



Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

* : Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2019-11-20
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	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
STGW100H65FB2-4	TSTM*JWF7R5F	A	998G	2019-11-20
	Amount	UoM	Unit type	ST ECOPACK Grade
	4430.00	mg	Each	ECOPACK2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NA	NA	NA		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	15.75-20.15-5.15	3	Through hole	
Comment	TO247-4			

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 13th September 2019			
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	11.44	Die - Leadframe	2582

QueryList : REACH-16th July 2019				
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
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

Material Composition Declaration :						Mfr Item Name	TSTM*JWF7R5F					
note : Substance present with less 0.001mg will not be declared in this document												
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	5.841	mg	supplier	die	Silicon (Si)	7440-21-3		4.983	mg	853107	1125
				supplier	metallization	Aluminium (Al)	7429-90-5		0.396	mg	67797	89
				supplier	Passivation	Silicon Nitride	12033-89-5		0.094	mg	16093	21
				supplier	Passivation	Silicon Oxide	7631-86-9		0.138	mg	23625	31
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.053	mg	9074	12
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.013	mg	2226	3
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.117	mg	20031	26
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.009	mg	1541	2
Leadframe	Copper & its alloys	2836.515	mg	supplier	alloy	Copper (Cu)	7440-50-8		2821.521	mg	994714	636912
				supplier	alloy	Iron (Fe)	7439-89-6		1.300	mg	458	293
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.373	mg	837	536
				supplier	metallization	Nickel (Ni)	7440-02-0		11.321	mg	3991	2556
Soft solder	Solder	17.357	mg	supplier	solder	Tin (Sn)	7440-31-5		11.282	mg	649997	2547
				supplier	solder	Silver (Ag)	7440-22-4		4.339	mg	249986	979
				supplier	solder	Antimony (Sb)	7440-36-0		1.736	mg	100017	392
Bonding wires	Other inorganic materials	9.645	mg	supplier	wire	Aluminium (Al)	7429-90-5		9.645	mg	1000000	2177
Encapsulation	Other Organic Materials	1551.346	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1163.509	mg	750000	262643
				supplier	mold compound	epoxy resin	29690-82-2		108.594	mg	70000	24513
				supplier	mold compound	phenol resin	9003-35-4		38.784	mg	25000	8755
				supplier	mold compound	metal hydroxide	21645-51-2		232.702	mg	150000	52529
				supplier	mold compound	Carbon black	1333-86-4		7.757	mg	5000	1751
Connections coating	Solder	9.296	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		9.296	mg	1000000	2099