



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 *	2018-07-26
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	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
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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-8I	7BVT*308SAM1	A	3068	2018-07-26
Amount	UoM	Unit type	ST ECOPACK Grade	
2300	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
Not Applicable	Not Applicable	Not Applicable		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10,15,5,4,5	3	Through-hole	
Comment	Package: TO 220 I CLIP			

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	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-I	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 : 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			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	7.27	Die - Leadframe - wire -ceramic	3161
Lead	72.87	Die - Solder	31682
Lead-Borate Glass	3.09	Die	1343

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				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	72.87	Die - Soft solder	31682
Lead borate glass	1000 ppm	3.088	Die	1343
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	72.87	Die - Soft solder	2488624
Lead borate glass	1000 ppm	3.088	Die	49134

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	7BVT*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	62.849	mg	supplier	die	Silicon (Si)	7440-21-3		14.088	mg	224156	6125
				supplier	metallization	Gold (Au)	7440-57-5		0.054	mg	859	23
				supplier	passivation	Nickel (Ni)	7440-02-0		0.283	mg	4503	123
				JIG - R	Passivation	Lead (Pb)	7439-92-1	7c-I-Electrical and d	44.855	mg	713695	19502
				supplier	Passivation	Silicon Oxide	7631-86-9		0.080	mg	1273	35
				supplier	back side metallization	Gold (Au)	7440-57-5		0.018	mg	286	8
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.383	mg	6094	167
				JIG - R	glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and d	3.088	mg	49134	1343
Leadframe & Slug	M-004 Copper and its alloys	1602.171	mg	supplier	alloy	Copper (Cu)	7440-50-8		1598.131	mg	997478	694840
				supplier	alloy	Iron (Fe)	7439-89-6		0.736	mg	460	320
				supplier	metallization	Nickel (Ni)	7440-02-0		3.304	mg	2062	1434
				JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	13.942	mg	924965	6062
Soft solder	Solder	15.073	mg	supplier	solder	Tin (Sn)	7440-31-5		0.377	mg	25012	164
				supplier	solder	Silver (Ag)	7440-22-4		0.754	mg	50023	328
				supplier	wire	Copper (Cu)	7440-50-8		31.625	mg	934131	13750
Bonding wires	M-004 Copper and its alloys	33.855	mg	supplier	wire	Nickel (Ni)	7440-02-0		2.230	mg	65869	970
				supplier	mold compound	Silica, vitreous	60676-86-0		360.226	mg	759999	156620
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		48.346	mg	102000	21020
				supplier	mold compound	Phenol resin	9003-35-4		28.439	mg	60000	12365
				supplier	mold compound	Others	Proprietary		23.699	mg	50000	10304
Encapsulation	M-011 Other inorganic materials	473.982	mg	supplier	mold compound	Metal hydroxide	Proprietary		9.480	mg	20001	4122
				supplier	mold compound	Carbon black	1333-86-4		3.792	mg	8000	1649
				JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	14.072	mg	849964	6118
				supplier	solder	Antimony (Sb)	7440-36-0		1.656	mg	100024	720
				supplier	solder	Tin (Sn)	7440-31-5		0.828	mg	50012	360
Connections coating	Solder	6.314	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.314	mg	1000000	2745
				supplier	ceramic	Alumina	1344-28-1		79.745	mg	894002	34672
Ceramic	M-010 Ceramics / glass	89.200	mg	supplier	ceramic	Molybdenum oxide	1313-27-5		4.460	mg	50000	1939
				supplier	ceramic	Manganese (Mn)	7439-96-5		3.479	mg	39002	1513
				supplier	ceramic	Nickel (Ni)	7440-02-0		1.070	mg	11996	465
				supplier	ceramic	Titanium (Ti)	1344-28-1		0.366	mg	4103	159
				supplier	ceramic	Phosphorus (P)	12185-10-3		0.080	mg	897	35