



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 *	2021-02-09
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 Material Declaration 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
LD39020ADTPU33R	MQBB*UAN4AB5	A	Z6HA	2021-02-09
	Amount	UoM	Unit type	ST ECOPACK Grade
	2	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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	.	

Package Designator	Package Size	Nbr of instances	Shape	
QFN	1 x 1	4	Flat	
Comment	A0TH VFDFPN 1.0X1.0X0.38 4L PITCH 0,6			

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 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 18th December 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	0.03	alloy	15979

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014				
Query	Response			
1 - Product(s) requires marking for the presence of restricted substances and must be marked with an Environmental Protection Use Period under China's Measures for Administration of the control of pollution by Electronic Information Products	false			
2 - Product(s) is eligible for marking with the e code under China's Measures for Administration of the control of pollution by Electronic Information Products	false			
Hasardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
O	O	O	O	O

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 : Responsible metals sourcing	
Query	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	false

China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 application date 1st December 2020	
Query	Response
The product contains adhesives identified under GB 33372	FALSE

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	MQBB*UANMAB5		1.9400		4999999.0	999998.0
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	0.066	mg	supplier	die	Silicon(Si)	7440-21-3		0.061	mg	924242	31443
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.002	mg	30303	1031
				supplier	passivation	Silicon oxide	7631-86-9		0.003	mg	45455	1546
Leadframe	M-004 Copper and its alloys	0.808	mg	supplier	alloy	Silicon (Si)	7440-21-3		0.009	mg	11139	4639
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.002	mg	2475	1031
				supplier	alloy	Nickel (Ni)	7440-02-0		0.031	mg	38366	15979
				supplier	alloy	Copper (Cu)	7440-50-8		0.766	mg	948020	394845
Die attach	M-011 Other inorganic materials	0.045	mg	supplier	glue	Silver (Ag)	7440-22-4		0.039	mg	866667	20103
				supplier	glue	2-Propionic acid, methyl ester reaction product	Proprietary		0.005	mg	111111	2577
				supplier	glue	2-Propenoic acid, 2-methyl-, 2-[[2,3,3a,4,7,7a]o	68586-19-6		0.001	mg	22222	515
Bonding wires	M-008 Precious metals	0.015	mg	supplier	wire	Gold (Au)	7440-57-5		0.015	mg	1000000	7732
Encapsulation	M-011 Other inorganic materials	1.006	mg	supplier	mold compound	Epoxy resin	29690-82-2		0.010	mg	9940	5155
				supplier	mold compound	Phenol resin	25068-38-6		0.010	mg	9940	5155
				supplier	mold compound	Silica (Amorphous) A	60676-86-0		0.847	mg	841948	436598
				supplier	mold compound	Silica (Amorphous) B	7631-86-9		0.136	mg	135189	70103
				supplier	mold compound	Carbon Black	1333-86-4		0.003	mg	2982	1546