



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 *	2018-03-15
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
	EBO7*UY19AAY	A	ZY1A	2018-03-15
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	Nickel/Palladium/Gold (Ni/Pd/Au)	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 TSX712IYDT			

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-15th January 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	EBO7*UY19AAY				5000002.0	999969.0
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	2.009	mg	supplier	die	Silicon (Si)	7440-21-3		1.948	mg	969637	24350
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	498	13
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	498	13
				supplier	Passivation	Silicon Nitride	12033-89-5		0.005	mg	2489	63
				supplier	Passivation	Silicon Oxide	7631-86-9		0.033	mg	16426	413
				supplier	polymer die coating	PIIX1 Gamma-butyrolactone	96-48-0		0.021	mg	10453	263
Leadframe	M-004 Copper and its alloys	35.594	mg	supplier	alloy	Copper (Cu)	7440-50-8		34.375	mg	965753	429688
				supplier	alloy	Iron (Fe)	7439-89-6		0.793	mg	22279	9913
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.048	mg	1349	600
				supplier	alloy	Zinc (Zn)	7440-66-6		0.042	mg	1180	525
				supplier	metallization	Nickel (Ni)	7440-02-0		0.312	mg	8766	3900
				supplier	metallization	Palladium (Pd)	7439-89-6		0.013	mg	365	163
Die attach	M-015 Other organic materials	0.881	mg	supplier	metallization	Gold (Au)	12185-10-3		0.011	mg	309	138
				supplier	glue	Silver (Ag)	7440-22-4		0.706	mg	801362	8825
				supplier	glue	Bisphenol F type epoxy resin	9003-36-5		0.071	mg	80590	888
				supplier	glue	Epoxy resin	68475-94-5		0.026	mg	29512	325
				supplier	glue	2,6-Diglycidyl phenyl allyl ether	EC 417-470-1		0.026	mg	29512	325
				supplier	glue	Gamma Butyrolactone	96-48-0		0.026	mg	29512	325
Bonding wires	M-008 Precious metals	0.153	mg	supplier	glue	Polyoxypropylenediamine	9046-10-0		0.026	mg	29512	325
				supplier	wire	Gold (Au)	7440-57-5		0.153	mg	1000000	1913
Encapsulation	M-015 Other organic materials	41.360	mg	supplier	mold compound	Biphenyl epoxy resin	85954-11-6		3.468	mg	83849	43350
				supplier	mold compound	Phenol Resin	26834-02-6		1.734	mg	41925	21675
				supplier	mold compound	Silica, vitreous	60676-86-0		35.681	mg	862693	446013
				supplier	mold compound	Carbon black	1333-86-4		0.217	mg	5247	2713
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.260	mg	6286	3250