



## Materials Declaration Form

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

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2020-01-29</b>
<b>Company Unique ID</b>	<b>NL 008751171B01</b>		
<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>	<b>Giovanni Giacobello</b>	<b>Representative Title</b>	<b>ADG MD CHAMPION</b>
<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>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
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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
VNH7100ASTR	UCQ7*VH72ABX	A	997G	2020-01-29
	Amount	UoM	Unit type	ST ECOPACK Grade
	150	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	DM00180816	

Package Designator	Size	Nbr of instances	Shape	
DSO	3.9 - 9.9 - 1.375	16	gull wing	
Comment	SO 16 .15 TO JEDEC MS-012			

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	0.54	die - leadframe	3573

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	UCQ7*VH72ABX					
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)
Dies	M-011 Other inorganic materials	4.623	mg	supplier	die	Silicon(Si)	7440-21-3		4.285	mg	926887	28567
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.068	mg	14709	453
				supplier	metallisation	Copper(Cu)	7440-50-8		0.030	mg	6489	200
				supplier	metallisation	Gold(Au)	7440-57-5		0.006	mg	1298	40
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.028	mg	6057	187
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.012	mg	2596	80
				supplier	metallisation	Tungsten(W)	7440-33-7		0.099	mg	21415	660
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.010	mg	2163	67
				supplier	passivation	Silicon oxide	7631-86-9		0.055	mg	11897	367
				supplier	polymer coating	PIX1 Polyimide	108-65-6		0.030	mg	6489	200
Leadframe	M-004 Copper and its alloys	58.387	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		52.359	mg	896758	349060
				supplier	alloy & coating	Nickel(Ni)	7440-02-0		0.508	mg	8701	3387
				supplier	alloy & coating	Iron(Fe)	7439-89-6		1.276	mg	21852	8505
				supplier	alloy & coating	Phosphorus metal	7723-14-0		0.045	mg	771	300
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.068	mg	1165	453
				supplier	alloy & coating	Silver (Ag)	7440-22-4		4.097	mg	70170	27313
				supplier	alloy & coating	Palladium(Pd)	7440-05-3		0.014	mg	240	93
				supplier	alloy & coating	Gold(Au)	7440-57-5		0.020	mg	343	133
				Die attach	M-011 Other inorganic materials	4.313	mg	supplier	glue	Silver(Ag)	7440-22-4	
supplier	glue	Bismaleimide polymer	13676-54-5						0.604	mg	140042	4027
supplier	glue	Epoxy Cresol Novolak	29690-82-2						0.388	mg	89961	2587
supplier	glue	Dicyclopentenylxyethyl methacrylate	68586-19-6						0.043	mg	9970	287
supplier	glue	Palladium(Pd)	7440-05-3						0.004	mg	927	27
supplier	glue											
Bonding wires	M-004 Copper and its alloys	0.102	mg	supplier	wire	Copper (Cu)	7440-50-8		0.102	mg	1000000	680
Encapsulation	M-011 Other inorganic materials	82.575	mg	supplier	mold compound	Silica vitreous	60676-86-0		73.243	mg	886988	488287
				supplier	mold compound	Epoxy Cresol Novolac	85954-11-6		6.606	mg	80000	44040
				supplier	mold compound	Phenol resin	26834-02-6		2.478	mg	30009	16520
				supplier	mold compound	Carbon black	1333-86-4		0.248	mg	3003	1653