



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 *	2020-07-30
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 *	Antonella Lanzafame	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
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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
L6364Q	CNZU*U1MDABA	A	Z7GA	2020-07-30
	Amount	UoM	Unit type	ST ECOPACK Grade
	44	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	4 x 4x 1	20	Flat	
Comment	ZU VFQFPN 20 4x4x1.0 PITCH 0.50			

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-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
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				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	CNZU*UIMDABA				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 or dies	M-011 Other inorganic materials	4.433	mg	supplier	die	Silicon(Si)	7440-21-3		4.343	mg	979698	98705
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.045	mg	10151	1023
				supplier	polymer coating	polyimide	proprietary		0.045	mg	10151	1023
Leadframe	M-004 Copper and its alloys	15.340	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		15.162	mg	988405	344591
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.037	mg	2412	841
				supplier	alloy & coating	Tin (Sn)	7440-31-5		0.037	mg	2412	841
				supplier	alloy & coating	Chromium (Cr)	7440-47-3		0.038	mg	2477	864
				supplier	alloy & coating	Silver (Ag)	7440-22-4		0.056	mg	4303	1500
Die attach	M-015 Other organic materials	0.580	mg	supplier	glue	Ag	7440-22-4		0.418	mg	720172	9493
				supplier	glue	exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl met	7534-94-3		0.119	mg	205000	2702
				supplier	glue	1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione	3006-93-7		0.038	mg	64655	852
				supplier	glue	Epoxy resin	Proprietary		0.003	mg	5000	66
				supplier	glue	2-(3,4-Epoxy cyclohexylethyl)trimethoxysilane	3388-04-3		0.003	mg	5000	66
				supplier	glue	2-Methylhydroquinone	95-71-6		0.001	mg	172	2
Bonding wires	M-008 Precious metals	0.277	mg	supplier	wire	Au	7440-57-5		0.277	mg	1000000	6298
Encapsulation	M-011 Other inorganic materials	21.456	mg	supplier	mold compound	Epoxy Resin	proprietary		1.078	mg	50234	24495
				supplier	mold compound	Phenol Resin	proprietary		0.496	mg	23103	11266
				supplier	mold compound	Silica (Amorphous)A	60676-86-0		18.223	mg	849309	414150
				supplier	mold compound	Silica (Amorphous)B	7631-86-9		1.078	mg	50234	24495
				supplier	mold compound	Metal Hydroxide	proprietary		0.496	mg	23103	11266
connections coating	Solder	1.914	mg	supplier	mold compound	Carbon Black	1333-86-4		0.086	mg	4018	1959
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.914	mg	1000000	43502