



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 *	2020-10-16
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
STGP3HF60HD	CDDZ*CW61662	A	3068	2020-10-16
	Amount	UoM	Unit type	ST ECOPACK Grade
	1900	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		
Not Applicable	Not Applicable	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	CD00426990	



Package Designator	Size	Nbr of instances	Shape	
SIP	10.00,9.10,4.50	3	Through hole	
Comment	TO 220 AB NON ISOL			

QueryList : RoHS Directive 2011/65/EU-July 2011 Annex II amended by Delegated 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 2020/363_ March 2020	
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	0.02	die	10
Lead	1.53	soft solder	803

QueryList : REACH-25th June 2020				
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
Lead	1000 ppm			
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	1.525	Soft solder	954915

Responsible metals sourcing	
Query	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
The following metals are present is the component :	Tin,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

Material Composition Declaration :						Mfr Item Name	CDDZ*CW61662					
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)
Dies	M-011 Other inorganic materials	3.186	mg	supplier	die	Silicon(Si)	7440-21-3		3.046	mg	956057	1602
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.058	mg	18205	31
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.002	mg	628	1
				supplier	metallisation	Gold(Au)	7440-57-5		0.001	mg	314	1
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.019	mg	5964	10
				supplier	metallisation	Silver(Ag)	7440-22-4		0.005	mg	1569	3
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.009	mg	2825	5
				supplier	passivation	Silicon oxide	7631-86-9		0.024	mg	7533	13
				supplier	polymer coating	Durimide	proprietary		0.022	mg	6905	12
				supplier	alloy & coating	Copper(Cu)	7440-50-8		1251.376	mg	998700	658619
Leadframe	M-004 Copper and its alloys	1253.005	mg	supplier	alloy & coating	Iron(Fe)	7439-89-6		1.253	mg	1000	659
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.376	mg	300	198
				SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	1.525	mg	954915	803
Soft solder	Solder	1.597	mg	supplier	solder	Silver(Ag)	7440-22-4		0.040	mg	25047	21
				supplier	solder	Tin(Sn)	7440-31-5		0.032	mg	20038	17
				supplier	wire	Copper(Cu)	7440-50-8		0.409	mg	1000000	215
Bonding wires	M-004 Copper and its alloys	0.409	mg	supplier	wire	Copper(Cu)	7440-50-8		0.409	mg	1000000	215
Encapsulation	M-011 Other inorganic materials	635.441	mg	supplier	mold compound	Silica vitreous	60676-86-0		442.267	mg	696001	232772
				supplier	mold compound	Quartz	14808-60-7		63.544	mg	100000	33444
				supplier	mold compound	Phenol resin	9003-35-4		38.127	mg	60001	20067
				supplier	mold compound	Epoxy resin	proprietary		82.607	mg	129999	43477
				supplier	mold compound	Carbon black	1333-86-4		3.177	mg	5000	1672
				supplier	mold compound	Polyethylene resin	9002-88-4		2.542	mg	4000	1338
				supplier	mold compound	Mercaptopropyl trimethoxysilane	4420-74-0		2.542	mg	4000	1338
				supplier	mold compound	Triphenylphosphine	603-35-0		0.635	mg	999	334
connections coating	Solder	6.362	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348