



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 *	2014-01-03
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
	PZ07*LW33FC1	A	SH1A	2014-01-03
Amount	UoM	Unit type	ST ECOPACK Grade	
76.29	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	Comment	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85X3.9X1.52	5	gull wing	
Comment	Package: SO 08 .15 JEDEC			

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	PZO7*LW33FC1					
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	2.147	mg	supplier	die	Silicon (Si)	7440-21-3		2.098	mg	977177	26225
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	12576	338
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.009	mg	4192	113
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.012	mg	5589	150
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.001	mg	466	13
Leadframe	Copper & its alloys	36.467	mg	supplier	alloy	Copper (Cu)	7440-50-8		36.372	mg	997395	454650
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.017	mg	466	213
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.031	mg	850	388
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.044	mg	1207	550
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	27	13
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	27	13
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.001	mg	27	13
Die attach	Other Organic Materials	0.726	mg	supplier	glue	Silver (Ag)	7440-22-4		0.661	mg	910468	8263
Die attach				supplier	glue	acrylate	Proprietary		0.036	mg	49587	450
Die attach				supplier	glue	Methacrylate	Proprietary		0.029	mg	39945	363
Bonding wire	Other inorganic materials	0.057	mg	supplier	wire	Copper (Cu)	7440-50-8		0.057	mg	1000000	713
encapsulation	Other Organic Materials	36.893	mg	supplier	mold compound	Epoxy Resin	Proprietary		2.767	mg	75001	34588
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		1.845	mg	50009	23063
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		31.949	mg	865991	399363
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.184	mg	4987	2300
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.148	mg	4012	1850