



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2018-03-15
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	Floriana SAN BIAGIO	<b>Representative Title</b>	AMS MD CHAMPION
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**


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Legal Statement		
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>
		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
	IDO7*103AAA6	A	BO2A	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 TSC103IDT			

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
-	-			0
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
-	-	0.00		
3 - Packing article and materials used for shipping the Product(s) does not contain REACH Substances Of Very High Concern				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in packing article (mg)	Application - Packing article description	ppm in packing article

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	IDO7*103AAA6				5000002.0	1000019.0	
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	2.106	mg	supplier	die	Silicon (Si)	7440-21-3		2.020	mg	959164	25250	
				supplier	metallization	Aluminium (Al)	7429-90-5		0.021	mg	9972	263	
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	950	25	
				supplier	Passivation	Silicon Nitride	12033-89-5		0.006	mg	2849	75	
				supplier	Passivation	Silicon Oxide	7631-86-9		0.035	mg	16619	438	
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.022	mg	10446	275	
Leadframe	M-004 Copper and its alloys	32.288	mg	supplier	alloy	Copper (Cu)	7440-50-8		31.129	mg	964104	389113	
				supplier	alloy	Iron (Fe)	7439-89-6		0.732	mg	22671	9150	
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.044	mg	1363	550	
				supplier	alloy	Zinc (Zn)	7440-66-6		0.038	mg	1177	475	
				supplier	metallization	Nickel (Ni)	7440-02-0		0.313	mg	9694	3913	
	M-006 Nickel and its alloys	supplier	metallization	Palladium (Pd)	7440-05-3		0.010	mg	310	125			
	M-008 Precious metals	supplier	metallization	Gold (Au)	7440-57-5		0.016	mg	496	200			
	supplier	metallization	Silver (Ag)	7440-22-4		0.006	mg	186	75				
	Die attach	M-015 Other organic materials	0.754	mg	supplier	glue	Silver (Ag)	7440-22-4		0.661	mg	876658	8263
					supplier	glue	Isobornyl Methacrylate	7534-94-3		0.038	mg	50398	475
supplier					glue	Urethane Methacrylate Resin	5888-33-5		0.038	mg	50398	475	
supplier					glue	Acrylate polymer	87320-05-6		0.015	mg	19894	188	
supplier					glue	Epoxyhexylethyltrimethoxysilane	3388-04-3		0.001	mg	1326	13	
supplier					glue	tert-Butyl peroxy(2-ethyl)-hexanoate	3006-82-4		0.001	mg	1326	13	
Bonding wires	M-004 Copper and its alloys	0.043	mg	supplier	wire	Copper (Cu)	7440-50-8		0.043	mg	1000000	538	
Encapsulation	M-015 Other organic materials	44.810	mg	supplier	mold compound	Silica, vitreous	60676-86-0		38.805	mg	865990	485063	
				supplier	mold compound	Epoxy Resin	29690-82-2		3.361	mg	75006	42013	
				supplier	mold compound	Phenol Resin	25068-38-6		2.241	mg	50011	28013	
				supplier	mold compound	Carbon black	1333-86-4		0.224	mg	4999	2800	
supplier	mold compound	Bismuth compound	7440-69-9		0.179	mg	3995	2238					