



## 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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2018-01-18
<b>Company Unique ID</b>	NL 008751171801		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giovanni Giacobello	<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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Legal Statement		
<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
STIPNS2M50-H	IHU6*UG52B62	A	SH1A	2018-01-18
	Amount	UoM	Unit type	ST ECOPACK Grade
	3160	mg	Each	ECOPACK® 2
	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
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	29.15 - 12.45 - 3.45	26	gull wing	
Comment	Package: SLLIMM NANO 26L SMT			

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	0.30	Die	94
Lead	25.18	Soft solder	7969

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	IHU6*UG52B62					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	M-011 Other inorganic materials	38.413	mg	supplier	die	Silicon (Si)	7440-21-3		36.876	mg	959988	11670
				supplier	metallization	Aluminium (Al)	7429-90-5		0.505	mg	13147	160
				supplier	Passivation	Silicon Nitride	12033-89-5		0.241	mg	6272	76
				supplier	Passivation	Silicon Oxide	7631-86-9		0.367	mg	9554	116
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.017	mg	443	5
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.007	mg	182	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.019	mg	495	6
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.298	mg	7758	94
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.083	mg	2161	26
Leadframe	M-004 Copper and its alloys	2322.822	mg	supplier	alloy	Copper (Cu)	7440-50-8		2317.517	mg	997716	733391
				supplier	alloy	Iron (Fe)	7439-89-6		1.067	mg	459	338
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.949	mg	839	617
				supplier	metallization	Silver (Ag)	7440-22-4		2.289	mg	986	724
Die attach	M-011 Other inorganic materials	2.575	mg	supplier	glue	Silver (Ag)	7440-22-4		1.957	mg	760000	619
				supplier	glue	Oxiranylmethoxy-phenyl-methylene-bisoxirane	13561-08-5		0.309	mg	120000	98
				supplier	glue	Phenol resin	9003-35-4		0.077	mg	29903	24
				supplier	glue	epoxypropoxy butane polymer	2425-79-8		0.077	mg	29903	24
				supplier	glue	Diglycidyl phenyl allyl ether	EC 417-470-1		0.129	mg	50097	41
				supplier	glue	Polyoxypropylenediamine	9046-10-6		0.026	mg	10097	8
Soft solder	Solder	28.263	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	25.182	mg	890988	7969
				supplier	solder	Tin (Sn)	7440-31-5		2.798	mg	98999	886
				supplier	solder	Hydrogenated Rosin	65997-06-0		0.283	mg	10013	90
Bonding wires	M-008 Precious metals	5.677	mg	supplier	wire	Gold (Au)	7440-57-5		5.677	mg	1000000	1797
Encapsulation	M-011 Other inorganic materials	752.432	mg	supplier	mold compound	Silica, vitreous	60676-86-0		150.486	mg	199999	47622
				supplier	mold compound	Silica	14808-60-7		485.319	mg	645000	153582
				supplier	mold compound	Epoxy resin	25068-38-6		60.195	mg	80001	19049
				supplier	mold compound	Phenol resin	29690-82-2		52.670	mg	70000	16668
				supplier	mold compound	Carbon black	1333-86-4		3.762	mg	5000	1191
connections coating	Solder	9.818	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		9.818	mg	1000000	3107