




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 Giacobello	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 *	<div style="display: flex; justify-content: space-between;"> true Legal Declaration * Standard </div>
Legal Statement	<p>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.</p>

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STGIPNS3HD60-H	IHU6*R461GD2	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	0.24	Die / NTC	75
Lead	12.41	Soft solder	3926

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*R461GD2					
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	44.276	mg	supplier	die	Silicon (Si)	7440-21-3		42.977	mg	970661	13600
				supplier	metallization	Aluminium (Al)	7429-90-5		0.389	mg	8786	123
				supplier	metallization	Copper (Cu)	7440-50-8		0.001	mg	23	0
				supplier	Passivation	Silicon Nitride	12033-89-5		0.213	mg	4811	67
				supplier	Passivation	Silicon Oxide	7631-86-9		0.366	mg	8266	116
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	45	1
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.023	mg	519	7
				supplier	back side metallization	Gold (Au)	7440-57-5		0.068	mg	1536	22
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.237	mg	5353	75
Leadframe	M-004 Copper and its alloys	2327.411	mg	supplier	alloy	Copper (Cu)	7440-50-8		2322.099	mg	997718	734841
				supplier	alloy	Iron (Fe)	7439-89-6		1.070	mg	460	339
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.953	mg	839	618
				supplier	metallization	Silver (Ag)	7440-22-4		2.289	mg	983	724
Die attach	M-011 Other inorganic materials	4.973	mg	supplier	glue	Silver (Ag)	7440-22-4		3.779	mg	759903	1196
				supplier	glue	Oxiranylmethoxy-phenyl-methylene-bisoxirane	13561-08-5		0.597	mg	120049	189
				supplier	glue	Phenol resin	9003-35-4		0.149	mg	29962	47
				supplier	glue	epoxypropoxy butane polymer	2425-79-8		0.149	mg	29962	47
				supplier	glue	Diglycidyl phenyl allyl ether	EC 417-470-1		0.249	mg	50070	79
				supplier	glue	Polyoxypropylenediamine	9046-10-6		0.050	mg	10054	16
Soft solder	Solder	13.922	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	12.405	mg	891036	3926
				supplier	solder	Tin (Sn)	7440-31-5		1.378	mg	98980	436
				supplier	solder	Hydrogenated Rosin	65997-06-0		0.139	mg	9984	44
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	753.923	mg	supplier	mold compound	Silica, vitreous	60676-86-0		150.784	mg	199999	47716
				supplier	mold compound	Silica	14808-60-7		486.280	mg	645000	153886
				supplier	mold compound	Epoxy resin	25068-38-6		60.314	mg	80000	19087
				supplier	mold compound	Phenol resin	29690-82-2		52.775	mg	70001	16701
				supplier	mold compound	Carbon black	1333-86-4		3.770	mg	5001	1193