



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-01-28
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 *	giovanni giacopello	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
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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
L99DZ100GPTR	HF9J*UBF9AAP	A	959	2020-01-28
	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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	DM00605945	

Package Designator	Size	Nbr of instances	Shape	
QFP	10.00,10.00,1.40	64	gull wing	
Comment	LQFP 64 10x10x1.4 1.0 ExPad Down. MDF valid for CPs: L99DZ100GP,L99DZ100GPTR			

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 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	0.27	Die - Leadframe	1042

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

Material Composition Declaration :						Mfr Item Name	HF9J*UBF9AAP									
note : Substance present with less 0.001mg will not be declared in this document																
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	21.553	mg	supplier	die	Silicon(Si)	7440-21-3		19.412	mg	900663	74662				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.046	mg	2134	177				
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.011	mg	510	42				
				supplier	metallisation	Copper(Cu)	7440-50-8		1.202	mg	55769	4623				
				supplier	metallisation	Cobalt(Co)	7440-48-4		0.002	mg	94	8				
				supplier	metallisation	Gold(Au)	7440-57-5		0.030	mg	1392	111				
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.203	mg	9419	781				
				supplier	metallisation	Palladium(Pd)	7440-05-3		0.047	mg	2181	181				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.008	mg	371	31				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.068	mg	3155	262				
				supplier	metallisation	Vanadium(V)	7440-62-2		0.003	mg	139	12				
				supplier	passivation	Silicon oxide	7631-86-9		0.298	mg	13826	1146				
				supplier	polymer coating	Polyimide AH 1200	proprietary		0.223	mg	10347	858				
				Leadframe	M-004 Copper and its alloys	99.628	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		97.017	mg	973793	373142
								supplier	alloy & coating	Nickel(Ni)	7440-02-0		0.068	mg	683	262
supplier	alloy & coating	Iron(Fe)	7439-89-6						2.282	mg	22905	8777				
supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8						0.137	mg	1375	527				
supplier	alloy & coating	Zinc(Zn)	7440-66-6						0.120	mg	1204	462				
supplier	alloy & coating	Silver (Ag)	7440-22-4						0.001	mg	10	4				
supplier	alloy & coating	Palladium(Pd)	7440-05-3						0.002	mg	20	8				
supplier	alloy & coating	Gold(Au)	7440-57-5						0.001	mg	10	4				
Die attach		2.995	mg					supplier	glue	Silver(Ag)	7440-22-4		2.671	mg	891820	10273
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.225	mg	75125	865				
				supplier	glue	Bismaleimide resin	proprietary		0.090	mg	30050	346				
				supplier	glue	Methyl acrylate polymer	87320-05-6		0.009	mg	3005	35				
Bonding wires	M-004 Copper and its alloys	2.775	mg	supplier	wire	Copper(Cu)	7440-50-8		2.775	mg	1000000	10673				
Bonding wires 2	M-004 Copper and its alloys	2.088	mg	supplier	wire	Copper(Cu)	7440-50-8		2.088	mg	1000000	8031				
Encapsulation	M-011 Other inorganic materials	130.961	mg	supplier	mold compound	Silica vitreous	60676-86-0		113.150	mg	863998	435192				
				supplier	mold compound	Epoxy type resin	proprietary		9.822	mg	74999	37777				
				supplier	mold compound	Phenol type resin	proprietary		6.548	mg	50000	25185				
				supplier	mold compound	Mercaptopropyl trimethoxysilane	4420-74-0		0.655	mg	5001	2519				
				supplier	mold compound	Quartz	14808-60-7		0.393	mg	3001	1512				
supplier	mold compound	Carbon black	1333-86-4		0.393	mg	3001	1512								