



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-11-15
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 *	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
	CC0T*VP10AB3	A	BO2A	2018-11-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	113	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	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.9x3.9x1.55	12	gull wing	
Comment	0T POWERSO-12; MDF valid for IPS161H			

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 : 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	3.84	adhesive	33938

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CCOT*VP10AB3				6000000.0	1000011.0
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	5.089	mg	supplier	die	Silicon (Si)	7440-21-3		4.809	mg	944979	42558
				supplier	metallization	Aluminium (Al)	7429-90-5		0.030	mg	5895	265
				supplier	metallization	Copper (Cu)	7440-50-8		0.040	mg	7860	354
				supplier	metallization	Titanium (Ti)	7440-32-6		0.125	mg	24563	1106
				supplier	Passivation	Silicon Nitride	12033-89-5		0.023	mg	4520	204
				supplier	Passivation	Silicon Oxide	7631-86-9		0.062	mg	12183	549
Leadframe	M-004 Copper and its alloys	67.200	mg	supplier	alloy	Copper (Cu)	7440-50-8		66.380	mg	987798	587434
				supplier	alloy	Iron (Fe)	7439-89-6		0.031	mg	461	274
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.056	mg	833	496
				supplier	metallization	Silver (Ag)	7440-22-4		0.733	mg	10908	6487
				supplier	metallization	Silver (Ag)	7440-22-4		0.733	mg	10908	6487
Soft solder	Solder	4.146	mg	SVHC	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	3.835	mg	924988	33938
				supplier	solder	Tin (Sn)	7440-31-5		0.207	mg	49928	1832
				supplier	solder	Silver (Ag)	7440-22-4		0.104	mg	25084	920
Bonding wires	M-008 Precious metals	0.343	mg	supplier	wire	Gold (Au)	7440-57-5		0.343	mg	1000000	3035
Encapsulation	M-015 Other organic materials	35.251	mg	supplier	mold compound	Silica, vitreous	60676-86-0		29.011	mg	822984	256735
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		2.468	mg	70012	21841
				supplier	mold compound	Phenol resin	9003-35-4		1.410	mg	39999	12478
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		1.058	mg	30013	9363
				supplier	mold compound	Antimony Trioxide	1309-64-4		0.423	mg	12000	3743
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		0.705	mg	19999	6239
				supplier	mold compound	Carbon black	1333-86-4		0.176	mg	4993	1558
connections coating	Solder	0.972	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.972	mg	1000000	8602