



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 *	2018-06-01
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Authorized Representative *	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
STD80N10F7	XMDP*OD0ERS2	A	3068	2018-06-01
Amount	UoM	Unit type	ST ECOPACK Grade	
330.00	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
SIP	6.5-6.1-2.3	3	GULL WING
Comment	TO 252 DPAK		

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 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	0.14	Die - Leadframe	436
Lead	4.74	Soft solder	14352

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	XMDP*ODDER52					
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	3.950	mg	supplier	die	Silicon (Si)	7440-21-3		3.728	mg	943797	11297
				supplier	metallization	Aluminium (Al)	7429-90-5		0.086	mg	21772	261
				supplier	metallization	Nickel (Ni)	7440-02-0		0.021	mg	5316	64
				supplier	metallization	Silver (Ag)	7440-22-4		0.013	mg	3293	39
				supplier	metallization	Titanium (Ti)	7440-32-6		0.010	mg	2532	30
				supplier	metallization	Tungsten (W)	7440-33-7		0.022	mg	5570	67
				supplier	Passivation	Silicon Oxide	7631-86-9		0.021	mg	5316	63
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	759	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.031	mg	7848	94
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.002	mg	506	6
Leadframe	M-004 Copper and its alloys	165.043	mg	supplier	back side metallization	Silver (Ag)	7440-22-4		0.013	mg	3291	39
				supplier	alloy	Copper (Cu)	7440-50-8		164.729	mg	998097	499179
				supplier	alloy	Iron (Fe)	7439-89-6		0.165	mg	1000	500
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.050	mg	303	152
				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	557	279
				supplier	metallization	Phosphorus (P)	7723-14-0		0.007	mg	43	21
Soft solder	Solder	4.959	mg	JG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	4.736	mg	955031	14352
				supplier	solder	Silver (Ag)	7440-22-4		0.124	mg	25005	376
				supplier	solder	Tin (Sn)	7440-31-5		0.099	mg	19964	300
Bonding wires	M-011 Other inorganic materials	1.009	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.005	mg	996036	3045
				supplier	wire	Magnesium (Mg)	7439-95-4		0.004	mg	3964	12
Encapsulation	M-011 Other inorganic materials	153.994	mg	supplier	mold compound	Silica, vitreous	60676-86-0		134.744	mg	874995	408315
				supplier	mold compound	Tetramethyl-biphenyl-diyl-bis oxymethylene-bis	EC 413-900-7		6.160	mg	40002	18667
				supplier	mold compound	Epoxy Resin	25068-38-6		4.620	mg	30001	14000
				supplier	mold compound	phenol resin	29690-82-2		7.700	mg	50002	23333
Connections coating	Solder	1.045	mg	supplier	mold compound	Carbon black	1333-86-4		0.770	mg	5000	2333
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167