



Materials Declaration Form

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

*: Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-08-10
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Authorized Representative *	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
VN7E010AJ	S0M5*XV70AAT	A	3068	2018-08-10
Amount	UoM	Unit type	ST ECOPACK Grade	
150.00	mg	Each	ECOPACK2	
	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		
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	3.9-4.9-1.55	16	gull wing	
Comment	Package: POWERSO 16 LEADS EP DIP DOWNSET - MDF valid for CPs: VN7E010AJTR and VN7E010AJ			

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 25th May 2018			
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	0.03	Die	173
Lead	3.77	Soft solder	25113

QueryList : REACH-27th June 2018				
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	3.77	soft solder	25113
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	3.77	soft solder	954880

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	S0M5*KV70AAT					
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	1.368	mg	supplier	die	Silicon (Si)	7440-21-3		1.094	mg	799708	7293
				supplier	metallization	Aluminium (Al)	7429-90-5		0.083	mg	60673	553
				supplier	metallization	Copper (Cu)	7440-50-8		0.030	mg	21930	200
				supplier	metallization	Titanium (Ti)	7440-32-6		0.007	mg	5115	47
				supplier	Passivation	Silicon Nitride	12033-89-5		0.011	mg	8041	73
				supplier	Passivation	Silicon Oxide	7631-86-9		0.048	mg	35088	320
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	1462	13
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.026	mg	19006	173
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.002	mg	1462	13
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.011	mg	8041	73
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.054	mg	39474	360
				Leadframe	M-004 Copper and its alloys	70.071	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						0.069	mg	985	460
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.021	mg	300	142
supplier	metallization	Silver (Ag)	7440-22-4						0.731	mg	10432	4873
supplier	metallization	Lead (Pb)	7439-92-1					7a-Lead in high me	3.767	mg	954880	25113
Soft solder	Solder	3.945	mg	JIG - R	solder	Silver (Ag)	7440-22-4		0.099	mg	25095	660
				supplier	solder	Tin (Sn)	7440-31-5		0.079	mg	20025	527
				supplier	solder	Copper (Cu)	7440-50-8		0.369	mg	1000000	2460
Bonding wires	M-011 Other inorganic materials	0.369	mg	supplier	wire	Copper (Cu)	7440-50-8		0.369	mg	1000000	2460
				supplier	die	Silica, vitreous	60676-86-0		63.028	mg	863989	420187
				supplier	die	Epoxy Resin	25068-38-6		5.471	mg	74997	36473
				supplier	die	Phenol Resin	29690-82-2		3.648	mg	50007	24320
				supplier	die	3-Mercaptopropyl trimethoxysilane	4420-74-0		0.365	mg	5003	2433
Encapsulation	M-011 Other inorganic materials	72.950	mg	supplier	die	Quartz	14808-60-7		0.219	mg	3002	1460
				supplier	die	Carbon black	1333-86-4		0.219	mg	3002	1460
Connections coating	Solder	1.297	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.297	mg	1000000	8647