



## 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>	2018-09-14
<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
	1D07*UW23JC2	A	BO2A	2018-09-14
	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	Tin (Sn), matte, annealed	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 ST3485EBDR			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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-27th June 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
;				
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	1D07*UW23JC2				6000001.0	1000006.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or dies	M-011 Other inorganic materials	3.524	mg	supplier	die	Silicon (Si)	7440-21-3		3.399	mg	964529	42488
				supplier	metallization	Aluminium (Al)	7429-90-5		0.028	mg	7946	350
				supplier	metallization	Copper (Cu)	7440-50-8		0.001	mg	284	13
				supplier	Passivation	Silicon Nitride	12033-89-5		0.010	mg	2838	125
				supplier	Passivation	Silicon Oxide	7631-86-9		0.048	mg	13621	600
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.038	mg	10783	475
Leadframe	M-004 Copper and its alloys	33.787	mg	supplier	alloy	Copper (Cu)	7440-50-8		33.473	mg	990706	418413
				supplier	alloy	Iron (Fe)	7439-89-6		0.017	mg	503	213
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.027	mg	799	338
				supplier	metallization	Silver (Ag)	7440-22-4		0.270	mg	7991	3375
				supplier	glue	Silver (Ag)	7440-22-4		1.085	mg	877832	13563
Die attach	M-015 Other organic materials	1.236	mg	supplier	glue	Isobornyl Methacrylate	7534-94-3		0.062	mg	50162	775
				supplier	glue	Acrylate resin	5888-33-5		0.062	mg	50162	775
				supplier	glue	Methyl acrylate polymer	87320-05-6		0.025	mg	20227	313
				supplier	glue	Epoxy cyclohexylethyltrimethoxysilane	3388-04-3		0.001	mg	809	13
				supplier	glue	Tert-Butyl peroxy(2-ethyl)-hexanoate	3006-82-4		0.001	mg	809	13
				supplier	wire	Copper (Cu)	7440-50-8		0.059	mg	1000000	738
Encapsulation	M-015 Other organic materials	40.323	mg	supplier	mold compound	Silica, vitreous	60676-86-0		34.920	mg	866007	436500
				supplier	mold compound	Epoxy Resin	85954-11-6		3.024	mg	74994	37800
				supplier	mold compound	Phenol Resin	26834-02-6		2.016	mg	49996	25200
				supplier	mold compound	Carbon black	1333-86-4		0.202	mg	5010	2525
				supplier	mold compound	Bismuth compound	7440-69-9		0.161	mg	3993	2013
connections coating	Solder	1.071	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.071	mg	1000000	13388