



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 *	2017-05-04
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
	EBO7*VA16AAAY	A	ZY1A	2017-05-04
Amount	UoM	Unit type	ST ECOPACK Grade	
80.00	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	
ating is used or other bulk terminati	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85 x3.9x1.52	8	gull wing	
Comment	Package: 07 SO 08 .15 JEDEC; MDF valid for TSZ122IYDT			

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-12th January 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	EBO7*VA16AAY					
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	0.648	mg	supplier	die	Silicon (Si)	7440-21-3		0.620	mg	956790	7750
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	7716	63
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1543	13
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1543	13
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	3086	25
				supplier	Passivation	Silicon Oxide	7631-86-9		0.011	mg	16975	138
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.008	mg	12346	100
				supplier	alloy	Copper (Cu)	7440-50-8		38.692	mg	963974	483650
				supplier	alloy	Iron (Fe)	7439-89-6		0.933	mg	23245	11663
				supplier	alloy	Zinc (Zn)	7440-66-6		0.048	mg	1196	600
Leadframe	Copper & its alloys	40.138	mg	supplier	alloy	Phosphorus (P)	12185-10-3		0.012	mg	299	150
				supplier	alloy	Nickel (Ni)	7440-02-0		0.440	mg	10962	5500
				supplier	metallization	Palladium (Pd)	7440-05-3		0.009	mg	224	113
				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	100	50
				supplier	metallization	Nickel (Ni)	7440-02-0		0.440	mg	10962	5500
				supplier	metallization	Palladium (Pd)	7440-05-3		0.009	mg	224	113
				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	100	50
				supplier	metallization	Palladium (Pd)	7440-05-3		0.009	mg	224	113
				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	100	50
				supplier	metallization	Nickel (Ni)	7440-02-0		0.440	mg	10962	5500
Die attach	Other Organic Materials	0.332	mg	supplier	glue	Epoxy resin A	9003-36-5		0.023	mg	69277	288
				supplier	glue	Epoxy resin B	68475-94-5		0.013	mg	39157	163
				supplier	glue	Silver(Ag)	7440-22-4		0.257	mg	774096	3213
				supplier	glue	Lactone	96-48-0		0.013	mg	39157	163
				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.013	mg	39157	163
				supplier	glue	2,6-Diglycidyl phenyl allyl ether oligomer	proprietary		0.013	mg	39157	163
				supplier	wire	Gold (Au)	7440-57-5		0.100	mg	1000000	1250
				supplier	wire	Gold (Au)	7440-57-5		0.100	mg	1000000	1250
Bonding wires	Precious metals	0.100	mg	supplier	wire	Gold (Au)	7440-57-5		0.100	mg	1000000	1250
				supplier	wire	Gold (Au)	7440-57-5		0.100	mg	1000000	1250
				supplier	wire	Gold (Au)	7440-57-5		0.100	mg	1000000	1250
				supplier	wire	Gold (Au)	7440-57-5		0.100	mg	1000000	1250
				supplier	wire	Gold (Au)	7440-57-5		0.100	mg	1000000	1250
Encapsulation	Other Organic Materials	38.781	mg	supplier	mold compound	Epoxy Resin	25068-38-6		2.909	mg	75011	36363
				supplier	mold compound	Silica fused (SiO2)	60676-86-0		33.351	mg	859983	416888
				supplier	mold compound	Phenol Resin	Proprietary		1.551	mg	39994	19388
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		0.776	mg	20010	9700
				supplier	mold compound	Carbon Black	1333-86-4		0.194	mg	5002	2425