



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 *	2020-09-16
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 product group 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
	EBO7*US58CAY	A	9998	2020-09-16
Amount	UoM	Unit type	ST ECOPACK Grade	
77	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	4.85 x 3.9	8	Gull wing	
Comment	07 SO 08 .15 JEDEC; MDF is valid for TSC2011YDT			

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	1.56	alloy&coating	20364

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 : 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				true
Substance	Homogeneous Material impacted	Content in Homogeneous Material (mg)	Concentration in the material(%)	Application Purpose

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 .	

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	EBO7*USSBCAY		76.5		4999967.0	999997.0
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	2.242	mg	supplier	die	Silicon(Si)	7440-21-3		2.135	mg	952275	27908
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.021	mg	9367	275
				supplier	metallisation	Copper(Cu)	7440-50-8		0.004	mg	1784	52
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	446	13
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.006	mg	2676	78
				supplier	passivation	Silicon oxide	7631-86-9		0.052	mg	23194	680
				supplier	polymer coating	polyimide	proprietary		0.023	mg	10259	301
Leadframe	M-004 Copper and its alloys	28.431	mg	supplier	alloy	Copper (Cu)	7440-50-8		26.154	mg	919911	341882
				supplier	alloy	Iron (Fe)	7439-89-6		0.630	mg	22159	8235
				supplier	alloy	Zinc (Zn)	7440-66-6		0.032	mg	1126	418
				supplier	alloy	Metallic Phosphorus (P)	7723-14-0		0.008	mg	281	105
				supplier	metallization	Nickel (Ni)	7440-02-0		1.558	mg	54799	20366
				supplier	metallization	Palladium (Pd)	7440-05-3		0.024	mg	844	314
				supplier	metallization	Gold (Au)	7440-57-5		0.024	mg	844	314
Die attach	M-015 Other organic materials	0.152	mg	supplier	glue	Silver (Ag)	7440-22-4		0.119	mg	781250	1549
				supplier	glue	Reaction product: bisphenol-F-(epichlorhydrin	9003-36-5		0.011	mg	72917	145
				supplier	glue	Fatty acids, C18-unsatd., dimers, polymers with	68475-94-5		0.006	mg	41667	83
				supplier	glue	Polyoxyalkylene amine	9046-10-0		0.006	mg	41667	83
				supplier	glue	Epoxy Resin	Proprietary		0.006	mg	41667	83
				supplier	glue	Copper Oxide	1317-38-0		0.002	mg	10417	21
				supplier	glue	1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8		0.002	mg	10417	21
Bonding wires	M-008 Precious metals	0.202	mg	supplier	wire	Gold (Au)	7440-57-5		0.200	mg	990100	2614
				supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	9900	26
Encapsulation	M-015 Other organic materials	45.474	mg	supplier	mold compound	Epoxy Resin	Proprietary		4.171	mg	91729	54527
				supplier	mold compound	Phenol Resin	205830-20-2		1.963	mg	43167	25660
				supplier	mold compound	Silica Amorphous A	60676-86-0		35.168	mg	773375	459718
				supplier	mold compound	Silica Amorphous B	7631-86-9		3.926	mg	86333	51319
				supplier	mold compound	Carbon Black	1333-86-4		0.245	mg	5396	3207