



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 *	2020-02-20
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		

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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
	MUTR*U1R4BAY	A	997G-Z7GA	2020-02-20
Amount	UoM	Unit type	ST ECOPACK Grade	
24.4	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	0	

Package Designator	Size	Nbr of instances	Shape	
QFN	3 x 3	6	flat	
Comment	A068 VFDFPN 6L 3X3X0.95 PITCH0.95 EP; MDF is valid for LDO40LPU33RY			

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			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	0.01	die	410

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	MUTR*U1R48AY				6000001.0	1000823.0
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	2.624	mg	supplier	die	Silicon(Si)	7440-21-3		2.484	mg	946646	101803
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.026	mg	9909	1066
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.002	mg	762	82
				supplier	metallisation	Gold(Au)	7440-57-5		0.005	mg	1905	205
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.010	mg	3811	410
				supplier	metallisation	Tungsten(W)	7440-33-7		0.020	mg	7622	820
				supplier	metallisation	Vanadium(V)	7440-62-2		0.001	mg	381	41
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.005	mg	1905	205
				supplier	passivation	Silicon oxide	7631-86-9		0.044	mg	16768	1803
				supplier	polymer coating	polyimide	proprietary		0.027	mg	10290	1107
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-indenediy]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	13.536	mg	supplier	mold compound	Epoxy Resin	25068-38-6		0.677	mg	50015	27746
				supplier	mold compound	Phenol Resin	29690-82-2		0.311	mg	22976	12746
				supplier	mold compound	Silica (Amorphous)A	60676-86-0		11.506	mg	850030	471557
				supplier	mold compound	Silica (Amorphous)B	7631-86-9		0.677	mg	50015	27746
				supplier	mold compound	Metal Hydroxide	Proprietary		0.311	mg	22976	12746
				supplier	mold compound	Carbon Black	1333-86-4		0.054	mg	3989	2213
connections coating	Solder	1.111	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.111	mg	1000000	45533