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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 *	2016-08-09
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 *	Antonella Lanzafame	Representative Title	AMG Materials Declaration 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
TSC1031IDT	IDO7*103BAB6	A	BO2A	2016-08-09
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 or other bulk termination : add in comments	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85 - 3.9 - 1.52	8	gull wing	
Comment	Package: SO 08 .15 JEDEC			

QueryList : ROHS directive 2011/65/EU _ July 2011	
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
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-20th 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	IDO7*103BAB6					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies	Other inorganic materials	2.106	mg	supplier	die	Silicon (Si)	7440-21-3		2.021	mg	959639	25263
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.020	mg	9497	250
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	950	25
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.006	mg	2849	75
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.035	mg	16619	438
Die or Dies				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.022	mg	10446	275
Leadframe	Copper & its alloys	31.668	mg	supplier	alloy	Copper (Cu)	7440-50-8		30.528	mg	964002	381600
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.718	mg	22673	8975
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.043	mg	1358	538
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.038	mg	1200	475
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.313	mg	9884	3913
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.010	mg	316	125
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.009	mg	284	113
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.009	mg	284	113
Die attach	Other inorganic materials	0.706	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.643	mg	910765	8038
Die attach				supplier	glue or tape	acrylate	Proprietary		0.035	mg	49575	438
Die attach				supplier	glue or tape	Methacrylate	Proprietary		0.028	mg	39660	350
Bonding wire	Other inorganic materials	0.036	mg	supplier	wire	Copper (Cu)	7440-50-8		0.036	mg	1000000	450
encapsulation	Other inorganic materials	45.484	mg	supplier	mold compound	Epoxy Resin	Proprietary		3.328	mg	73169	41600
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		3.328	mg	73169	41600
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		38.429	mg	844891	480363
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.222	mg	4881	2775
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.177	mg	3891	2213