



Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

*: Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-08-17
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Authorized Representative *	Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	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 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
ESDA14V2L	CDWC*EAW14V2	A	ZS1A	2018-08-17
	Amount	UoM	Unit type	ST ECOPACK Grade
	8	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		 life.augmented
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	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-March 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
Exemption Id.	Description

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	TRUE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
Exemption Id.	Description

QueryList : California Prop65 list, dated 25th May 2018			
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-27th June 2018				
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
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CDWC*EAW14V2					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	0.330	mg	supplier	die	Silicon (Si)	7440-21-3		0.285	mg	863636	35625
				supplier	metallization	Aluminium (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	429	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	Silver (Ag)	7440-22-4		0.024	mg	827586	3000
				supplier	glue	Carbocyclic Acrylates	proprietary		0.003	mg	103448	375
				supplier	glue	Bismaleimide resin	35325-39-4		0.001	mg	34483	125
				supplier	glue	2-preponoic acid, 2-methyl	68586-19-6		0.001	mg	34483	125
Bonding wire	Other inorganic materials	0.030	mg	supplier	wire	Copper (Cu)	7440-50-8		0.029	mg	966667	3625
				supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	33333	125
				supplier	mold compound	Silica, vitreous	60676-86-0		4.330	mg	853034	541250
Encapsulation	Other inorganic materials	5.076	mg	supplier	mold compound	phenolic resin	29690-82-2		0.178	mg	35067	22250
				supplier	mold compound	epoxy resin	25068-38-6		0.203	mg	39992	25375
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.101	mg	19898	12625
				supplier	mold compound	carbon black	1333-86-4		0.010	mg	1970	1250
				supplier	mold compound	Zinc hydroxide	20427-58-1		0.051	mg	10047	6375
				supplier	mold compound	Magnesium hydroxide	1309-42-8		0.203	mg	39992	25375
Connection coating	Solder	0.199	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.199	mg	1000000	24875