



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 *	2018-07-10
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
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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
STBR3012G2-TR	7T(9*V01C212	A	3068	2018-07-10
Amount	UoM	Unit type	ST ECOPACK Grade	
1380.00	mg	Each	ECOPACK1	
Comment		ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
SIP	10.2-7.2-4.5	3	GULL WING
Comment	H2PAK HC 2-3 Leads		

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)

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
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)

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	0.28	Die - Leadframe	204
Lead	8.93	Soft solder	6469
Antimony trioxide	6.04	Mold compound	4377

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				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	7T(9*V01C212					
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	10.286	mg	supplier	die	Silicon (Si)	7440-21-3		9.923	mg	964747	7191
				supplier	metallization	Aluminium (Al)	7429-90-5		0.123	mg	11958	89
				supplier	Passivation	Silicon Oxide	7631-86-9		0.040	mg	3889	29
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.005	mg	487	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.014	mg	1361	10
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.068	mg	6611	49
Leadframe	M-004 Copper and its alloys	848.010	mg	supplier	polymer die coating	Probimide	Proprietary		0.113	mg	10947	82
				supplier	alloy	Copper (Cu)	7440-50-8		846.677	mg	998428	613534
				supplier	alloy	Iron (Fe)	7439-89-6		0.848	mg	1000	614
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.254	mg	300	184
				supplier	metallization	Nickel (Ni)	7440-02-0		0.214	mg	252	155
				supplier	metallization	Phosphorus (P)	7723-14-0		0.017	mg	20	12
Soft solder	Solder	9.348	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	8.927	mg	954964	6469
				supplier	solder	Silver (Ag)	7440-22-4		0.234	mg	25032	170
				supplier	solder	Tin (Sn)	7440-31-5		0.187	mg	20004	136
Bonding wires	M-011 Other inorganic materials	5.541	mg	supplier	wire	Aluminium (Al)	7429-90-5		5.541	mg	1000000	4015
Encapsulation	M-011 Other inorganic materials	503.081	mg	supplier	mold compound	Silica, vitreous	60676-86-0		405.483	mg	805999	293828
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		35.216	mg	70001	25519
				supplier	mold compound	Phenol resin	9003-35-4		20.123	mg	40000	14582
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		30.185	mg	60000	21873
				supplier	mold compound	Antimony Trioxide	1309-64-4		6.037	mg	12000	4375
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		3.522	mg	7001	2552
Connections coating	Solder	3.734	mg	supplier	mold compound	Carbon black	1333-86-4		2.515	mg	4999	1822
				supplier	solder alloy	Tin (Sn)	7440-31-5		3.734	mg	1000000	2706