



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 *	2020-05-21
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 MD 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
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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
0	IDO7*0158B16	A	BO2A	2020-05-21
	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		 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	4.851.523.9	8	Gull wing	
Comment	O7 SO 08 .15 JEDEC; MD valid for LM2904AYDT, LM158YDT, LM258AYDT, LM2904YDT, LM358YDT			

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	0.43	alloy	5375

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
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	ID07*0158816				5000002.0	1000007.0				
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Die or dies	M-011 Other inorganic materials	0.721	mg	supplier	die	Silicon(Si)	7440-21-3		0.705	mg	977809	8813				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.009	mg	12483	113				
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.003	mg	4161	38				
				supplier	passivation	Silicon oxide	7631-86-9		0.004	mg	5548	50				
Leadframe	M-004 Copper and its alloys	28.916	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		27.704	mg	958085	346300				
				supplier	alloy & coating	Nickel(Ni)	7440-02-0		0.430	mg	14871	5375				
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.652	mg	22548	8150				
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.039	mg	1349	488				
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.034	mg	1176	425				
				supplier	alloy & coating	Silver (Ag)	7440-22-4		0.015	mg	519	188				
				supplier	alloy & coating	Palladium(Pd)	7440-05-3		0.035	mg	1210	438				
				supplier	alloy & coating	Gold(Au)	7440-57-5		0.007	mg	242	88				
				Die attach		0.172	mg	supplier	glue	Silver(Ag)	7440-22-4		0.151	mg	877907	1888
								supplier	glue	isobornyl methacrylate	7534-94-3		0.009	mg	52326	113
supplier	glue	isobornyl acrylate	8888-33-5						0.009	mg	52326	113				
supplier	glue	Methyl acrylate polymer	87320-05-6						0.003	mg	17442	38				
Bonding wires	M-004 Copper and its alloys	0.054	mg	supplier	wire	Copper(Cu)	7440-50-8		0.054	mg	1000000	675				
Encapsulation	M-011 Other inorganic materials	50.137	mg	supplier	mold compound	Silica vitreous	60676-86-0		43.418	mg	865987	542725				
				supplier	mold compound	Epoxy type resin	proprietary		3.760	mg	74995	47000				
				supplier	mold compound	Phenol type resin	proprietary		2.507	mg	50003	31338				
				supplier	mold compound	Carbon black	1333-86-4		0.251	mg	5006	3138				
				supplier	mold compound	Bismuth compound	7440-69-9		0.201	mg	4009	2513				