



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 *	2018-05-10
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 *	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	<p>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.</p>

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
	CC0T*VP08AE3	A	BO2A	2018-05-10
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		
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 IPS160H			

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 : REACH-15th January 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
-	-			0
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				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
-	-	0.00		

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CCOT* VP08AE3				6000000.0	1000000.0				
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	5.131	mg	supplier	die	Silicon (Si)	7440-21-3		4.809	mg	937244	42558				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.030	mg	5847	265				
				supplier	metallization	Copper (Cu)	7440-50-8		0.040	mg	7796	354				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.125	mg	24362	1106				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.023	mg	4483	204				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.062	mg	12083	549				
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	390	18				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.007	mg	1364	62				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.033	mg	6431	292				
				supplier	alloy	Copper (Cu)	7440-50-8		66.377	mg	987797	587407				
Leadframe	M-004 Copper and its alloys	67.197	mg	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	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.835	mg	924988	33938				
Soft solder	Solder	4.146	mg	JIG - R	solder	Tin (Sn)	7440-31-5		0.207	mg	49928	1832				
				supplier	solder	Silver (Ag)	7440-22-4		0.104	mg	25084	920				
				supplier	wire	Gold (Au)	7440-57-5		0.343	mg	1000000	3035				
Bonding wires	M-008 Precious metals	0.343	mg	supplier	wire	Gold (Au)	7440-57-5		0.343	mg	1000000	3035				
				supplier	mold compound	Silica, vitreous	60676-86-0		28.979	mg	823010	256451				
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		2.465	mg	70007	21814				
				supplier	mold compound	Phenol resin	9003-35-4		1.408	mg	39988	12460				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		1.056	mg	29991	9345				
				supplier	mold compound	Antimony Trioxide	1309-64-4		0.423	mg	12013	3743				
Encapsulation	M-011 Other inorganic materials	35.211	mg	supplier	mold compound	Brominated Epoxy Resin	40039-93-8		0.704	mg	19994	6230				
				supplier	mold compound	Carbon black	1333-86-4		0.176	mg	4998	1558				
				supplier	mold compound	Tin (Sn)	7440-31-5		0.972	mg	1000000	8602				
				connections coating	Solder	0.972	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.972	mg	1000000	8602