



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 *	2018-05-14
Contact Name *	Refer to Supplier Comment section	Contact Email *	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
STP80N6F6	R1DZ*7D6GAC2	A	3068	2018-05-14
Amount	UoM	Unit type	ST ECOPACK Grade	
1900	mg	Each	ECOPACK1	
Comment		ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices		

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	10-9.1-4.5	3	THROUGH HOLE
Comment	TO 220 AB NON ISOL		

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	0.54	Die - Leadframe	285
Lead	6.77	Soft solder	3563
Antimony trioxide	10.59	Mold compound	5574

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	RID2*7D6GAC2					
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	5.690	mg	supplier	die	Silicon (Si)	7440-21-3		5.416	mg	951845	2851
				supplier	metallization	Aluminium (Al)	7429-90-5		0.071	mg	12478	37
				supplier	metallization	Titanium (Ti)	7440-32-6		0.019	mg	3339	10
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	352	1
				supplier	Passivation	Silicon Oxide	7631-86-9		0.108	mg	18981	57
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.004	mg	703	2
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.052	mg	9139	27
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.018	mg	3163	11
Leadframe	M-004 Copper and its alloys	1253.534	mg	supplier	alloy	Copper (Cu)	7440-50-8		1251.375	mg	998278	658618
				supplier	alloy	Iron (Fe)	7439-89-6		1.253	mg	1000	659
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.376	mg	300	198
				supplier	metallization	Nickel (Ni)	7440-02-0		0.490	mg	390	258
				supplier	metallization	Phosphorus (P)	7723-14-0		0.040	mg	32	21
Soft solder	Solder	7.088	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	6.769	mg	954994	3563
				supplier	solder	Silver (Ag)	7440-22-4		0.177	mg	24972	93
				supplier	solder	Tin (Sn)	7440-31-5		0.142	mg	20034	75
				supplier	wire	Aluminium (Al)	7429-90-5		0.146	mg	993197	77
Bonding wires	M-011 Other inorganic materials	0.147	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	6803	1
Bonding Ribbons	M-009 Other non-ferrous metals and	4.041	mg	supplier	Ribbon	Aluminium (Al)	7429-90-5		4.041	mg	1000000	2127
Encapsulation	M-011 Other inorganic materials	623.138	mg	supplier	mold compound	Silica vitreous	60676-86-0		486.047	mg	779999	255814
				supplier	mold compound	Bisphenol F type epoxy resin	9003-36-5		59.198	mg	95000	31157
				supplier	mold compound	Phenol resin	9003-35-4		52.344	mg	84001	27549
				supplier	mold compound	Antimony Trioxide	1309-64-4		10.593	mg	16999	5575
				supplier	mold compound	Brominated flame retardant	Proprietary		9.347	mg	15000	4919
				supplier	mold compound	Silica Cristobalite	14464-46-1		3.116	mg	5000	1640
				supplier	mold compound	Carbon Black	1333-86-4		2.493	mg	4001	1312
Connections coating	Solder	6.362	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348