



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-05-15
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
STP30N10F7	T2DZ*OD0BR52	A	3068	2018-05-15
Amount	UoM	Unit type	ST ECOPACK Grade	
1900	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
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	0.51	Die - Leadframe	271
Lead	2.25	Soft solder	1183

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	TZDZ*OD08R52					
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	1.790	mg	supplier	die	Silicon (Si)	7440-21-3		1.689	mg	943575	889
				supplier	metallization	Aluminium (Al)	7429-90-5		0.039	mg	21788	21
				supplier	metallization	Nickel (Ni)	7440-02-0		0.010	mg	5587	5
				supplier	metallization	Silver (Ag)	7440-22-4		0.006	mg	3352	3
				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	2233	2
				supplier	metallization	Tungsten (W)	7440-33-7		0.010	mg	5587	5
				supplier	Passivation	Silicon Oxide	7631-86-9		0.010	mg	5587	5
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	559	1
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.014	mg	7821	7
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	559	1
Leadframe	M-004 Copper and its alloys	1253.535	mg	supplier	back side metallization	Silver (Ag)	7440-22-4		0.006	mg	3352	3
				supplier	alloy	Copper (Cu)	7440-50-8		1251.376	mg	998278	658619
				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
Soft solder	Solder	2.353	mg	supplier	metallization	Phosphorus (P)	7723-14-0		0.040	mg	32	22
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	2.247	mg	954951	1183
				supplier	solder	Silver (Ag)	7440-22-4		0.059	mg	25074	31
				supplier	solder	Tin (Sn)	7440-31-5		0.047	mg	19975	25
Bonding wires	M-011 Other inorganic materials	1.471	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.464	mg	995241	771
				supplier	wire	Magnesium (Mg)	7439-95-4		0.007	mg	4759	4
Encapsulation	M-011 Other inorganic materials	634.489	mg	supplier	mold compound	Silica, vitreous	60676-86-0		552.006	mg	870001	290529
				supplier	mold compound	Epoxy resin	25068-38-6		63.449	mg	100000	33394
				supplier	mold compound	Phenol resin	29690-82-2		15.862	mg	25000	8348
				supplier	mold compound	Carbon Black	1333-86-4		3.172	mg	4999	1669
Connections coating	Solder	6.362	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348