



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 *	2020-02-10
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 *	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
	CA07*3171AF6	A	996M-Z6MA	2020-02-10
Amount	UoM	Unit type	ST ECOPACK Grade	
76.5	mg	Each	ECOPACK® 3	
Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony			

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), matte, annealed	Copper Alloy	0	

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85x3.9	8	gull wing	
Comment	07 SO 08 .15 JEDEC; MDF is valid for MC33171DT			

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	TRUE
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)	FALSE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	TRUE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
Exemption Id.	Description

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			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product

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				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
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				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

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				NO
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	CA07*3171AF6				5999999.0	1000353.0
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	1.245	mg	supplier	die	Silicon(Si)	7440-21-3		1.223	mg	982329	15987
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.010	mg	8032	131
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.005	mg	4016	65
				supplier	passivation	Silicon oxide	7631-86-9		0.007	mg	5622	92
				supplier	alloy & coating	Copper(Cu)	7440-50-8		35.369	mg	954577	462340
Leadframe	M-004 Copper and its alloys	37.052	mg	supplier	alloy & coating	Iron(Fe)	7439-89-6		0.901	mg	24317	11778
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.012	mg	324	157
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.046	mg	1241	601
				supplier	alloy & coating	Silver (Ag)	7440-22-4		0.724	mg	19540	9464
				supplier	glue	Silver (Ag)	7440-22-4		0.847	mg	750887	11072
Die attach	M-015 Other organic materials	1.128	mg	supplier	glue	Epoxy Cresol Novolak	29690-82-2		0.278	mg	246454	3634
				supplier	glue	tert-butanol	75-65-0		0.001	mg	887	13
				supplier	glue	1-isopropyl-2,2-dimethyltrimethylene diisobut	6846-50-0		0.002	mg	1773	26
				supplier	wire	Copper (Cu)	7440-50-8		0.077	mg	987179	1007
Bonding wires	M-004 Copper and its alloys	0.078	mg	supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	12821	13
				supplier	mold compound	Phenol Resin	205830-20-2		1.526	mg	42226	19948
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		1.145	mg	31683	14967
				supplier	mold compound	epoxy resin	Proprietary		1.145	mg	31683	14967
				supplier	mold compound	carbon black	1333-86-4		0.076	mg	2103	993
connections coating	Solder	0.885	mg	supplier	mold compound	silica vitreous	60676-86-0		32.247	mg	892305	421529
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.885	mg	1000000	11569