



Materials Declaration Form

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


Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-04-04
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	IPD MD CHAMPION
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty Statement

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard
Legal Statement	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
LD2980CM18TR	RVWV*RR18FC1	A	ZS1A	2016-04-04
Amount		UoM	Unit type	ST ECOPACK Grade
16.00		mg	Each	ECOPACK® 2

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

Package Designator	Size	Nbr of instances	Shape	
DSO	2.8 - 1.5 - 0.9	5	gull wing	
Comment	Package: SOT 23 5L			

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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	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						Mfr Item Name	RVVV*RR18FC1					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die attach	Other inorganic materials	0.971	mg	supplier	die	Silicon (Si)	7440-21-3		0.932	mg	959835	58250
				supplier	metallization	Aluminium (Al)	7429-90-5		0.015	mg	15448	938
				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	4120	250
				supplier	Passivation	Silicon Oxide	7631-86-9		0.008	mg	8239	500
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.012	mg	12358	750
Leadframe	Copper & its alloys	6.851	mg	supplier	alloy	Copper (Cu)	7440-50-8		6.599	mg	963217	412438
				supplier	alloy	Iron (Fe)	7439-89-6		0.154	mg	22478	9625
				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	292	125
				supplier	alloy	Zinc (Zn)	7440-66-6		0.009	mg	1314	563
				supplier	metallization	Nickel (Ni)	7440-02-0		0.079	mg	11531	4938
				supplier	metallization	Palladium (Pd)	7440-05-3		0.007	mg	1022	438
				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	146	63
Die attach	Other Organic Materials	0.064	mg	supplier	glue	Silver (Ag)	7440-22-4		0.044	mg	687500	2750
				supplier	glue	methylene diacrylate	42594-17-2		0.016	mg	250000	1000
				supplier	glue	Dicyclopentenyloxyethyl methacrylate	68586-19-6		0.002	mg	31250	125
				supplier	glue	Polymer of Polybutadiene + Anhydride	Proprietary		0.002	mg	31250	125
Bonding wire	Other Organic Materials	0.141	mg	supplier	wire	Copper (Cu)	7440-50-8		0.141	mg	1000000	8813
Encapsulation	Other Organic Materials	7.973	mg	supplier	molding compound	Silica, vitreous	60676-86-0		7.158	mg	897780	447375
				supplier	molding compound	phenolic resin	29690-82-2		0.294	mg	36874	18375
				supplier	molding compound	epoxy resin	25068-38-6		0.336	mg	42142	21000
				supplier	molding compound	Biphenyl epoxy resin	85954-11-6		0.168	mg	21071	10500
				supplier	molding compound	carbon black	1333-86-4		0.017	mg	2133	1063