



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 *	2018-06-21
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 *	Giovanni Giapello	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

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
STGWA30M65DF2	TDWT*KLF5U5F	A	998G	2018-06-21
	Amount	UoM	Unit type	ST ECOPACK Grade
	6180.00	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
Not Applicable	Not Applicable	Not Applicable		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	21 - 15.8 - 5	3	Through-hole	
Comment	TO-247 LONG LEADS			

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			TRUE	
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)			FALSE	
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions			FALSE	
Exemption Id.	Description			

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017				
Query			Response	
1 - Product(s) meets EU ELV requirements without any exemptions			TRUE	
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)			FALSE	
Exemption Id.	Description			

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	1.22	Die - Leadframe	198	

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	TDWT*KLFSUSF					
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	7.584	mg	supplier	die	Silicon (Si)	7440-21-3		6.914	mg	911656	1119
				supplier	metallization	Aluminium (Al)	7429-90-5		0.339	mg	44699	55
				supplier	Passivation	Silicon Nitride	12033-89-5		0.051	mg	6725	8
				supplier	Passivation	Silicon Oxide	7631-86-9		0.146	mg	19251	24
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.008	mg	1055	1
				supplier	back side metallization	Gold (Au)	7440-57-5		0.023	mg	3033	4
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.098	mg	12922	16
Leadframe	M-004 Copper and its alloys	4049.131	mg	supplier	back side metallization	Vanadium (V)	7440-62-2		0.005	mg	659	1
				supplier	alloy	Copper (Cu)	7440-50-8		4042.745	mg	998423	654166
				supplier	alloy	Iron (Fe)	7439-89-6		4.048	mg	1000	654
				supplier	alloy	Phosphorus metal	7723-14-0		1.215	mg	300	197
				supplier	metallization	Nickel (Ni)	7440-02-0		1.123	mg	277	182
Soft solder	Solder	3.798	mg	supplier	solder	Tin(Sn)	7440-31-5		2.469	mg	650079	400
				supplier	solder	Silver(Ag)	7440-22-4		0.949	mg	249868	154
				supplier	solder	Antimony	7440-36-0		0.380	mg	100053	61
				supplier	wire	Aluminium (Al)	7429-90-5		4.954	mg	1000000	802
Encapsulation	M-011 Other inorganic materials	2075.796	mg	supplier	mold compound	Epoxy resin	29690-82-2		145.305	mg	70000	23512
				supplier	mold compound	Phenol resin	9003-35-4		51.895	mg	25000	8397
				supplier	mold compound	Silica	60676-86-0		1556.850	mg	750001	251917
				supplier	mold compound	Metal hydroxide	21645-51-2		311.368	mg	149999	50283
				supplier	mold compound	Carbon black	1333-86-4		10.378	mg	5000	1679
connections coating	Solder	38.737	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		38.737	mg	1000000	6268