



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-01-02
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	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
STP28N60M2	T2DZ*MQ66B62	A	3068	2017-01-02
Amount	UoM	Unit type	ST ECOPACK Grade	
1900.00	mg	Each	ECOPACK2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	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)

Query : California Prop65 list, dated 5th August 2016			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.58	Die / Leadframe	307
Lead	12.25	Soft solder	6449

QueryList : REACH-20th June 2016				
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	T2D2*MQ66862					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	14.376	mg	supplier	die	Silicon (Si)	7440-21-3		13.806	mg	960351	7266
				supplier	metallization	Aluminium (Al)	7429-90-5		0.274	mg	19060	144
				supplier	Passivation	Silicon Nitride	12033-89-5		0.065	mg	4521	34
				supplier	Passivation	Silicon Oxide	7631-86-9		0.097	mg	6747	51
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.007	mg	487	4
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.094	mg	6539	49
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.033	mg	2295	17
				supplier	alloy	Copper (Cu)	7440-50-8		1251.376	mg	998278	658619
Leadframe	Copper & its alloys	1253.535	mg	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)	12185-10-3		0.040	mg	32	21
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	12.254	mg	954956	6449
Soft solder	Solder	12.832	mg	JIG - R	solder	Silver (Ag)	7440-22-4		0.321	mg	25016	169
				supplier	solder	Tin (Sn)	7440-31-5		0.257	mg	20028	135
				supplier	wire	Aluminium (Al)	7429-90-5		0.879	mg	996599	463
Bonding wires	Other inorganic materials	0.882	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.003	mg	3401	2
				supplier	mold compound	Silica, vitreous	60676-86-0		532.452	mg	870001	280238
Encapsulation	Other Organic Materials	612.013	mg	supplier	mold compound	Epoxy resin	25068-38-6		61.201	mg	100000	32211
				supplier	mold compound	Phenol resin	29690-82-2		15.300	mg	24999	8053
				supplier	mold compound	Carbon Black	1333-86-4		3.060	mg	5000	1611
Connections coating	Solder	6.362	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348