



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 *	2016-07-06
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Floriana San Biagio	Representative Title	AMG MD CHAMPION
Representative Phone *	Refer to Supplier Comment section		Refer to Supplier Comment section
Representative Email *	Refer to Supplier Comment section		
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/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
	PZO7*LW05FC1	A	SH1A	2016-07-06
Amount	UoM	Unit type	ST ECOPACK Grade	
76.29	mg	Each	ECOPACK® 2	
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

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	
NAC	Nicke/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	4.85x3.9x1.52	8	gull wing	
Comment	Package: 07 SO 08 .15 JEDEC; MDF valid for L4931ABD50-TR			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description

QueryList : REACH-20th June 2016				
Query				Response
1 - Product(s) 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	PZ07* LW05FC1					
note : Substance present with less 0.001mg will not be declared in this document												
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	2.167	mg	supplier	die	Silicon (Si)	7440-21-3		2.098	mg	968159	27500
				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	12460	354
				supplier	Passivation	Silicon Nitride	12033-89-5		0.009	mg	4153	118
				supplier	Passivation	Silicon Oxide	7631-86-9		0.012	mg	5538	157
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	923	26
				supplier	back side metallization	Gold (Au)	7440-57-5		0.004	mg	1846	52
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.015	mg	6922	197
				supplier	back side metallization	Copper (Cu)	7440-50-8		31.133	mg	969483	408088
Leadframe	Copper & its alloys	32.113	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.732	mg	22795	9595
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.044	mg	1370	577
				supplier	alloy	Zinc (Zn)	7440-66-6		0.038	mg	1183	498
				supplier	metallization	Nickel (Ni)	7440-02-0		0.151	mg	4702	1979
				supplier	metallization	Palladium (Pd)	7440-05-3		0.005	mg	156	66
				supplier	metallization	Gold (Au)	7440-57-5		0.005	mg	156	66
				supplier	metallization	Silver (Ag)	7440-22-4		0.005	mg	156	66
				supplier	metallization	Silver (Ag)	7440-22-4		0.005	mg	156	66
Die attach	Other Organic Materials	0.792	mg	supplier	glue	Silver (Ag)	7440-22-4		0.696	mg	878788	9123
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.040	mg	50505	524
				supplier	glue	Urethane Methacrylate Resin	5888-33-5		0.040	mg	50505	524
				supplier	glue	Acrylate polymer	87320-05-6		0.016	mg	20202	210
				supplier	wire	Copper (Cu)	7440-50-8		0.069	mg	1000000	904
Bonding wires	Other inorganic materials	0.069	mg	supplier	wire	Copper (Cu)	7440-50-8		0.069	mg	1000000	904
				supplier	mold compound	Silica, vitreous	60676-86-0		35.635	mg	865999	467099
				supplier	mold compound	Epoxy Resin	Proprietary		3.086	mg	74996	40451
				supplier	mold compound	Phenol Resin	Proprietary		2.057	mg	49989	26963
Encapsulation	Other Organic Materials	41.149	mg	supplier	mold compound	Carbon black	1333-86-4		0.206	mg	5006	2700
				supplier	mold compound	Bismuth compound	7440-69-9		0.165	mg	4010	2163
				supplier	mold compound	Bismuth compound	7440-69-9		0.165	mg	4010	2163