



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 *	2021-02-10
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
VND7E050AJTR	STM5*XV69BAT	A	3068	2021-02-10
	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		
3	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00694886	



Package Designator	Size	Nbr of instances	Shape	
QFP	4.90,3.90,1.55	16	gull wing	
Comment	POWERSO 16 LEADS EP DIP DOWNSET			

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	0.02	die	133
Lead	1.77	soft solder	11793

QueryList : REACH-19th January 2021				
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	1.77	Soft solder	11793
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	1.769	Soft solder	955184

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 :	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	STM5*XV69BAT					
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	1.538	mg	supplier	die	Silicon(Si)	7440-21-3		1.311	mg	852407	8739
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.021	mg	13654	140
				supplier	metallisation	Copper(Cu)	7440-50-8		0.028	mg	18205	187
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.020	mg	13004	133
				supplier	metallisation	Silver(Ag)	7440-22-4		0.008	mg	5202	53
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.089	mg	57867	593
				supplier	metallisation	Vanadium(V)	7440-62-2		0.002	mg	1300	13
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.016	mg	10403	107
				supplier	passivation	Silicon oxide	7631-86-9		0.043	mg	27958	287
				supplier	alloy & coating	Copper(Cu)	7440-50-8		67.569	mg	973518	450460
Leadframe	M-004 Copper and its alloys	69.407	mg	supplier	alloy & coating	Iron(Fe)	7439-89-6		1.589	mg	22894	10593
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.096	mg	1383	640
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.083	mg	1196	553
				supplier	alloy & coating	Silver (Ag)	7440-22-4		0.070	mg	1009	467
Soft solder	Solder	1.852	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	1.769	mg	955184	11793
				supplier	solder	Silver(Ag)	7440-22-4		0.046	mg	24838	307
				supplier	solder	Tin(Sn)	7440-31-5		0.037	mg	19978	247
Bonding wires	M-004 Copper and its alloys	0.396	mg	supplier	wire	Copper(Cu)	7440-50-8		0.396	mg	1000000	2640
				supplier	wire	Copper(Cu)	7440-50-8		0.298	mg	1000000	1987
Bonding wires 2	M-004 Copper and its alloys	0.298	mg	supplier	wire	Copper(Cu)	7440-50-8		0.298	mg	1000000	1987
				supplier	wire	Copper(Cu)	7440-50-8		0.298	mg	1000000	1987
				supplier	wire	Copper(Cu)	7440-50-8		0.298	mg	1000000	1987
				supplier	wire	Copper(Cu)	7440-50-8		0.298	mg	1000000	1987
				supplier	wire	Copper(Cu)	7440-50-8		0.298	mg	1000000	1987
Encapsulation	M-011 Other inorganic materials	75.213	mg	supplier	mold compound	Silica vitreous	60676-86-0		61.261	mg	814500	408407
				supplier	mold compound	Silicon oxide	7631-86-9		5.641	mg	75000	37607
				supplier	mold compound	Epoxy type resin	proprietary		5.641	mg	75000	37607
				supplier	mold compound	Phenol type resin	proprietary		2.256	mg	29996	15040
				supplier	mold compound	Carbon black	1333-86-4		0.414	mg	5504	2760
connections coating	Solder	1.296	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.296	mg	1000000	8640