



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 *	2017-02-13
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacobello	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

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 omprehensive 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
ESDA25L	CDWC*EAW25V2	A	ZS1A	2017-02-13
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	Tin (Sn), matte	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

Query : California Prop65 list, dated 15 July 2016			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product

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	CDWC*EAW25V2					
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	0.330	mg	supplier	die	Silicon (Si)	7440-21-3		0.285	mg	863636	35625
				supplier	metallization	Aluminum (Al)	7429-90-5		0.039	mg	118182	4875
				supplier	Passivation	Silicon Oxide	7631-86-9		0.003	mg	9091	375
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	3030	125
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.002	mg	6061	250
Leadframe	Other inorganic materials	2.336	mg	supplier	alloy	Copper (Cu)	7440-50-8		2.255	mg	965325	281875
				supplier	alloy	Iron (Fe)	7439-89-6		0.053	mg	22688	6625
				supplier	alloy	Phosphorus (P)	12185-10-3		0.001	mg	428	125
				supplier	alloy	Zinc (Zn)	7440-66-6		0.003	mg	1284	375
				supplier	metallization	Silver (Ag)	7440-22-4		0.024	mg	10274	3000
Die attach	Other inorganic materials	0.029	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.024	mg	827586	3000
				supplier	glue or tape	Carbocyclic Acrylates	proprietary		0.003	mg	103448	375
				supplier	glue or tape	Bismaleimide resin	35325-99-4		0.001	mg	34483	125
				supplier	glue or tape	2-preponic acid, 2-methyl	68586-19-6		0.001	mg	34483	125
Bonding wire	Other inorganic materials	0.030	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.029	mg	966667	3625
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.001	mg	33333	125
Encapsulation	Other inorganic materials	5.076	mg	supplier	Molding compound	Silica, vitreous	60676-86-0		4.330	mg	853034	541250
				supplier	Molding compound	phenolic resin	29690-82-2		0.178	mg	35067	22250
				supplier	Molding compound	epoxy resin	25068-38-6		0.203	mg	39992	25375
				supplier	Molding compound	Biphenyl epoxy resin	85954-11-6		0.101	mg	19898	12625
				supplier	Molding compound	carbon black	1333-86-4		0.010	mg	1970	1250
				supplier	Molding compound	Zinc hydroxide	20427-58-1		0.051	mg	10047	6375
Finishing	Solder	0.199	mg	supplier	Molding compound	Magnesium hydroxide	1309-42-8		0.203	mg	39992	25375
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.199	mg	1000000	24875