



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 *	2019-05-02
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 *	Rossana Bonaccorso	Representative Title	ADG 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

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
L9963	BA9I*UR8IBBP	A	MU1A	2019-05-02
	Amount	UoM	Unit type	ST ECOPACK Grade
	260	mg	Each	ECOPACK® 2
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)			

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	10x10x1	64	gull wing	
Comment	TQFP 64 10x10x1.0 1.0 ExPad Down			

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 2017/2096 _November 2017	
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 8th March 2019			
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	0.13	Die	500

QueryList : REACH-15th January 2019				
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	BA91*UR8IBBP					
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	19.450	mg	supplier	die	Silicon(Si)	7440-21-3		17.566	mg	903132	67562
				supplier	metallisation	Copper(Cu)	7440-50-8		1.200	mg	61696	4615
				supplier	metallisation	Cobalt(Co)	7440-48-4		0.002	mg	103	8
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.130	mg	6684	500
				supplier	metallisation	Palladium(Pd)	7440-05-3		0.042	mg	2159	162
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	51	4
				supplier	metallisation	Tungsten(W)	7440-33-7		0.056	mg	2879	215
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.059	mg	3033	227
				supplier	passivation	Silicon Oxide	7631-86-9		0.192	mg	9872	738
Leadframe	M-004 Copper and its alloys	119.821	mg	supplier	polymer coating	Polyimido AH 1200	proprietary		0.2021	mg	10391	777
				supplier	alloy & coating	Copper (Cu)	7440-50-8		103.461	mg	863463	397927
				supplier	alloy & coating	Iron (Fe)	7439-89-6		2.433	mg	20305	9358
				supplier	alloy & coating	Iron Phosphide (FeP)	26508-33-8		0.147	mg	1227	565
				supplier	alloy & coating	Zinc (Zn)	7440-66-6		0.127	mg	1060	488
Die attach	M-015 Other organic materials	2.713	mg	supplier	alloy & coating	Silver (Ag)	7440-22-4		13.653	mg	113945	52512
				supplier	glue	Silver(Ag)	7440-22-4		2.420	mg	892001	9308
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.204	mg	75194	785
				supplier	glue	Bismaleimide resin	35325-39-4		0.081	mg	29856	312
Bonding wires	M-004 Copper and its alloys	0.037	mg	supplier	glue	Methyl acrylate polymer	87320-05-6		0.008	mg	2949	31
				supplier	wire	Copper (Cu)	7440-50-8		0.037	mg	1000000	142
Encapsulation	M-011 Other inorganic materials	114.648	mg	supplier	mold compound	Silica vitreous	60676-86-0		99.056	mg	864001	380985
				supplier	mold compound	Epoxy type resin	25068-38-6		8.599	mg	75003	33073
				supplier	mold compound	Phenol type resin	29690-82-2		5.732	mg	49997	22046
				supplier	mold compound	Mercaptopropyl trimethoxysilane	4420-74-0		0.573	mg	4999	2202
				supplier	mold compound	Quartz	14808-60-7		0.344	mg	3000	1323
Connections coating	Solder	3.331	mg	supplier	mold compound	Carbon black	1333-86-4		0.344	mg	3000	1323
				supplier	solder alloy	Tin (Sn)	7440-31-5		3.331	mg	1000000	12812