

Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info	Subsectionals *	A-D
	Manufacturing Info		* : Required Field

Supplier Information								
Company Name *	STMicroelectronics	Response Date *	2018-07-17					
Company Unique ID	NL 008751171B01							
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section					
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section					
Authorized Representative *	Floriana SAN BIAGIO Representative Title		AMS MD CHAMPION					
Representative Phone *	Refer to Supplier Comment section Representative Email *		Refer to Supplier Comment section					
Supplier Comment	nline Technical Support - STMicroelectronics : ttp://www.st.com/web/en/support/support.html							

Uncertainty Statement

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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 omprehensive 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*LE33FC1	А	SH1A	2018-07-17				
	Amount	UoM	Unit type	ST ECOPACK Grade				
	80	mg	Each	ECOPACK® 2				
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900pp 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	life.augmented		
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		moradgirioriiod		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.9x6x1.75	8	gull wing	
Comment	O7 SO 08 .15 JEDEC; MDF valid for LE3	3CD-TR		

QueryList: RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 2015								
	Query							
1 - Product(s) meets EU RoHS requiremen	t without any exemptions	TRUE						
2 - Product(s) meets EU RoHS requiremen apply)	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 papely)							
3 - Product(s) meets EU RoHS requiremen	3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s) FALSE							
4 - Product(s) does not meet EU RoHS req	FALSE							
Exemption Id. Description								

QueryList: REACH-27th June 2018							
	Response						
1 - Product(s) does not contain REACH Sul	TRUE						
CategoryLevel_Name	Name CategoryLevel_Threshold amount in product (mg) Application						
;							
2 - Product(s) does not contain REACH definition within REACH	TRUE						
CategoryLevel_Name	ppm in Article /Homogeneous Material						

Material Composition Declaration note : Substance present with les	on: ss 0.001mg will not be declared in this	document				Mfr Item Name	PZO7*I	E33FC1			5000002.0	1000005.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	2.146	mg	supplier	die	Silicon (Si)	7440-21-3		2.098	mg	977633	26225
				supplier	metallization	Aluminium (AI)	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	M-004 Copper and its alloys	31.758	mg	supplier	alloy	Copper (Cu)	7440-50-8		30.901	mg	973015	386263
				supplier	alloy	Iron (Fe)	7439-89-6		0.727	mg	22892	9088
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.044	mg	1385	550
				supplier	alloy	Zinc (Zn)	7440-66-6		0.038	mg	1197	475
	M-006 Nickel and its alloys			supplier	metallization	Nickel (Ni)	7440-02-0		0.044	mg	1385	550
	M-008 Precious metals			supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	31	13
	M-008 Precious metals			supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	63	25
				supplier	metallization	Silver (Ag)	7440-22-4		0.001	mg	31	13
Die attach	M-015 Other organic materials	0.792	mg	supplier	glue	Silver (Ag)	7440-22-4		0.694	mg	876263	8675
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.040	mg	50505	500
				supplier	glue	Acrylate resin	5888-33-5		0.040	mg	50505	500
				supplier	glue	Methyl acrylate polymer	87320-05-6		0.016	mg	20202	200
				supplier	glue	Epoxycyclohexylethyltrimethoxysilane	3388-04-3		0.001	mg	1263	13
				supplier	glue	Tert-Butyl peroxy(2-ethyl)-hexanoate	3006-82-4		0.001	mg	1263	13
Bonding wires	M-011 Other inorganic materials	0.031	mg	supplier	wire	Copper (Cu)	7440-50-8		0.031	mg	1000000	388
Encapsulation	M-015 Other organic materials	45.273	mg	supplier	mold compound	Silica, vitreous	60676-86-0		39.206	mg	865991	490075
				supplier	mold compound	Epoxy Resin	85954-11-6		3.396	mg	75012	42450
				supplier	mold compound	Phenol Resin	26834-02-6		2.264	mg	50008	28300
				supplier	mold compound	Carbon black	1333-86-4		0.226	mg	4992	2825
				supplier	mold compound	Bismuth compound	7440-69-9		0.181	mg	3998	2263