



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 *	2016-11-17
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	Representative Title	ADG 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
ESDCAN24-2BLY	CJWC*TAY24VC	A	Z55A	2016-11-17
	Amount	UoM	Unit type	ST ECOPACK Grade
	8.00	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	2.9 - 2 - 1.175	3	gull wing	
Comment	Package: SOT 23 SIMPLE DIODE			

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
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-20th June 2016				
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	CJWC* TAY24VC					
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	0.332	mg	supplier	die	Silicon (Si)	7440-21-3		0.277	mg	834337	34625
				supplier	metallization	Aluminium (Al)	7429-90-5		0.045	mg	135542	5625
				supplier	metallization	Copper (Cu)	7440-50-8		0.006	mg	18072	750
				supplier	Passivation	Silicon Oxide	7631-86-9		0.004	mg	12048	500
				supplier	alloy	Copper (Cu)	7440-50-8		2.315	mg	962978	289375
Leadframe	Copper & its alloys	2.404	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.054	mg	22463	6750
				supplier	alloy	Phosphorus (P)	12185-10-3		0.001	mg	416	125
				supplier	alloy	Zinc (Zn)	7440-66-6		0.003	mg	1248	375
				supplier	metallization	Nickel (Ni)	7440-02-0		0.028	mg	11647	3500
				supplier	metallization	Palladium (Pd)	7440-05-3		0.002	mg	832	250
				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	416	125
				supplier	glue	Epoxyde Bisphenol A Resin	25068-38-6		0.003	mg	100000	375
				supplier	glue	Silica, vitreous	60676-86-0		0.009	mg	300000	1125
Die attach	Other inorganic materials	0.030	mg	supplier	glue	Ethoxyethoxy-ethyl Acetate	112-15-2		0.006	mg	200000	750
				supplier	glue	Aluminium oxide	1344-28-1		0.006	mg	200000	750
				supplier	glue	Bisphenol A diglycidyl ether polymer	25036-25-3		0.004	mg	133333	500
				supplier	glue	Glycol ether ester	Proprietary		0.001	mg	33333	125
				supplier	glue	Diaminodiphenylsulfone	80-08-0		0.001	mg	33333	125
Bonding wire	Other inorganic materials	0.031	mg	supplier	wire	Copper (Cu)	7440-50-8		0.030	mg	967742	3750
				supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	32258	125
encapsulation	Other inorganic materials	5.203	mg	supplier	mold compound	silica vitreous	60676-86-0		4.440	mg	853354	555000
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		0.285	mg	54776	35625
				supplier	mold compound	Phenol Resin	26834-02-6		0.260	mg	49971	32500
				supplier	mold compound	Tetrakis(2,6-dimethylphenyl) 1,3-phenylene bi	139189-30-3		0.130	mg	24986	16250
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.078	mg	14991	9750
				supplier	mold compound	Carbon black	1333-86-4		0.010	mg	1922	1250