



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 *	2017-07-24
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giuseppe Vitali Palma	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 omprehensive 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
STF13NM60ND	TSFP*F263B62	A	3068	2017-07-24
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
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	10.2-16.15-4.5	3	Through-hole	
Comment	TO 220 ISO FULL PACK IN LINE			

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 27th January 2017			
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	0.73	Die back side metal - Leadframe metal	382
Lead	6.89	Soft solder	3626

QueryList : REACH-12th January 2017				
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	TSFP*F263B62					
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	7.864	mg	supplier	die	Silicon (Si)	7440-21-3		7.551	mg	960198	3974
				supplier	metallization	Aluminium (Al)	7429-90-5		0.150	mg	19074	79
				supplier	Passivation	Silicon Nitride	12033-89-5		0.036	mg	4578	19
				supplier	Passivation	Silicon Oxide	7631-86-9		0.053	mg	6740	28
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.004	mg	509	2
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.052	mg	6612	27
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.018	mg	2289	9
				supplier	alloy	Copper (Cu)	7440-50-8		604.469	mg	997498	318142
				supplier	alloy	Iron (Fe)	7439-89-6		0.605	mg	998	318
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.182	mg	301	96
Leadframe	Copper & its alloys	605.985	mg	supplier	metallization	Nickel (Ni)	7440-02-0		0.674	mg	1112	355
				supplier	metallization	Phosphorus (P)	12185-10-3		0.055	mg	91	29
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	6.889	mg	955081	3626
				supplier	solder	Silver (Ag)	7440-22-4		0.180	mg	24955	95
				supplier	solder	Tin (Sn)	7440-31-5		0.144	mg	19964	76
				supplier	metallization	Aluminium (Al)	7429-90-5		0.928	mg	995708	488
Soft solder	Solder	7.213	mg	JIG - R	solder	Magnesium (Mg)	7439-95-4		0.004	mg	4292	2
				supplier	alloy	Quartz	14808-60-7		890.498	mg	700000	468684
				supplier	alloy	Silica, vitreous	60676-86-0		95.410	mg	75000	50216
				supplier	metallization	Epoxy resin	25068-38-6		178.100	mg	140000	93737
				supplier	metallization	phenol resin	29690-82-2		89.050	mg	70000	46868
Bonding wires	Other inorganic materials	0.932	mg	supplier	wire	metal hydroxide	Proprietary		12.721	mg	10000	6695
				supplier	wire	carbon black	1333-86-4		6.361	mg	5000	3348
				supplier	alloy	Tin (Sn)	7440-31-5		5.866	mg	1000000	3087
				supplier	alloy	Aluminium (Al)	7429-90-5		0.928	mg	995708	488
Encapsulation	Other Organic Materials	1272.140	mg	supplier	mold compound	Quartz	14808-60-7		890.498	mg	700000	468684
				supplier	mold compound	Silica, vitreous	60676-86-0		95.410	mg	75000	50216
				supplier	mold compound	Epoxy resin	25068-38-6		178.100	mg	140000	93737
				supplier	mold compound	phenol resin	29690-82-2		89.050	mg	70000	46868
				supplier	mold compound	metal hydroxide	Proprietary		12.721	mg	10000	6695
				supplier	mold compound	carbon black	1333-86-4		6.361	mg	5000	3348
Connections coating	Solder	5.866	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.866	mg	1000000	3087