



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 *	2021-03-25
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
TSV622AIST	ASE3*V622BRL	A	Z9LA	2021-03-25
	Amount	UoM	Unit type	ST ECOPACK Grade
	24	mg	Each	ECOPACK® 3
Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony			

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	
D50	3 x 4.9	8	Gull wing	
Comment	E3 MSOP/TSSOP 8 BODY3.00 PITCH0.65			

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 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	0.15	alloy	6453

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.	true
The following metals are present in the component :	Tin, 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 December 1st 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	ASE3*V622BRL		23.7100		5999999.0	999999.0
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	0.697	mg	supplier	die	Silicon(Si)	7440-21-3		0.673	mg	965567	28385
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.006	mg	8608	253
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	1435	42
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	1435	42
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.002	mg	2869	84
				supplier	passivation	Silicon oxide	7631-86-9		0.014	mg	20086	590
Leadframe	M-004 Copper and its alloys	6.772	mg	supplier	alloy	Copper (Cu)	7440-50-8		6.500	mg	959835	274146
				supplier	alloy	Silicium (Si)	7440-21-3		0.070	mg	10337	2952
				supplier	alloy	Nickel (Ni)	7440-02-0		0.153	mg	22593	6453
				supplier	alloy	Manganese(Mn)	7439-95-4		0.007	mg	1034	295
				supplier	alloy	Silver (Ag)	7440-22-4		0.042	mg	6202	1771
				supplier	alloy	Silver (Ag)	7440-22-4		0.135	mg	800000	5702
Die attach	M-011 Other inorganic materials	0.169	mg	supplier	glue	Silver (Ag)	7440-22-4		0.135	mg	800000	5702
				supplier	glue	Acrylate monomer	61434-04-6		0.023	mg	139000	991
				supplier	glue	Acrylate oligomer	proprietary		0.008	mg	50000	356
				supplier	glue	Bismaleimide resin	proprietary		0.002	mg	10000	71
				supplier	glue	Epoxy resin	proprietary		0.000	mg	1000	7
				supplier	wire	Copper (Cu)	7440-50-8		0.689	mg	960556	29051
Bonding wires	M-004 Copper and its alloys	0.717	mg	supplier	wire	Palladium (Pd)	7440-05-3		0.028	mg	39344	1190
				supplier	wire	Palladium (Pd)	7440-05-3		0.028	mg	39344	1190
Encapsulation	M-011 Other inorganic materials	13.655	mg	supplier	mold compound	Epoxy Resin 1	proprietary		0.058	mg	4247	2446
				supplier	mold compound	Epoxy Resin 2	proprietary		0.058	mg	4247	2446
				supplier	mold compound	Epoxy Resin 3	proprietary		0.058	mg	4247	2446
				supplier	mold compound	Hardener	proprietary		0.275	mg	20102	11577
				supplier	mold compound	Catalyst	proprietary		0.013	mg	930	536
				supplier	mold compound	Carbon black	1333-86-4		0.020	mg	1465	844
				supplier	mold compound	Amorphous silica1	60676-86-0		13.030	mg	954215	549557
				supplier	mold compound	Amorphous silica2	7631-86-9		0.144	mg	10545	6073
Connections coating	Solder	1.700	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.700	mg	1000000	71693