



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 *	2018-10-16
Company Unique ID	NL 008751171801		
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

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
SCTH100N65G2-7AG	T28P*SQGWAVE	A	SH1A	2018-10-16
	Amount	UoM	Unit type	ST ECOPACK Grade
	1450	mg	Each	ECOPACK® 1
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	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DIP	10.2 - 9.15 - 4.5	7	Through-hole	
Comment	H2PAK-7			

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	1.29	Die - Leadframe	886
Lead	5.03	Soft solder	3469
Antimony trioxide	9.65	Mold compound	6655

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	5.03	Soft solder	3469
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	5.03	Soft solder	955003

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	T28P*SQGWAVE					
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	20.313	mg	supplier	die	Silicium carbide	409-21-2		19.796	mg	974548	13652
				supplier	metallization	Aluminium (Al)	7429-90-5		0.257	mg	12652	177
				supplier	Passivation	Silicon Oxide	7631-86-9		0.091	mg	4480	63
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.006	mg	295	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.019	mg	936	13
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.088	mg	4332	61
Leadframe	M-004 Copper and its alloys	616.008	mg	supplier	polymer die coating	PIXI Polyimide	108-65-6		0.056	mg	2757	39
				supplier	alloy	Copper (Cu)	7440-50-8		614.005	mg	996748	423452
				supplier	alloy	Iron (Fe)	7439-89-6		0.283	mg	459	195
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.516	mg	838	356
				supplier	metallization	Nickel (Ni)	7440-02-0		1.197	mg	1944	826
Soft solder	Solder	5.267	mg	SVHC	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	5.030	mg	955003	3469
				supplier	solder	Silver (Ag)	7440-22-4		0.132	mg	25062	91
				supplier	solder	Tin (Sn)	7440-31-5		0.105	mg	19935	72
				supplier	metallization	Phosphorus (P)	7723-14-0		0.007	mg	11	5
Bonding wires	M-011 Other inorganic materials	1.844	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.844	mg	1000000	1272
Encapsulation	M-011 Other inorganic materials	804.130	mg	supplier	mold compound	Silica, vitreous	60676-86-0		661.798	mg	822999	456412
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		56.289	mg	70000	38820
				supplier	mold compound	Phenol resin	9003-35-4		32.165	mg	40000	22183
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		24.124	mg	30000	16637
				supplier	mold compound	Antimony Trioxide	1309-64-4		9.650	mg	12001	6655
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		16.083	mg	20000	11092
				supplier	mold compound	Carbon black	1333-86-4		4.021	mg	5000	2773
Connections coating	Solder	2.438	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.438	mg	1000000	1681