



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 *	2020-06-23
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Representative Title	AMS MD CHAMPION
Authorized Representative *	Florina SAN BIAGIO	Representative Email *	Refer to Supplier Comment section
Representative Phone *	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 *	Legal Declaration *
true	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
	MUTR*U1R9ABY	A	997G	2020-06-23
Amount	UoM	Unit type	ST ECOPACK Grade	
24	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
3	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Package Size	Nbr of instances	Shape	
QFN	3 x 3	6	Flat	
Comment	A068 VFDFPN 6L 3X3X0.95 PITCH0.95 EP; MDF is valid for LD49100PU18RY			

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 2020/363_March 2020	
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
,	0			
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
,	0		,	

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	MUTR*U1R9ABY				6000002.0	999922.0
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	0.602	mg	supplier	die	Silicon(Si)	7440-21-3		0.568	mg	943522	23279
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.007	mg	11628	287
				supplier	metallisation	Tungsten(W)	7440-33-7		0.006	mg	9967	246
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.002	mg	3322	82
				supplier	passivation	Silicon oxide	7631-86-9		0.012	mg	19934	492
				supplier	polymer coating	polyimide	proprietary		0.007	mg	11628	287
Leadframe	M-004 Copper and its alloys	6.734	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		6.556	mg	973567	268689
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.013	mg	1931	533
				supplier	alloy & coating	Tin (Sn)	7440-31-5		0.016	mg	2376	656
				supplier	alloy & coating	Chromium (Cr)	7440-47-3		0.017	mg	2525	697
				supplier	alloy & coating	Silver (Ag)	7440-22-4		0.132	mg	19602	5410
Die attach	M-015 Other organic materials	0.224	mg	supplier	glue	Silver (Ag)	7440-22-4		0.181	mg	808036	7418
				supplier	glue	[Octahydro-4,7-methano-1 H-indenedyl]bis(m	42594-17-2		0.014	mg	62500	574
				supplier	glue	exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl met	7534-94-3		0.014	mg	62500	574
				supplier	glue	Isobornyl acrylate	5888-33-5		0.014	mg	62500	574
				supplier	glue	2-(3,4-Epoxy)cyclohexyl)ethyltrimethoxysilane	3388-04-3		0.001	mg	4464	41
Bonding wires	M-008 Precious metals	0.191	mg	supplier	wire	Gold (Au)	7440-57-5		0.191	mg	1000000	7828
Encapsulation	M-015 Other organic materials	15.536	mg	supplier	mold compound	Epoxy Resin	25068-38-6		0.677	mg	43576	27746
				supplier	mold compound	Phenol Resin	29690-82-2		0.311	mg	20018	12746
				supplier	mold compound	Silica (Amorphous)A	60676-86-0		13.506	mg	869336	553525
				supplier	mold compound	Silica (Amorphous)B	7631-86-9		0.677	mg	43576	27746
				supplier	mold compound	Metal Hydroxide	Proprietary		0.311	mg	20018	12746
connections coating	Solder	1.111	mg	supplier	mold compound	Carbon Black	1333-86-4		0.054	mg	3476	2213
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.111	mg	1000000	45533