



life.augmented

## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2016-07-12</b>
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	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>	Antonella Lanzafame	<b>Representative Title</b>	AMG Materials Declaration 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

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.


### Legal Statement

<b>Supplier Acceptance *</b>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
------------------------------	-------------	----------------------------	-----------------

### 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
LM2903WYDT	IDO7*0193AFY	A	BO2A	2016-07-12
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*0193AFY					
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	0.780	mg	supplier	die	Silicon (Si)	7440-21-3		0.767	mg	983333	9588
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	7692	75
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.003	mg	3846	38
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.004	mg	5128	50
Leadframe	Copper & its alloys	31.659	mg	supplier	alloy	Copper (Cu)	7440-50-8		30.519	mg	963991	381488
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.718	mg	22679	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	9887	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	0.347	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.316	mg	910663	3950
Die attach				supplier	glue or tape	acrylate	Proprietary		0.017	mg	48991	213
Die attach				supplier	glue or tape	Methacrylate	Proprietary		0.014	mg	40346	175
Bonding wire	Other inorganic materials	0.036	mg	supplier	wire	Copper (Cu)	7440-50-8		0.036	mg	1000000	450
encapsulation	Other inorganic materials	47.178	mg	supplier	mold compound	Epoxy Resin	25068-38-6		3.452	mg	73170	43150
encapsulation				supplier	mold compound	Phenol Resin	29690-82-2		3.452	mg	73170	43150
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		39.859	mg	844864	498238
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.231	mg	4896	2888
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.184	mg	3900	2300