



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 *	2017-01-09
Contact Name *	Refer to "Supplier Comment" section	Contact Title	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	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
	EBO7*UY19AAA	A	ZY1A	2017-01-09
Amount	UoM	Unit type	ST ECOPACK Grade	
80.00	mg	Each	ECOPACK® 3	

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 ; if coating is used o	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: SO 08 .15 JEDEC; MDF valid for TSX712IDT			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description

QueryList : REACH-20t June 2016				
Query				Response
The product 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	EBO7*UY19AAA					
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	2.005	mg	supplier	die	Silicon (Si)	7440-21-3		1.943	mg	969185	24375
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	497	13
Die				supplier	metallization	Titanium Nitride (TiN)	25583-20-4		0.001	mg	497	13
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	497	13
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.005	mg	2485	63
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.033	mg	16402	413
Die				supplier	passivation	PIX1 Gamma-butyrolactone	96-48-0		0.021	mg	10437	263
Leadframe	Copper & its alloys	35.599	mg	supplier	alloy	Copper (Cu)	7440-50-8		34.380	mg	965757	431150
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.793	mg	22288	9950
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.048	mg	1344	600
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.042	mg	1176	525
Leadframe	Nickel (Ni)			supplier	metallization	Nickel (Ni)	7440-02-0		0.312	mg	8764	3913
Leadframe	Precious metals			supplier	metallization	Palladium (Pd)	7439-89-6		0.013	mg	364	163
Leadframe	Precious metals			supplier	metallization	Gold (Au)	12185-10-3		0.011	mg	308	138
Die attach	Other inorganic materials	0.881	mg	supplier	glue	Silver (Ag)	7440-22-4		0.706	mg	800000	8860
Die attach				supplier	glue	Bisphenol F type epoxy resin	9003-36-5		0.071	mg	80000	886
Die attach				supplier	glue	Epoxy resin	68475-94-5		0.026	mg	30000	332
Die attach				supplier	glue	2,6-Diglycidyl phenyl allyl ether	EC 417-470-1		0.026	mg	30000	332
Die attach				supplier	glue	Gamma Butyrolactone	96-48-0		0.026	mg	30000	332
Die attach				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.026	mg	30000	332
Bonding wire	Precious metals	0.153	mg	supplier	wire	Gold (Au)	7440-57-5		0.153	mg	1000000	1925
encapsulation	Other inorganic materials	41.362	mg	supplier	mold compound	Biphenyl epoxy resin	85954-11-6		3.468	mg	83855	43501
encapsulation				supplier	mold compound	Phenol Resin	26834-02-6		1.734	mg	41928	21751
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		35.683	mg	862687	447530
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.217	mg	5241	2719
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.260	mg	6289	3263