



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 *	2020-01-27
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 *	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
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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
VN7050AJTR	S0M5*XV10AES	A	3068	2020-01-27
	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	Tin (Sn), matte, annealed	Copper Alloy	DM00398830	

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 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 2017/2096 _November 2017	
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	0.01	Die	93
Lead	1.34	Soft solder	8960

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				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	1.34	Soft solder	8960
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	1.34	Soft solder	955224

Material Composition Declaration :						Mfr Item Name	S0M5* XV10AES									
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	2.494	mg	supplier	die	Silicon(Si)	7440-21-3		2.300	mg	922213	15333				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.034	mg	13633	227				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.016	mg	6415	107				
				supplier	metallisation	Gold(Au)	7440-57-5		0.003	mg	1203	20				
				supplier	metallisation	Nicke(Ni)	7440-02-0		0.014	mg	5613	93				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.007	mg	2807	47				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.054	mg	21652	360				
				supplier	metallisation	Vanadium(V)	7440-62-2		0.001	mg	401	7				
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.006	mg	2406	40				
				supplier	passivation	Silicon oxide	7631-86-9		0.031	mg	12430	207				
				supplier	polymer coating	PIX1 Gamma-butyrolactone	96-48-0		0.028	mg	11227	187				
				Leadframe	M-004 Copper and its alloys	69.407	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		67.569	mg	973519	450460
								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	1382	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	1.407	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	1.344	mg	955224	8960				
				supplier	solder	Silver(Ag)	7440-22-4		0.035	mg	24876	233				
				supplier	solder	Tin(Sn)	7440-31-5		0.028	mg	19900	187				
Bonding wires	M-004 Copper and its alloys	0.357	mg	supplier	wire	Copper(Cu)	7440-50-8		0.357	mg	1000000	2380				
Bonding wires 2	M-004 Copper and its alloys	0.298	mg	supplier	wire	Copper(Cu)	7440-50-8		0.298	mg	1000000	1987				
Encapsulation	M-011 Other inorganic materials	74.741	mg	supplier	mold compound	Silica vitreous	60676-86-0		64.576	mg	863997	430507				
				supplier	mold compound	Epoxy type resin	25068-38-6		5.606	mg	75006	37373				
				supplier	mold compound	Phenol type resin	29690-82-2		3.737	mg	49999	24913				
				supplier	mold compound	Mercaptopropyl trimethoxysilane	4420-74-0		0.374	mg	5004	2493				
				supplier	mold compound	Quartz	14808-60-7		0.224	mg	2997	1493				
				supplier	mold compound	Carbon black	1333-86-4		0.224	mg	2997	1493				
Connections coating	Solder	1.296	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.296	mg	1000000	8640				