

## **Materials Declaration Form**

IPC	1752	Version	2	
Form Type *	Distribute	VEISION	2	
Sectionals *	Material Info	Subsectionals *	A-D	
	Manufacturing Info		* : Required Field	

Supplier Information						
Company Name *	STMicroelectronics	Response Date *	2022-04-11			
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 *	giovanni giacopello	Representative Title	ADG Material Declaration champion			
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section			

## **Uncertainty Statement**

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

## 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		
ESDALC5-1BT2Y	ASPK*6TAPYP3	А	996Н	2022-04-11		
	Amount	UoM	Unit type	ST ECOPACK Grade		
	1	mg	Each	ECOPACK® 2		
	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				
1	260	3				
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	life.augmented		
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	DM00733491	1110.009/110/1100		

	Package Designator	Package Size	Nbr of instances	Shape	
	СНР	1.00,0.60,0.52	2	No lead	
(	Comment	SOD882T - 1x0.6x0.4 2LDS			

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 w	1 - Product(s) meets EU RoHS requirement without any exemptions			
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)				
3 - Product(s) meets EU RoHS requirements	- Product(s) meets EU RoHS requirements by application of the selected exemption(s)			
4 - Product(s) does not meet EU RoHS requir	4 - Product(s) does not meet EU RoHS requirements and is not under exemptions			
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				
2 - Product(s) meets EU RoHS requirements	2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)			
Exemption Id. Description				

QueryList: California Prop65 list, dated 17th Dec 2021					
Query	Response				
1 - The product does not contain identified substance from California Prop 65 List, no exposure to co	false				
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consun	true				
Substance	ppm in product				
Nickel	11250				

	Response					
1 - Product(s) requires marking for the p for Administration of the control of pollu	false					
2 - Product(s) is eligible for marking with	false					
	H	Hasardous substance				
Lead (Pb)	PBB & PBDE					
0	0 0 0					

QueryList: REACH-17 Jan 2022						
	Response					
1 - Product(s) does not contain REACH Su	true					
CategoryLevel_Name	CategoryLevel_Name CategoryLevel_Threshold amount in product (mg) Application					
2 - Product(s) does not contain REACI 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 is the component :	Gold,			
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						
	Response					
The Product does contain at least one of	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						

Stockholm Convention Persistent Organic Pollutants							
Query	Response						
Product is compliant with Stockholm Convention Persistent Organic Pollutants Annex I	true						

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document					Mfr Item Name	Mfr Item Name ASPK*6TAPYP3						
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS Exe	empt M	lass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	0.031	mg	supplier	die	Silicon(Si)	7440-21-3	0.	027	mg	870968	33721
				supplier	metallisation	Aluminium(Al)	7429-90-5	0.	002	mg	64516	2500
				supplier	metallisation	Nickel(Ni)	7440-02-0	0.	001	mg	32258	1250
				supplier	passivation	Silicon oxide	7631-86-9	0.	001	mg	32258	1250
Leadframe	M-004 Copper and its alloys	0.171	mg	supplier	alloy	Copper (Cu)	7440-50-8	0.1	6001	mg	936168	200013
				supplier	alloy	Silicium (Si)	7440-21-3	0.0	0095	mg	5558	1188
				supplier	alloy	Nickel (Ni)	7440-02-0	0.0	0617	mg	36099	7713
				supplier	alloy	Magnesium (Mg)	7439-95-4	0.0	0028	mg	1638	350
				supplier	alloy	Iron (Fe)	7439-89-6	0.0	0019	mg	1112	238
				supplier	alloy	Zinc (Zn)	7440-66-6	0.0	0095	mg	5558	1188
				supplier	alloy	Manganese (Mn)	7439-96-5	0.0	0009	mg	527	113
				supplier	alloy	Nickel (Ni)	7440-02-0	0.0	0209	mg	12228	2613
				supplier	alloy	Palladium (Pd)	7440-05-3	0.0	0019	mg	1112	238
Die attach	M-011 Other inorganic materials	0.015	mg	supplier	glue	Silver(Ag)	7440-22-4	0.	013	mg	866666	16250
				supplier	glue	Rubber modified epoxy	proprietary	0.	001	mg	66667	1250
				supplier	glue	Ethoxyethoxy-ethyl acetate	112-15-2	0.	001	mg	66667	1250
Bonding wires	M-008 Precious metals	0.005	mg	supplier	wire	Gold(Au)	7440-57-5	0.	005	mg	1000000	6250
Encapsulation	M-011 Other inorganic materials	0.578	mg	supplier	mold compound	Silica vitreous	60676-86-0	0.	536	mg	927347	670125
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6	0.	023	mg	39786	28750
				supplier	mold compound	Phenol resin	9003-35-4	0.	017	mg	29407	21250
				supplier	mold compound	Carbon black	1333-86-4	0.	002	mg	3460	2500