



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-09-07
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 *	Floriana SAN BIAGIO	Representative Title	AMS MD CHAMPION
Representative Phone *	Refer to Supplier Comment section	Representative Email *	
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
	HZGR*KS331A6	B	3068	2020-09-07
Amount	UoM	Unit type	ST ECOPACK Grade	
290	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		 life.augmented
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), immersion	Copper Alloy		

Package Designator	Package Size	Nbr of instances	Shape	
SIP	6 x 6.6	2	through-hole	
Comment	GR TO-252 DPAK Cu Wire; MDF is valid for LD1117DT33CTR			

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 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	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	59
Lead	1.40	soft solder	4831

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				false
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	1.40	Soft solder	4831
,				
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	1.401	Soft solder	955010
,			,	

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update				
Query				Response
The Product does contain at least one of the substances listed in Chemical Control Act				false
Substance	Homogeneous Material impacted	Content in Homogeneous Material (mg)	Concentration in the material(%)	Application Purpose

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	HZGR*KS31A6				6000000.0	1000000.0
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	2.451	mg	supplier	die	Silicon(Si)	7440-21-3		2.372	mg	967768	8179
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.030	mg	12240	103
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.002	mg	816	7
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.017	mg	6936	59
				supplier	metallisation	Silver(Ag)	7440-22-4		0.006	mg	2448	21
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.010	mg	4080	34
				supplier	passivation	Silicon oxide	7631-86-9		0.014	mg	5712	48
Leadframe	M-004 Copper and its alloys	165.540	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		165.325	mg	998701	570086
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.076	mg	459	262
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.139	mg	840	479
Soft solder	Solder	1.467	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	1.401	mg	955010	4831
				supplier	solder	Silver(Ag)	7440-22-4		0.037	mg	25222	128
				supplier	solder	Tin(Sn)	7440-31-5		0.029	mg	19768	100
Bonding wires	M-004 Copper and its alloys	0.153	mg	supplier	wire	Copper(Cu)	7440-50-8		0.153	mg	1000000	528
				supplier	mold compound	Silica vitreous	60676-86-0		103.137	mg	874999	355645
Encapsulation	M-011 Other inorganic materials	117.871	mg	supplier	mold compound	Biphenyl epoxy resin	85954-11-6		4.715	mg	40001	16259
				supplier	mold compound	Epoxy type resin	proprietary		3.536	mg	29999	12193
				supplier	mold compound	Phenol type resin	proprietary		5.894	mg	50004	20324
				supplier	mold compound	Carbon black	1333-86-4		0.589	mg	4997	2031
connections coating	Solder	2.518	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.518	mg	1000000	8683