



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 *	2020-05-13
Company Unique ID	NL 008751171B01		
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 *	giovanni giacopello	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

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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
SCTH40N120G2V7AG	T28P*SQK9AVE	A	3068	2020-05-13
	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		
1	245	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00554135	



Package Designator	Size	Nbr of instances	Shape	
Not Applicable	10.20,9.15,4.50	7	shape	
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 3rd January 2020			
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	6.00	die - leadframe	4139
Lead	2.99	soft solder	2065
Antimony trioxide	9.75	encapsulation	6724

QueryList : REACH-16th January 2020				
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	2.99	Soft solder	2065
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	2.994	Soft solder	955024

Material Composition Declaration :						Mfr Item Name	T28P*SQK9AVE					
note : Substance present with less 0.001mg will not be declared in this document												
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	5.183	mg	supplier	die	Silicium carbide	409-21-2		4.960	mg	956975	3421
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.111	mg	21414	76
				supplier	metallisation	Gold(Au)	7440-57-5		0.008	mg	1544	6
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.038	mg	7332	26
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.003	mg	579	2
				supplier	passivation	Silicon oxide	7631-86-9		0.039	mg	7525	27
Leadframe	M-004 Copper and its alloys	627.181	mg	supplier	polymer coating	PIX1 Gamma-butyrolactone	96-48-0		0.024	mg	4631	17
				supplier	alloy & coating	Copper(Cu)	7440-50-8		619.193	mg	987264	427030
				supplier	alloy & coating	Nickel(Ni)	7440-02-0		5.963	mg	9508	4112
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.285	mg	454	197
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.521	mg	830	359
Soft solder	Solder	3.135	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	2.994	mg	955024	2065
				supplier	solder	Silver(Ag)	7440-22-4		0.078	mg	24880	54
				supplier	solder	Tin(Sn)	7440-31-5		0.063	mg	20096	43
				supplier	solder	Phosphorus metal	7723-14-0		1.219	mg	1944	841
Encapsulation	M-011 Other inorganic materials	812.388	mg	supplier	mold compound	Silica vitreous	60676-86-0		668.594	mg	822999	461099
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		56.867	mg	70000	39219
				supplier	mold compound	Phenol resin	9003-35-4		32.496	mg	40001	22411
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		24.372	mg	30000	16808
				supplier	mold compound	Antimony trioxide	1309-64-4		9.749	mg	12000	6723
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		16.248	mg	20000	11206
connections coating	Solder	2.113	mg	supplier	mold compound	Carbon black	1333-86-4		4.062	mg	5000	2801
				supplier	solder alloy	Tin (Sn)	7440-31-5		2.113	mg	1000000	1457