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 ***	2018-06-19
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 omprehensive 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.

Signature Not
Verified

Digitally signed by
rossana bonaccorso
Date: 2018.06.19
15:34:36 +02:00

Product				
Mfr Item Number	**Mfr Item Name**	**Version**	**Mfr Site**	**Date**
	FF9J*UBF9AA1	A	0959	2018-06-19
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	260.00	mg	Each	ECOPACK2
	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**		
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	**Package: LQFP 64 10x10x1.4 1.0 ExPad Down. MDF valid for CPs: L99DZ100GTR - L99DZ100G**			

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 25th May 2018

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	0.75	Die - Leadframe	2900
Cobalt	0.002	Die	8

QueryList : REACH-15th January 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

Query	Response
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**	**FF9J*UBF9AA1**					
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	21.529	mg	supplier	die	Silicon (Si)	7440-21-3		19.412	mg	901655	74662
				supplier	metallization	Aluminium (Al)	7429-90-5		0.046	mg	2137	177
				supplier	metallization	Copper (Cu)	7440-50-8		1.202	mg	55831	4623
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	93	8
				supplier	metallization	Nickel (Ni)	7440-02-0		0.148	mg	6874	569
				supplier	metallization	Platinum (Pt)	7440-06-4		0.083	mg	3855	319
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	372	31
				supplier	metallization	Tungsten (W)	7440-33-7		0.068	mg	3158	262
				supplier	Passivation	Silicon Nitride	12033-89-5		0.039	mg	1811	150
				supplier	Passivation	Silicon Oxide	7631-86-9		0.298	mg	13842	1146
				supplier	polymer die coating	Polyimide AH 1200	Proprietary		0.223	mg	10372	857
Leadframe	M-004 Copper and its alloys	100.226	mg	supplier	alloy	Copper (Cu)	7440-50-8		99.434	mg	992098	382438
				supplier	alloy	Iron (Fe)	7439-89-6		0.100	mg	997	385
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.030	mg	299	115
				supplier	metallization	Nickel (Ni)	7440-02-0		0.606	mg	6046	2331
				supplier	metallization	Palladium (Pd)	7440-05-3		0.020	mg	200	77
				supplier	metallization	Gold (Au)	7440-57-5		0.018	mg	180	69
				supplier	metallization	Silver (Ag)	7440-22-4		0.018	mg	180	69
Die attach	M-015 Other organic materials	5.030	mg	supplier	glue	Silver (Ag)	7440-22-4		4.502	mg	895030	17315
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.377	mg	74950	1450
				supplier	glue	Bismaleimide resin	35325-39-4		0.151	mg	30020	581
Bonding wires	M-011 Other inorganic materials	2.834	mg	supplier	wire	Copper (Cu)	7440-50-8		2.834	mg	1000000	10900
Encapsulation	M-011 Other inorganic materials	130.381	mg	supplier	mold compound	Silica, vitreous	60676-86-0		112.649	mg	863999	433265
				supplier	mold compound	Epoxy Resin	25068-38-6		9.779	mg	75003	37612
				supplier	mold compound	Phenol Resin	29690-82-2		6.519	mg	50000	25073
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		0.652	mg	5000	2508
				supplier	mold compound	Quartz	14808-60-7		0.391	mg	2999	1504
				supplier	mold compound	Carbon black	1333-86-4		0.391	mg	2999	1504