



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-05-18
Company Unique ID	NL 008751171801		
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 *	Giovanni Giacopello	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
SM2T3V3A	8HRO*TWUV33B	A	9941	2018-05-18
Amount	UoM	Unit type	ST ECOPACK Grade	
15.5	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
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	1.9 - 1.9 - 1	2	gull wing	
Comment	Package: DO-216AA			

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 : California Prop65 list, dated 15th December 2017			
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	581
Lead	0.74	Soft solder	47677

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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	8HRO*TWUV33B					
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	0.703	mg	supplier	die	Silicon (Si)	7440-21-3		0.677	mg	963016	43677
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	7111	323
				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	5690	258
				supplier	passivation	Nickel (Ni)	7440-02-0		0.004	mg	5690	258
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1422	65
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1422	65
				supplier	Passivation	Silicon Oxide	7631-86-9		0.005	mg	7112	323
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1425	65
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.005	mg	7112	323
				supplier	alloy	Copper (Cu)	7440-50-8		6.167	mg	999514	397871
Leadframe	M-004 Copper and its alloys	6.170	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.001	mg	162	65
				supplier	alloy	Phosphorus (P)	7723-14-0		0.002	mg	324	129
				supplier	alloy	Lead (Pb)	7439-92-1	7a-Lead in high mel	0.739	mg	924906	47677
Soft solder	Solder	0.799	mg	supplier	solder	Tin (Sn)	7440-31-5		0.040	mg	50063	2581
				supplier	solder	Silver (Ag)	7440-22-4		0.020	mg	25031	1290
				supplier	clip	Copper (Cu)	7440-50-8		1.016	mg	1000000	65548
Clip	M-004 Copper and its alloys	1.016	mg	supplier	mold compound	Silica , amorphous,fused	60676-86-0		5.513	mg	828773	355677
				supplier	mold compound	Epoxy resin proprietaire, resin unknown	29690-82-2		0.898	mg	134997	57935
				supplier	mold compound	Benzophenone teracarboxylic anhydride	2421-28-5		0.037	mg	5562	2387
				supplier	mold compound	Silica, quartz	14808-60-7		0.167	mg	25106	10774
Encapsulation	M-011 Other inorganic materials	6.652	mg	supplier	mold compound	Carbon black	1333-86-4		0.037	mg	5562	2387
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.160	mg	1000000	10323
connections coating	Solder	0.160	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.160	mg	1000000	10323