



## 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 *	2020-05-26
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 *	Floriana SAN BIAGIO	Representative Title	AMS MD CHAMPION
Representative Phone *	Refer to Supplier Comment section	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
	1D6R*27L4AAW	A	64BA	2020-05-26
Amount	UoM	Unit type	ST ECOPACK Grade	
55	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	
DSO	5 x 4.4	14	Gull wing	
Comment	6R TSSOP 14 BODY 4.4 PITCH 0.65; MDF is valid for TS27L4IPT			

QueryList : RoHS Directive 2011/65/EU-July 2011 Annex II amended by Directive 2015/863-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	0.39	alloy&coating	7059

QueryList : REACH-16th January 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
,	0			
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 : 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
Substance	Homogeneous Material impacted	Content in Homogeneous Material (mg)	Concentration in the material(%)	Application Purpose

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	1D6R*27L4AAW				5000001.0	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	2.299	mg	supplier	die	Silicon(Si)	7440-21-3		2.242	mg	975207	40897
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.009	mg	3915	164
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.006	mg	2610	109
				supplier	passivation	Silicon oxide	7631-86-9		0.042	mg	18269	766
				supplier	alloy & coating	Copper(Cu)	7440-50-8		20.021	mg	954017	365213
Leadframe	M-004 Copper and its alloys	20.986	mg	supplier	alloy & coating	Nickel(Ni)	7440-02-0		0.387	mg	18441	7059
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.471	mg	22444	8592
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.028	mg	1334	511
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.025	mg	1191	456
				supplier	alloy & coating	Palladium(Pd)	7440-05-3		0.047	mg	2240	857
				supplier	alloy & coating	Gold(Au)	7440-57-5		0.007	mg	334	128
Die attach	M-015 Other organic materials	0.140	mg	supplier	glue	Silver(Ag)	7440-22-4		0.123	mg	878571	2244
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.007	mg	50000	128
				supplier	glue	Isobornyl acrylate	5888-33-5		0.007	mg	50000	128
				supplier	glue	Methyl acrylate polymer	87320-05-6		0.003	mg	21429	55
Bonding wires	M-004 Copper and its alloys	0.083	mg	supplier	wire	Copper(Cu)	7440-50-8		0.083	mg	100000	1514
Encapsulation	M-015 Other organic materials	31.312	mg	supplier	mold compound	Silica vitreous	60676-86-0		22.419	mg	715987	408957
				supplier	mold compound	Silicon oxide	7631-86-9		4.697	mg	150006	85680
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		2.348	mg	74987	42831
				supplier	mold compound	Phenol resin	26834-02-6		1.566	mg	50013	28566
				supplier	mold compound	Carbon black	1333-86-4		0.157	mg	5014	2864
				supplier	mold compound	Bismuth compound	7440-69-9		0.125	mg	3992	2280