



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 *	2017-11-15
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	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

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*LE08FC1	A	SHENZHEN B/E	2017-11-15
Amount	UoM	Unit type	ST ECOPACK Grade	
80.00	mg	Each	ECOPACK2	
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant		

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	NiPdAuAg	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	4.9, 6, 1.75	8	GULL WING	
Comment	Package: O7 SO 08 .15 JEDEC; MDF valid for LE80CD-TR			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
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-7 th July 2017				
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*LE08FC1					
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	0.941	mg	supplier	die	Silicon (Si)	7440-21-3		0.920	mg	977683	11500
				supplier	metallization	Aluminium (Al)	7429-90-5		0.012	mg	12752	150
				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	4251	50
				supplier	Passivation	Silicon Oxide	7631-86-9		0.005	mg	5313	63
Leadframe	Copper & its alloys	32.000	mg	supplier	alloy	Copper (Cu)	7440-50-8		31.911	mg	997219	398888
				supplier	alloy	Iron (Fe)	7439-89-6		0.015	mg	469	188
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.027	mg	844	338
				supplier	metallization	Nickel (Ni)	7440-02-0		0.044	mg	1375	550
				supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	31	13
				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	31	13
Die attach	Other Organic Materials	0.377	mg	supplier	metallization	Silver (Ag)	7440-22-4		0.001	mg	31	13
				supplier	glue	Silver (Ag)	7440-22-4		0.343	mg	909814	4288
				supplier	glue	acrylate	Proprietary		0.019	mg	50398	238
				supplier	glue	Methacrylate	Proprietary		0.015	mg	39788	188
Bonding wires	Other inorganic materials	0.018	mg	supplier	wire	Copper (Cu)	7440-50-8		0.018	mg	1000000	225
Encapsulation	Other Organic Materials	46.664	mg	supplier	mold compound	Silica, vitreous	60676-86-0		40.411	mg	865999	505138
				supplier	mold compound	Epoxy Resin	25068-38-6		3.500	mg	75004	43750
				supplier	mold compound	Phenol Resin	29690-82-2		2.333	mg	49996	29163
				supplier	mold compound	Carbon black	1333-86-4		0.233	mg	4993	2913
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.187	mg	4007	2338