



## 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>

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-08-28
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Floriana San Biagio	<b>Representative Title</b>	AMG 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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<b>Legal Statement</b>			
<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
	MFVV*UN71AA6	A	Z8GA	2017-08-28
Amount	UoM	Unit type	ST ECOPACK Grade	
17.10	mg	Each	ECOPACK® 2	
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
ting is used or other bulk terminat	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	2.9x1.6x1.05	5	gull wing	
Comment	Package: WV SOT 23 5L; MDF valid for LD3985M30R			

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	MFWW*UN71AA6					
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	0.881	mg	supplier	die	Silicon (Si)	7440-21-3		0.833	mg	945516	48713
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	7946	409
				supplier	metallization	Tungsten (W)	7440-33-7		0.012	mg	13621	702
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	2270	117
				supplier	Passivation	Silicon Oxide	7631-86-9		0.017	mg	19296	994
				supplier	glass coating	Glass: Silicon Dioxide	7631-86-9		0.001	mg	1135	58
Leadframe	Copper & its alloys	6.097	mg	supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.009	mg	10216	526
				supplier	alloy	Copper (Cu)	7440-50-8		5.942	mg	974578	347485
				supplier	alloy	Iron (Fe)	7439-89-6		0.140	mg	22962	8187
				supplier	alloy	Phosphorus (P)	12185-10-3		0.008	mg	1312	468
				supplier	alloy	Zinc (Zn)	7440-66-6		0.007	mg	1148	409
Die attach	Other Organic Materials	0.092	mg	supplier	glue	Silver (Ag)	7440-22-4		0.075	mg	815217	4386
				supplier	glue	Acrylate resins	7534-94-3		0.011	mg	119565	643
				supplier	glue	Heterocyclic organic compound	3006-93-7		0.003	mg	32609	175
				supplier	glue	Treated silica	Proprietary		0.003	mg	32609	175
Bonding wires	Precious metals	0.113	mg	supplier	wire	Gold (Au)	7440-57-5		0.113	mg	1000000	6608
Encapsulation	Other Organic Materials	9.040	mg	supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.723	mg	79978	42281
				supplier	mold compound	Phenol Resin	26834-02-6		0.362	mg	40044	21170
				supplier	mold compound	Silica, vitreous	60676-86-0		7.856	mg	869027	459415
				supplier	mold compound	Carbon black	1333-86-4		0.045	mg	4978	2632
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.054	mg	5973	3158
Finishing	Solder	0.876	mg	supplier	Connection coating	Tin(Sn)	7440-31-5		0.876	mg	1000000	51228