



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-08-17
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Authorized Representative *	Rossana Bonaccorso
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
STS4DNF60L	C2O7*FL6CB3F	A	998G	2018-08-17
Amount	UoM	Unit type	ST ECOPACK Grade	
80.00	mg	Each	ECOPACK2	
	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		
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
QFN	4.9-6-1.75	8	GULL WING
Comment	SO 08 .15 JEDEC		

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	0.02	Die	213

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				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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	C207*FL6CB3F					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	M-011 Other inorganic materials	5.797	mg	supplier	die	Silicon (Si)	7440-21-3		5.611	mg	967909	70125
				supplier	metallization	Aluminium (Al)	7429-90-5		0.109	mg	18806	1363
				supplier	Passivation	Silicon Oxide	7631-86-9		0.051	mg	8799	638
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	172	13
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.017	mg	2933	213
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	173	13
Leadframe	M-004 Copper and its alloys	29.911	mg	supplier	back side metallization	Silver (Ag)	7440-22-4		0.007	mg	1208	88
				supplier	alloy	Copper (Cu)	7440-50-8		29.710	mg	993280	371375
				supplier	alloy	Iron (Fe)	7439-89-6		0.030	mg	1003	375
Die attach		1.074	mg	supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.009	mg	301	113
				supplier	metallization	Silver (Ag)	7440-22-4		0.162	mg	5416	2025
				supplier	glue	Silver (Ag)	7440-22-4		0.926	mg	862197	11575
				supplier	glue	Methacrylate	Proprietary		0.079	mg	73557	988
				supplier	glue	Bismaleimide resin	35325-39-4		0.064	mg	59590	800
				supplier	glue	Substituted silane	Proprietary		0.005	mg	4656	63
Bonding wires	M-011 Other inorganic materials	0.326	mg	supplier	wire	Copper (Cu)	7440-50-8		0.326	mg	1000000	4075
Encapsulation	M-011 Other inorganic materials	36.844	mg	supplier	mold compound	Silica, vitreous	60676-86-0		31.908	mg	866030	398850
				supplier	mold compound	Epoxy Resin	25068-38-6		2.763	mg	74992	34538
				supplier	mold compound	Phenol Resin	29690-82-2		1.842	mg	49995	23025
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.147	mg	3990	1838
				supplier	mold compound	Carbon black	1333-86-4		0.184	mg	4993	2307
Connections coating	Solder	6.048	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		6.048	mg	1000000	75600