



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2022-06-20
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	Antonella Lanzafame	<b>Representative Title</b>	AMS Material Declaration champion
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	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
ST485BDR	1D07*U494JC3	A	BO2A	2022-06-20
Amount	UoM	Unit type	ST ECOPACK Grade	
80	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		
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), immersion	Copper Alloy		



Package Designator	Package Size	Nbr of instances	Shape	
D50	4.9 x 3.9	8	Gull wing	
Comment	07 SO 08 .15 JEDEC			

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 25th Feb 2022			
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 : 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-17 Jan 2022				
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
.	#N/A			
.	#N/A			
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
.	#N/A			

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,
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

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	true
All the adhesive impacted complies with GB 33372	true

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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	ID07*U494IC3		80.0000		6000001.0	1000006.0
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	3.357	mg	supplier	die	Silicon(Si)	7440-21-3		3.239	mg	964850	40488
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.027	mg	8043	338
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.010	mg	2979	125
				supplier	passivation	Silicon oxide	7631-86-9		0.045	mg	13405	563
Leadframe	M-004 Copper and its alloys	28.764	mg	supplier	polymer coating	proprietary			0.036	mg	10724	450
				supplier	alloy	Copper(Cu)	7440-50-8		27.986	mg	972952	349825
				supplier	alloy	Iron(Fe)	7439-89-6		0.658	mg	22876	8225
				supplier	alloy	Iron phosphide	1310-43-6		0.040	mg	1391	500
Die attach	M-011 Other inorganic materials	0.582	mg	supplier	alloy	Zinc(Zn)	7440-66-6		0.035	mg	1217	438
				supplier	metallization	Silver (Ag)	7440-22-4		0.045	mg	1564	563
				supplier	glue	Silver(Ag)	7440-22-4	0	0.510	mg	876289	6375
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.029	mg	49828	363
Bonding wires	M-004 Copper and its alloys	0.044	mg	supplier	glue	Isobornyl acrylate	5888-33-5		0.029	mg	49828	363
				supplier	glue	Methyl acrylate polymer	87320-05-6		0.012	mg	20619	150
				supplier	glue	Epoxy cyclohexylethyltrimethoxysilane	3388-04-3		0.001	mg	1718	13
				supplier	glue	Tert-butyl peroxy(2-ethyl)-hexanoate	3006-82-4		0.001	mg	1718	13
Encapsulation	M-011 Other inorganic materials	46.535	mg	supplier	wire	Copper(Cu)	7440-50-8		0.044	mg	1000000	550
				supplier	mold compound	Silica vitreous	60676-86-0		33.319	mg	715999	416488
				supplier	mold compound	Silicon oxide	7631-86-9		6.980	mg	149995	87250
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		3.490	mg	74997	43625
Connections coating	Solder	0.718	mg	supplier	mold compound	Phenol resin	26834-02-6		2.327	mg	50005	23088
				supplier	mold compound	Carbon black	1333-86-4		0.233	mg	5007	2913
				supplier	mold compound	Bismuth compound	7440-69-9		0.186	mg	3997	2325
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.718	mg	1000000	8975