



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-07-20
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
ESDA37L	CJWS*TUS36VC	A	Z55A	2017-07-20
Amount	UoM	Unit type	ST ECOPACK Grade	
9.80	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	Alloy 42		

Package Designator	Size	Nbr of instances	Shape	
DSO	2.75 - 1.2 - 0.89	3	gull wing	
Comment	Package: SOT 23 ANODE COMMUNE			

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 27th January 2017			
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
Nickel	1.16	Die - Leadframe	118367

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	CJWS*TUS36VC					
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	0.115	mg	supplier	die	Silicon (Si)	7440-21-3		0.105	mg	913043	10714
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	43478	510
				supplier	metallization	Copper (Cu)	7440-50-8		0.001	mg	8696	102
				supplier	Passivation	Silicon Oxide	7631-86-9		0.003	mg	26087	306
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.001	mg	8696	102
Leadframe	Copper & its alloys	2.944	mg	supplier	alloy	Iron (Fe)	7439-89-6		1.628	mg	552989	166122
				supplier	alloy	Nickel (Ni)	7440-02-0		1.159	mg	393682	118265
				supplier	alloy	Manganese (Mn)	7439-96-5		0.017	mg	5774	1735
				supplier	alloy	Chromium (Cr)	7440-47-3		0.002	mg	679	204
				supplier	alloy	Cobalt (Co)	7440-48-4		0.014	mg	4755	1429
				supplier	alloy	Silicon (Si)	7440-21-3		0.005	mg	1698	510
				supplier	metallization	Silver (Ag)	7440-22-4		0.119	mg	40421	12143
Die attach	Other inorganic materials	0.079	mg	supplier	glue or tape (choose)	Silver (Ag)	7440-22-4		0.059	mg	746835	6020
				supplier	glue or tape	Bis F Epoxy Resin	28064-14-4		0.012	mg	151899	1224
				supplier	glue or tape	1,4-bis(2,3-epoxypropoxy)butane	2425-79-8		0.006	mg	75949	612
				supplier	glue or tape	Aromatic amine	Proprietary		0.002	mg	25316	204
Bonding wires	Precious metals	0.030	mg	supplier	wire	Gold (Au)	7440-57-5		0.030	mg	1000000	3061
Encapsulation	Other inorganic materials	6.336	mg	supplier	mold compound	Silicon dioxide	60676-86-0		5.531	mg	872948	564388
				supplier	mold compound	Epoxy Resin	29690-82-2		0.317	mg	50032	32347
				supplier	mold compound	Phenol Resin	26834-02-6		0.317	mg	50032	32347
				supplier	mold compound	Aromatic poly-phosphate	Proprietary		0.158	mg	24937	16122
				supplier	mold compound	Carbon black	1333-86-4		0.013	mg	2052	1327
Connections coating	Solder	0.296	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.296	mg	1000000	30204