



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 *	2018-01-18
Company Unique ID	NL 008751171801		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	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

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
STIPNS1M50T-H	ISU6*UG5AB62	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)
7c-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

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	0.99	Die / NTC	313
Lead	13.73	Soft solder	4345
Lead-Borate Glass	0.02	NTC	5

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	ISU6*UG5A862					
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	26.533	mg	supplier	die	Silicon (Si)	7440-21-3		25.566	mg	963555	8091
				supplier	metallization	Aluminium (Al)	7429-90-5		0.282	mg	10628	89
				supplier	Passivation	Silicon Nitride	12033-89-5		0.167	mg	6294	53
				supplier	Passivation	Silicon Oxide	7631-86-9		0.248	mg	9347	78
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.009	mg	339	3
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.007	mg	264	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.019	mg	716	6
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.190	mg	7161	60
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.045	mg	1696	14
Leadframe	M-004 Copper and its alloys	2337.734	mg	supplier	alloy	Copper (Cu)	7440-50-8		2332.409	mg	997722	738104
				supplier	alloy	Iron (Fe)	7439-89-6		1.074	mg	460	341
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.962	mg	839	621
				supplier	metallization	Silver (Ag)	7440-22-4		2.289	mg	979	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	15.394	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	13.716	mg	890996	4341
				supplier	solder	Tin (Sn)	7440-31-5		1.524	mg	99000	482
				supplier	solder	Hydrogenated Rosin	65997-06-0		0.154	mg	10004	49
Bonding wires	M-008 Precious metals	5.677	mg	supplier	wire	Gold (Au)	7440-57-5		5.677	mg	1000000	1797
				supplier	mold compound	Silica, vitreous	60676-86-0		151.454	mg	200000	47928
Encapsulation	M-011 Other inorganic materials	757.269	mg	supplier	mold compound	Silica	14808-60-7		488.438	mg	644999	154569
				supplier	mold compound	Epoxy resin	25068-38-6		60.582	mg	80001	19172
				supplier	mold compound	Phenol resin	29690-82-2		53.009	mg	70000	16775
				supplier	mold compound	Carbon black	1333-86-4		3.786	mg	5000	1198
				supplier	solder alloy	Tin (Sn)	7440-31-5		9.818	mg	1000000	3107
connections coating	Solder	9.818	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		9.818	mg	1000000	3107
CONTROLLER TEMP(NTC)	M-011 Other inorganic materials	5.000	mg	supplier	ceramic	Manganese oxide	1317-35-7		3.196	mg	639200	1011
				supplier	ceramic	Nickel oxide	1313-99-1		0.799	mg	159800	253
				supplier	ceramic	Cobalt oxide	1308-06-1		0.705	mg	141000	223
				JIG - R & California 65	Glass	Lead borate Glass	65997-18-4	7c-l-Electrical and e	0.015	mg	3000	5
				supplier	metallisation	Gold (Au)	7440-57-5		0.285	mg	57000	90