



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 *	2020-11-30
Company Unique ID	NL 008751171B01	Contact Name *	Refer to Supplier Comment section
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Authorized Representative *	marianna grasso
Authorized Representative *	marianna grasso	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
L9384-D	A9)W*UR84BGP	A	959	2020-11-30
	Amount	UoM	Unit type	ST ECOPACK Grade
	3393	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	245	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00718160	

Package Designator	Size	Nbr of instances	Shape	
QFP	20.00,14.00,3.15	110	gull wing	
Comment	HI-QUAD 110 14x20 MM			

QueryList : RoHS Directive 2011/65/EU-July 2011 Annex II amended by Delegated Directive 2015/863-March 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	FALSE
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)	TRUE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : ELV directive : 2000/53/EC amended 2020/363_ March 2020	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

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	0.10	die - leadframe	29
Lead	14.16	soft solder	4174

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				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	14.16	Soft solder	4174
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				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	14.162	Soft solder	975009

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, Tin,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

Material Composition Declaration :						Mfr Item Name	A9)W*UR84BGP					
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	35.557	mg	supplier	die	Silicon(Si)	7440-21-3		34.950	mg	982929	10301
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.324	mg	9112	95
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.020	mg	562	6
				supplier	metallisation	Gold(Au)	7440-57-5		0.053	mg	1491	16
				supplier	metallisation	Nicke(Ni)	7440-02-0		0.099	mg	2784	29
				supplier	metallisation	Vanadium(V)	7440-62-2		0.005	mg	141	1
				supplier	passivation	Silicon oxide	7631-86-9		0.106	mg	2981	31
Leadframe	M-004 Copper and its alloys	2494.886	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		2491.605	mg	998685	734337
				supplier	alloy & coating	Iron(Fe)	7439-89-6		1.148	mg	460	338
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		2.096	mg	840	618
				supplier	alloy & coating	Silver (Ag)	7440-22-4		0.037	mg	15	11
Soft solder	Solder	14.525	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	14.162	mg	975009	4174
				supplier	solder	Silver(Ag)	7440-22-4		0.218	mg	15010	64
				supplier	solder	Tin(Sn)	7440-31-5		0.145	mg	9981	43
Bonding wires	M-004 Copper and its alloys	6.429	mg	supplier	wire	Copper(Cu)	7440-50-8		6.429	mg	1000000	1895
Encapsulation	M-011 Other inorganic materials	824.524	mg	supplier	mold compound	Silica vitreous	60676-86-0		671.575	mg	814500	197930
				supplier	mold compound	Silicon oxide	7631-86-9		61.839	mg	75000	18225
				supplier	mold compound	Epoxy type resin	proprietary		61.839	mg	75000	18225
				supplier	mold compound	Phenol type resin	proprietary		24.736	mg	30000	7290
				supplier	mold compound	Carbon black	1333-86-4		4.535	mg	5500	1337
connections coating	Solder	17.079	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		17.079	mg	1000000	5034