



## Materials Declaration Form

<b>IPC</b>	<b>1752</b>	<b>Version</b>	<b>2</b>
<b>Form Type *</b>	<b>Distribute</b>		
<b>Sectionals *</b>	<b>Material Info</b> <b>Manufacturing Info</b>	<b>Subsectionals *</b>	<b>A-D</b>
<i>* : Required Field</i>			

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2018-07-26</b>
<b>Contact Name *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Authorized Representative *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	<b>Rossana Bonaccorso</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
T3035H-8T	7BVP*308SAM1	A	3068	2018-07-26
Amount	UoM	Unit type	ST ECOPACK Grade	
2100	mg	Each	ECOPACK2	
	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	
NA	NA	NA		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
SIP	10.2-15.5-4.5	3	Through-hole
Comment	TO 220 NI CLIP		

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	FALSE
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)	TRUE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)
7c-l	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

QueryList : ELV directive : 2000/53/EC amended 2016/774 _May 2016	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)
10a	Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound. This exemption does not cover the use of lead in: — glass in bulbs and glaze of spark plugs, — dielectric ceramic materials of components listed under 10(b), 10(c) and 10(d)

QueryList : California Prop65 list, dated 15th December 2017			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.67	Die	317
Lead	57.86	Die - Soft solder	27552
Lead-Borate Glass	3.09	Die	1470

QueryList : REACH-15th January 2018				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	57.86	Die - Soft solder	27552
Lead-Borate Glass	1000 ppm	3.09	Die	1470
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				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	57.86	Die - Soft solder	1633941
Lead-Borate Glass	1000 ppm	3.09	Die	49134

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	7BVP*308SAM1					
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	62.848	mg	supplier	die	Silicon (Si)	7440-21-3		14.087	mg	224156	6709
				supplier	metallization	Gold (Au)	7440-57-5		0.054	mg	859	26
				supplier	metallization	Nickel (Ni)	7440-02-0		0.283	mg	4503	135
				JIG - R	Passivation	Lead (Pb)	7439-92-1	7c-I-Electrical and e	44.855	mg	713695	21360
				supplier	Passivation	Silicon Oxide	7631-86-9		0.080	mg	1273	38
				supplier	back side metallization	Gold (Au)	7440-57-5		0.018	mg	286	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.383	mg	6094	182
				JIG - R & California 65	glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and e	3.088	mg	49134	1470
				supplier	alloy	Copper (Cu)	7440-50-8		1251.374	mg	998700	595892
Leadframe	M-004 Copper and its alloys	1253.003	mg	supplier	alloy	Iron (Fe)	7439-89-6		1.253	mg	1000	597
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.376	mg	300	176
				JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	13.004	mg	920246	6192
				supplier	solder	Silver (Ag)	7440-22-4		0.352	mg	24910	168
Soft solder	Solder	14.131	mg	supplier	solder	Tin (Sn)	7440-31-5		0.704	mg	49820	335
				supplier	solder	flux residue	Proprietary		0.071	mg	5024	34
				supplier	mold compound	Silica, vitreous	60676-86-0		556.343	mg	759999	264925
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		74.667	mg	102000	35556
				supplier	mold compound	Phenol resin	9003-35-4		43.922	mg	60000	20915
Encapsulation	M-011 Other inorganic materials	732.031	mg	supplier	mold compound	Others	Proprietary		36.602	mg	50000	17430
				supplier	mold compound	Metal hydroxide	21645-51-2		14.641	mg	20001	6972
				supplier	mold compound	Carbon black	1333-86-4		5.856	mg	8000	2789
				supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3030
				supplier	alloy	Copper ( Cu)	7440-50-8		31.625	mg	1000000	15060
				Connections coating	Solder	6.362	mg	supplier	solder alloy	Tin (Sn)	7440-31-5	
Clip	M-004 Copper and its alloys	31.625	mg	supplier	alloy	Copper ( Cu)	7440-50-8		31.625	mg	1000000	15060