



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 *	2020-07-24
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

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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
STH240N10F7-2	R2(9*OD0JB82	A	3068	2020-07-24
	Amount	UoM	Unit type	ST ECOPACK Grade
	1380	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	DM00492008	



Package Designator	Size	Nbr of instances	Shape	
SIP	10.20,9.15,4.50	2	gull wing	
Comment	H2PAK HC 2-3 Leads. MDF valid for CPs: STH240N10F7-2,STH24810-2			

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	0.39	die - leadframe	283
Lead	8.71	soft solder	6313
Antimony trioxide	5.86	encapsulation	4246

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	8.71	Soft solder	6313
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	8.712	Soft solder	955054

Material Composition Declaration :						Mfr Item Name	R2[9*OD0JB82					
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	12.649	mg	supplier	die	Silicon(Si)	7440-21-3		11.978	mg	946953	8678
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.312	mg	24666	226
				supplier	metallisation	Copper(Cu)	7440-50-8		0.115	mg	9092	83
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.099	mg	7827	72
				supplier	metallisation	Silver(Ag)	7440-22-4		0.040	mg	3162	29
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.020	mg	1581	14
				supplier	metallisation	Vanadium(V)	7440-62-2		0.007	mg	553	5
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.072	mg	5692	52
				supplier	passivation	Silicon oxide	7631-86-9		0.006	mg	474	4
				Leadframe	M-004 Copper and its alloys	847.275	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8	
supplier	alloy & coating	Nickel(Ni)	7440-02-0						0.291	mg	343	211
supplier	alloy & coating	Copper Phosphorous(CuP)	12517-41-8						1.694	mg	1999	1228
supplier	alloy & coating	Phosphorus metal	7723-14-0						0.029	mg	34	21
supplier	alloy & coating	Cobalt (Co)	7440-48-4						2.372	mg	2800	1719
Soft solder	Solder	9.122	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	8.712	mg	955053	6313
				supplier	solder	Silver(Ag)	7440-22-4		0.228	mg	24995	165
				supplier	solder	Tin(Sn)	7440-31-5		0.182	mg	19952	132
Bonding wires	M-003 Aluminum and its alloys	0.154	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.153	mg	993506	111
				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	6494	1
Bonding Ribbons	M-003 Aluminum and its alloys	18.590	mg	supplier	ribbon	Aluminium (Al)	7429-90-5		18.590	mg	1000000	13471
Encapsulation	M-011 Other inorganic materials	488.476	mg	supplier	mold compound	Silica vitreous	60676-86-0		402.016	mg	823001	291316
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		34.193	mg	69999	24778
				supplier	mold compound	Phenol resin	9003-35-4		19.539	mg	40000	14159
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		14.654	mg	29999	10619
				supplier	mold compound	Antimony trioxide	1309-64-4		5.862	mg	12001	4248
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		9.770	mg	20001	7080
				supplier	mold compound	Carbon black	1333-86-4		2.442	mg	4999	1770
connections coating	Solder	3.734	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.734	mg	1000000	2706