



## 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>	2018-07-03
<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>	Giovanni Giacopello	<b>Representative Title</b>	ADG MD 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		
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>
		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
L9907	AA9I*UQ29CC2	A	0959	2018-07-03
Amount	UoM	Unit type	ST ECOPACK Grade	
260.00	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	
NA	NiPdAuAg	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	10-10-1	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

California 65 list			
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	0.55	Die - Leadframe	2119

QueryList : REACH-27th June 2018				
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	AA91*UQ29CC2					
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	27.715	mg	supplier	die	Silicon (Si)	7440-21-3		26.856	mg	969006	103292
				supplier	metallization	Aluminium (Al)	7429-90-5		0.249	mg	8984	958
				supplier	metallization	Tungsten (W)	7440-33-7		0.110	mg	3969	423
				supplier	Passivation	Silicon Nitride	12033-89-5		0.029	mg	1047	112
				supplier	Passivation	Silicon Oxide	7631-86-9		0.236	mg	8515	908
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.010	mg	361	38
				supplier	back side metallization	Gold (Au)	7440-57-5		0.027	mg	974	104
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.051	mg	1840	196
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.003	mg	108	12
				supplier	polymer die coating	PDI Gamma-butyrolactone	96-48-0		0.144	mg	5196	554
				supplier	alloy	Copper (Cu)	7440-50-8		84.461	mg	992293	324850
				supplier	alloy	Iron (Fe)	7439-89-6		0.085	mg	999	327
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.025	mg	294	96
				supplier	metallization	Nickel (Ni)	7440-02-0		0.500	mg	5874	1923
Leadframe	M-004 Copper and its alloys	85.117	mg	supplier	metallization	Palladium (Pd)	7440-05-3		0.016	mg	188	62
				supplier	metallization	Gold (Au)	7440-57-5		0.015	mg	176	58
				supplier	metallization	Silver (Ag)	7440-22-4		0.015	mg	176	58
				supplier	glue	Silver (Ag)	7440-22-4		8.186	mg	895036	31485
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.686	mg	75005	2638
				supplier	glue	Bismaleimide resin	Proprietary		0.274	mg	29959	1053
Bonding wires	M-008 Precious metals	1.928	mg	supplier	wire	Gold (Au)	7440-57-5		1.908	mg	989627	7338
				supplier	wire	Copper (Cu)	7440-50-8		0.012	mg	6224	46
				supplier	wire	Palladium (Pd)	7440-05-3		0.006	mg	3112	23
				supplier	wire	Platinum (Pt)	7440-06-4		0.002	mg	1037	8
Encapsulation	M-011 Other inorganic materials	136.094	mg	supplier	mold compound	Silica, vitreous	60676-86-0		117.585	mg	863998	452250
				supplier	mold compound	Epoxy Resin	25068-38-6		10.207	mg	75000	39258
				supplier	mold compound	Phenol Resin	29690-82-2		6.805	mg	50002	26173
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		0.681	mg	5004	2619
				supplier	mold compound	Quartz	14808-60-7		0.408	mg	2998	1569
				supplier	mold compound	Carbon black	1333-86-4		0.408	mg	2998	1569