials	0.17	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.17	mg	1000000	531				
encapsulation	Other organic materials	156.087	mg	supplier	mold compound	Silica, vitreous	60676-86-0		124.87	mg	800003	390219				
						Epoxy Cresol Novolak	29690-82-2		10.926	mg	69999	34144				
						Phenol resin	9003-35-4		6.244	mg	40003	19513				
						Biphenyl epoxy resin	85954-11-6		9.365	mg	59999	29266				
						Antimony Trioxide	1309-64-4		1.873	mg	12000	5853				
					JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		2.341	mg	14998	7316			
connections coating	Solder	1.045	mg	supplier	mold compound	Carbon Black	1333-86-4		0.468	mg	2998	1463				
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266				