



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 *	2015-12-23
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	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

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
LDK220C33R	RVW8*UI98AB5	A	ZS1A	2015-12-23
	Amount	UoM	Unit type	ST ECOPACK Grade
	7.00	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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOJ	1.80 - 1.15 - 0.8	5	gull wing	
Comment	Package: SOT 323 5LDS			

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	RVW8*UI98AB5					
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	0.351	mg	supplier	die	Silicon (Si)	7440-21-3		0.328	mg	934473	46857
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	14245	714
				supplier	metallization	Tungsten (W)	7440-33-7		0.004	mg	11396	571
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	2849	143
				supplier	Passivation	Silicon Oxide	7631-86-9		0.008	mg	22792	1143
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.005	mg	14245	714
Leadframe	Copper & its alloys	2.279	mg	supplier	alloy	Copper (Cu)	7440-50-8		2.195	mg	963142	313571
				supplier	alloy	Iron (Fe)	7439-89-6		0.051	mg	22378	7286
				supplier	alloy	Phosphorus (P)	12185-10-3		0.001	mg	439	143
				supplier	alloy	Zinc (Zn)	7440-66-6		0.003	mg	1316	429
				supplier	metallization	Nickel (Ni)	7440-02-0		0.026	mg	11409	3714
				supplier	metallization	Palladium (Pd)	7440-05-3		0.002	mg	878	286
Die attach	Other inorganic materials	0.024	mg	supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	439	143
				supplier	glue or tape	Silver (Ag)	7440-22-4		0.016	mg	666667	2286
				supplier	glue or tape	methylene diacrylate	42594-17-2		0.006	mg	250000	857
				supplier	glue or tape	Dicyclopentenylxyethyl methacrylate	68586-19-6		0.001	mg	41667	143
				supplier	glue or tape	Polymer of Polybutadiene + Anhydride	Proprietary		0.001	mg	41667	143
				supplier	wire	Copper (Cu)	7440-50-8		0.037	mg	1000000	5286
Encapsulation	Other inorganic materials	4.309	mg	supplier	mold compound	Silica, vitreous	60676-86-0		3.705	mg	859828	529286
				supplier	mold compound	phenolic resin	29690-82-2		0.129	mg	29937	18429
				supplier	mold compound	epoxy resin	25068-38-6		0.250	mg	58018	35714
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.216	mg	50128	30857
				supplier	mold compound	carbon black	1333-86-4		0.009	mg	2089	1286