



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 *	2016-05-10
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
	ZP07*LE05FC1	A	SH1A	2016-05-10
Amount	UoM	Unit type	ST ECOPACK Grade	
80.00	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	Nickel/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 LE50CD-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-17th December 2015				
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	ZP07*LE05FC1					
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	2.146	mg	supplier	die	Silicon (Si)	7440-21-3		2.098	mg	977633	26225
				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	12582	338
				supplier	Passivation	Silicon Nitride	12033-89-5		0.009	mg	4194	113
				supplier	Passivation	Silicon Oxide	7631-86-9		0.012	mg	5592	150
Leadframe	Copper & its alloys	32.113	mg	supplier	alloy	Copper (Cu)	7440-50-8		31.133	mg	969483	389163
				supplier	alloy	Iron (Fe)	7439-89-6		0.732	mg	22795	9150
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.044	mg	1370	550
				supplier	alloy	Zinc (Zn)	7440-66-6		0.038	mg	1183	475
				supplier	metallization	Nickel (Ni)	7440-02-0		0.151	mg	4702	1888
				supplier	metallization	Palladium (Pd)	7440-05-3		0.005	mg	156	63
				supplier	metallization	Gold (Au)	7440-57-5		0.005	mg	156	63
				supplier	metallization	Silver (Ag)	7440-22-4		0.005	mg	156	63
Die attach	Other Organic Materials	0.792	mg	supplier	glue	Silver (Ag)	7440-22-4		0.696	mg	878788	8700
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.040	mg	50505	500
				supplier	glue	Urethane Methacrylate Resin	5888-33-5		0.040	mg	50505	500
				supplier	glue	Acrylate polymer	87320-05-6		0.016	mg	20202	200
Bonding wires	Other inorganic materials	0.041	mg	supplier	wire	Copper (Cu)	7440-50-8		0.041	mg	1000000	513
Encapsulation	Other Organic Materials	44.908	mg	supplier	mold compound	Silica, vitreous	60676-86-0		38.890	mg	865993	486125
				supplier	mold compound	Epoxy Resin	Proprietary		3.368	mg	74998	42100
				supplier	mold compound	Phenol Resin	Proprietary		2.245	mg	49991	28063
				supplier	mold compound	Carbon black	1333-86-4		0.225	mg	5010	2813
				supplier	mold compound	Bismuth compound	7440-69-9		0.180	mg	4008	2250