



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Sectionals *	A-D * : Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-08-29
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Floriana SAN BIAGIO	Representative Title	AMS 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

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
	TM8C*VN11W3A	B	MU1A	2018-08-29
Amount	UoM	Unit type	ST ECOPACK Grade	
1929.67	mg	Each	ECOPACK® 1	
	Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices		

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	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	15.9x11.x3.5	36	gull wing	
Comment	8C PowerSO 36 .430 BODY WIDTH; MDF valid for VN808CM-32-E			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 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 : 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				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TM8C*VN1W3A					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	15.143	mg	supplier	die	Silicon (Si)	7440-21-3		14.806	mg	977745	7673
				supplier	Passivation	Silicon Nitride	12033-89-5		0.105	mg	6934	54
				supplier	Passivation	Silicon Oxide	7631-86-9		0.102	mg	6736	53
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.007	mg	462	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.022	mg	1453	11
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.101	mg	6670	52
Leadframe	Copper & its alloys	1247.708	mg	supplier	alloy	Copper (Cu)	7440-50-8		1232.966	mg	988185	638952
				supplier	alloy	Iron (Fe)	7439-89-6		0.617	mg	495	320
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.988	mg	792	512
				supplier	metallization	Silver (Ag)	7440-22-4		13.137	mg	10529	6808
Soft solder	Other inorganic materials	12.800	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	12.480	mg	975000	6467
				supplier	solder	Silver (Ag)	7440-22-4		0.192	mg	15000	99
				supplier	solder	Tin (Sn)	7440-31-5		0.128	mg	10000	66
Bonding wires	Precious metals	1.802	mg	supplier	wire	Gold (Au)	7440-57-5		1.802	mg	1000000	934
Encapsulation	Other Organic Materials	646.271	mg	supplier	mold compound	Silica, vitreous	60676-86-0		515.078	mg	797000	266925
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		51.702	mg	80000	26793
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		16.157	mg	25000	8373
				supplier	mold compound	Phenol resin	9003-35-4		38.776	mg	60000	20095
				supplier	mold compound	Antimony Trioxide	1309-64-4		9.694	mg	15000	5024
				JIG - I	mold compound	Brominated Epoxy Resin	68541-56-0		12.925	mg	19999	6698
connections coating	Solder	5.946	mg	supplier	mold compound	Carbon black	1333-86-4		1.939	mg	3000	1005
				supplier	solder alloy	Tin (Sn)	7440-31-5		5.946	mg	1000000	3081