



## Materials Declaration Form

<b>IPC Form Type *</b>	<b>1752 Distribute</b>	<b>Version</b>	<b>2</b>
<b>Sectionals *</b>	<b>Material Info Manufacturing Info</b>	<b>Sectionals *</b>	<b>A-D</b>

\* : Required Field

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2017-07-20</b>
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	<b>Giovanni Giacopello</b>	<b>Representative Title</b>	<b>ADG MD CHAMPION</b>
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

### Uncertainty Statement

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### Legal Statement

<b>Supplier Acceptance *</b>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
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### 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
ESDA37LY	AJWS*TUY36VC	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	118571

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	AJWS*TUY35VC						
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	2.948	mg	supplier	alloy	Iron (Fe)	7439-89-6		1.630	mg	552917	166327	
				supplier	alloy	Nickel (Ni)	7440-02-0		1.161	mg	393826	118469	
				supplier	alloy	Manganese (Mn)	7439-96-5		0.017	mg	5767	1735	
				supplier	alloy	Chromium (Cr)	7440-47-3		0.002	mg	678	204	
				supplier	alloy	Cobalt (Co)	7440-48-4		0.014	mg	4749	1429	
				supplier	alloy	Silicon (Si)	7440-21-3		0.005	mg	1696	510	
				supplier	metallization	Silver (Ag)	7440-22-4		0.119	mg	40366	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	Other inorganic materials	0.013	mg	supplier	wire	Copper (Cu)	7440-50-8		0.013	mg	1000000	1327	
Encapsulation	Other inorganic materials	6.348	mg	supplier	mold compound	Silicon dioxide	60676-86-0		5.541	mg	872873	565408	
				supplier	mold compound	Epoxy Resin	29690-82-2		0.318	mg	50095	32449	
				supplier	mold compound	Phenol Resin	26834-02-6		0.318	mg	50095	32449	
				supplier	mold compound	Aromatic poly-phosphate	Proprietary		0.158	mg	24890	16122	
				supplier	mold compound	Carbon black	1333-86-4		0.013	mg	2048	1327	
Connections coating	Solder	0.297	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.297	mg	1000000	30306	