



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 *	2018-04-24
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
		A	3068	2018-04-24
Amount	UoM	Unit type	ST ECOPACK Grade	
1860	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			
NA	NA	NA	 life.augmented		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy			Comment
NA	Tin (Sn), matte	Copper Alloy			

Package Designator	Size	Nbr of instances	Shape	
SIP	10.2-16.25-4.5	2	Through-hole	
Comment	Package: DO 220 - BOM: 1F031651 - MDF valid for Rls: HSDK*W01G101 - HSDK*W19G201 - HSDK*W20G201 - HSDK*W22G101 - HSDK*W24G101 - HSDK*W41G201 - HSDK*W42G101 - HSDK*W50A011 - HSDK*W57D111 - HSDK*W60D111 - HSDK*W65A011 - HSDK*W66A011 - HSDK*W75G101 - JSDK*W01G101			

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	0.12	Die - Leadframe	62
Lead	3.44	Soft solder	1852

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
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	HSDK*W01G101					
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	5.057	mg	supplier	die	Silicon (Si)	7440-21-3		4.930	mg	974886	2651
				supplier	metallization	Aluminium (Al)	7429-90-5		0.043	mg	8503	23
				supplier	Passivation	Silicon Oxide	7631-86-9		0.014	mg	2768	8
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	396	1
				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	989	3
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.024	mg	4746	13
				supplier	polymer die coating	Propbimide	Proprietary		0.039	mg	7712	21
Leadframe	M-004 Copper and its alloys	1184.409	mg	supplier	alloy	Copper (Cu)	7440-50-8		1182.771	mg	998617	635898
				supplier	alloy	Iron (Fe)	7439-89-6		1.184	mg	1000	635
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.355	mg	300	191
				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	77	49
				supplier	metallization	Phosphorus (P)	7723-14-0		0.007	mg	6	4
Soft solder	Solder	3.606	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	3.444	mg	955075	1852
				supplier	solder	Silver (Ag)	7440-22-4		0.090	mg	24958	48
				supplier	solder	Tin (Sn)	7440-31-5		0.072	mg	19967	39
Bonding wires	M-011 Other inorganic materials	2.463	mg	supplier	wire	Aluminium (Al)	7429-90-5		2.463	mg	1000000	1324
Encapsulation	M-011 Other inorganic materials	660.224	mg	supplier	mold compound	Silica, vitreous	60676-86-0		574.395	mg	870000	308815
				supplier	mold compound	Epoxy resin	25068-38-6		66.022	mg	99999	35496
				supplier	mold compound	Phenol resin	29690-82-2		16.506	mg	25001	8874
				supplier	mold compound	Carbon Black	1333-86-4		3.301	mg	5000	1775
Connections coating	Solder	4.241	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.241	mg	1000000	2280