



## Materials Declaration Form

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

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-05-31
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giuseppe Vitali Palma	<b>Representative Title</b>	ADG MD Champion
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**


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<b>Legal Statement</b>			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard

**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
STB24N60DM2	TLD2*FQ6HB62	A	3068	2017-05-31
Amount	UoM	Unit type	ST ECOPACK Grade	
1380.00	mg	Each	ECOPACK2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10.2-9.15-4.5	2	gull wing	
Comment	D2PAK			

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			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	0.15	Die back side metal - Leadframe metal	110
Lead	9.87	Soft solder	7154

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	TLD2*FQ6HB2					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies (choose)	Other inorganic materials	11.479	mg	supplier	die	Silicon (Si)	7440-21-3		11.023	mg	960275	7988
				supplier	metallization	Aluminium (Al)	7429-90-5		0.219	mg	19078	159
				supplier	Passivation	Silicon Nitride	12033-89-5		0.052	mg	4530	38
				supplier	Passivation	Silicon Oxide	7631-86-9		0.078	mg	6795	57
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.005	mg	436	4
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.075	mg	6534	54
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.027	mg	2352	20
				supplier	alloy	Copper (Cu)	7440-50-8		777.537	mg	998594	563433
				supplier	alloy	Iron (Fe)	7439-89-6		0.358	mg	459	259
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.654	mg	840	474
Leadframe	Copper & its alloys	778.632	mg	supplier	metallization	Nickel (Ni)	7440-02-0		0.077	mg	99	56
				supplier	metallization	Phosphorus (P)	12185-10-3		0.006	mg	8	4
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	9.873	mg	954928	7154
				supplier	solder	Silver (Ag)	7440-22-4		0.259	mg	25051	186
				supplier	solder	Tin (Sn)	7440-31-5		0.207	mg	20021	150
Soft solder	Solder	10.339	mg	JIG - R	solder	Aluminium (Al)	7429-90-5		0.771	mg	996124	559
				supplier	wire	Magnesium (Mg)	7439-95-4		0.003	mg	3876	2
Bonding wires	Other inorganic materials	0.774	mg	supplier	wire	Silica, vitreous	60676-86-0		504.251	mg	875000	365399
				supplier	mold compound	Tetramethyl-biphenyl-diyl-bis oxymethylene-b	EC 413-900-7		23.052	mg	40001	16704
				supplier	mold compound	Epoxy Resin	25068-38-6		17.289	mg	30001	12528
				supplier	mold compound	phenol resin	29690-82-2		28.814	mg	49999	20880
				supplier	mold compound	Carbon black	1333-86-4		2.881	mg	4999	2088
Connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804