



## 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 *	2021-02-24
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 Material Declaration champion
Authorized Representative *	Floriana SAN BIAGIO	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**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
	MQBB*VB64ADJ	A	996H	2021-02-24
Amount	UoM	Unit type	ST ECOPACK Grade	
1.18	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 VFDFFN 1.0X1.0X0.38 4L PITCH 0,6; MDF is valid for LDLN025PU28R			

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	0.01	alloy&coating	12493

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
Hazardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
O	O	O	O	O

QueryList : REACH-19th January 2021				
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.	true
The following metals are present in the component :	Gold, Tungsten,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

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
			Application Purpose

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	MQB8*VB64ADJ		1.1830		5001101.0	1002539.0
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	0.113	mg	supplier	die	Silicon(Si)	7440-21-3		0.101	mg	893805	85593
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.003	mg	26549	2542
				supplier	metallisation	Tungsten(W)	7440-33-7		0.002	mg	17699	1695
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.001	mg	8850	847
				supplier	passivation	Silicon oxide	7631-86-9		0.006	mg	53097	5085
Leadframe	M-004 Copper and its alloys	0.539	mg	supplier	alloy	Copper	7440-50-8		0.521	mg	965877	441525
				supplier	alloy	Silicon	7440-21-3		0.003	mg	5562	2542
				supplier	alloy	Magnesium	7439-95-4		0.001	mg	1854	847
				supplier	metallization	Nickel (Ni)	7440-02-0		0.015	mg	27808	12712
Die attach	M-015 Other organic materials	0.020	mg	supplier	glue	Epoxy acrylic resin	Proprietary		0.009	mg	450000	7627
				supplier	glue	Bisphenol A epoxy resin	25068-38-6		0.004	mg	200000	3390
				supplier	glue	Acrylic resin	Proprietary		0.007	mg	348000	5898
				supplier	glue	Additive	Proprietary		0.000	mg	2000	34
Bonding wires	M-008 Precious metals	0.020	mg	supplier	wire	Gold (Au)	7440-57-5		0.020	mg	1000000	16947
Encapsulation	M-015 Other organic materials	0.490	mg	supplier	mold compound	Epoxy resin	Proprietary		0.006	mg	13061	5424
				supplier	mold compound	Phenol resin	Proprietary		0.006	mg	13061	5424
				supplier	mold compound	Silica (Amorphous) A	60676-86-0		0.389	mg	794286	329831
				supplier	mold compound	Silica (Amorphous) B	7631-86-9		0.086	mg	176327	73220
				supplier	mold compound	Carbon Black	1333-86-4		0.002	mg	3265	1356