



## 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

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2016-05-10
<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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**Legal Statement**


<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
	RVWV*UN71AA6	A	ZS1A	2016-05-10
Amount	UoM	Unit type	ST ECOPACK Grade	
16.00	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 ( in each organic material)		

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	
NAC	Nicke/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	2.8x1.5x0.9	5	gull wing	
Comment	Package: WV SOT 23 5L; MDF valid for LDS3985M30R			

QueryList : ROHS directive 2011/65/EU _ July 2011	
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-17th December 2015				
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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	RVWV*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	52063
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	7946	438
				supplier	metallization	Tungsten (W)	7440-33-7		0.012	mg	13621	750
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	2270	125
				supplier	Passivation	Silicon Oxide	7631-86-9		0.017	mg	19296	1063
				supplier	glass coating	Glass: Silicon Dioxide	7631-86-9		0.001	mg	1135	63
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.009	mg	10216	563
				supplier	alloy	Copper (Cu)	7440-50-8		6.534	mg	961165	408375
Leadframe	Copper & its alloys	6.798	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.162	mg	23831	10125
				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	294	125
				supplier	alloy	Zinc (Zn)	7440-66-6		0.009	mg	1324	563
				supplier	metallization	Nickel (Ni)	7440-02-0		0.083	mg	12209	5188
				supplier	metallization	Palladium (Pd)	7440-05-3		0.007	mg	1030	438
				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	147	63
				supplier	metallization	Nickel (Ni)	7440-02-0		0.083	mg	12209	5188
Die attach	Other Organic Materials	0.068	mg	supplier	glue	Silver (Ag)	7440-22-4		0.047	mg	691176	2938
				supplier	glue	methylene diacrylate	42594-17-2		0.017	mg	250000	1063
				supplier	glue	Dicyclopentenylxyethyl methacrylate	68586-19-6		0.002	mg	29412	125
				supplier	glue	Polymer of Polybutadiene + Anhydride	Proprietary		0.002	mg	29412	125
				supplier	wire	Copper (Cu)	7440-50-8		0.095	mg	1000000	5938
				supplier	mold compound	Silica, vitreous	60676-86-0		6.862	mg	841138	428875
Encapsulation	Other Organic Materials	8.158	mg	supplier	mold compound	phenolic resin	Proprietary		0.308	mg	37754	19250
				supplier	mold compound	epoxy resin	Proprietary		0.353	mg	43270	22063
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.176	mg	21574	11000
				supplier	mold compound	carbon black	1333-86-4		0.018	mg	2206	1125
				supplier	mold compound	Zinc hydroxide	20427-58-1		0.088	mg	10787	5500
				supplier	mold compound	Magnesium hydroxide	1309-42-8		0.353	mg	43271	22056
				supplier	mold compound	Proprietary	Proprietary		0.308	mg	37754	19250