



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 *	2018-08-21
Company Unique ID	NL 008751171801		
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	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
	FBO7*A239CEY	A	ZY1A	2018-08-21
Amount	UoM	Unit type	ST ECOPACK Grade	
80	mg	Each	ECOPACK® 3	
	Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony		

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	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85x3.9x1.52	8	gull wing	
Comment	07 SO 08 .15 JEDEC; MDF valid for TSB712IYDT			

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-27th June 2018				
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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	FB07*A239CEY				6000001.0	1000020.0
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	2.069	mg	supplier	die	Silicon (Si)	7440-21-3		2.069	mg	1000000	25863
Leadframe	M-004 Copper and its alloys	29.201	mg	supplier	alloy	Copper (Cu)	7440-50-8		28.423	mg	973357	355288
				supplier	alloy	Iron (Fe)	7439-89-6		0.685	mg	23458	8563
				supplier	alloy	Zinc (Zn)	7440-66-6		0.035	mg	1199	438
				supplier	alloy	Metallic Phosphorus (P)	7723-14-0		0.009	mg	308	113
				supplier	metallization	Silver (Ag)	7440-22-4		0.049	mg	1678	613
Die attach	M-015 Other organic materials	0.694	mg	supplier	glue	Silver (Ag)	7440-22-4		0.520	mg	749280	6500
				supplier	glue	Reaction product: bisphenol-F-(epichlorhydrin)	9003-36-5		0.049	mg	70605	613
				supplier	glue	Fatty acids, C18-unsatd., dimers, polymers with	68475-94-5		0.028	mg	40346	350
				supplier	glue	gamma-Butyrolactone	96-48-0		0.028	mg	40346	350
				supplier	glue	Polyoxyalkylene amine	9046-10-0		0.028	mg	40346	350
				supplier	glue	Epoxy Resin	Proprietary		0.028	mg	40346	350
				supplier	glue	Copper Oxide	1317-38-0		0.007	mg	10086	88
				supplier	glue	Epoxy Resin Modifier	Proprietary		0.003	mg	4323	38
Bonding wires	M-008 Precious metals	0.156	mg	supplier	glue	Substituted Silane	Proprietary		0.003	mg	4323	38
				supplier	wire	Gold (Au)	7440-57-5		0.155	mg	993590	1938
				supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	6410	13
Encapsulation	M-015 Other organic materials	46.517	mg	supplier	molding compound	Epoxy Resin	Proprietary		3.954	mg	85001	49425
				supplier	molding compound	Phenol Resin	205830-20-2		1.861	mg	40007	23263
				supplier	molding compound	Silica Amorphous A	60676-86-0		36.748	mg	789991	459350
				supplier	molding compound	Silica Amorphous B	7631-86-9		3.721	mg	79992	46513
				supplier	molding compound	Carbon Black	1333-86-4		0.233	mg	5009	2913
Finishing	M-011 Other inorganic materials	1.364	mg	supplier	connection coating	Tin (Sn)	7440-31-5		1.364	mg	1000000	17050