



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 *	2020-05-20
Contact Name *	Refer to Supplier comment section	Contact Title	Refer to Supplier comment section
Contact Phone *	Refer to Supplier comment section	Contact Email *	Refer to Supplier comment section
Authorized Representative *	Antonella Lanzafame	Representative Title	AMS Material Declaration 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
LIS3DHTR	D53N*MV36BFA	B	CA2A	2020-05-20
	Amount	UoM	Unit type	ST ECOPACK Grade
	19.0	mg	Each	ECOPACK® 2

Manufacturing information			
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	
3	260	3	
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	0



Package Designator	Size	Nbr of instances	Shape
LGA	313	16	flat
Comment	3N LLGA 3X3X1.0 16L - FOR SENSOR		

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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
7c-I	7c-I-Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devices, or in a glass or ceramic matrix compound

QueryList : ELV directive : 2000/53/EC amended 2020/363_ March 2020	
Query	Response
1 - Product(s) meets EU ELV requirement without any exemptions	FALSE
2 - Product(s) meets EU ELV requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
#VALUE!	Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound. This exemption does not cover the use of lead in: — glass in bulbs and glaze of spark plugs. — dielectric ceramic materials of components listed under 10(b), 10(c) and 10(d)

QueryList : California Prop65 list, dated 3rd January 2020			
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	0.035	alloy	1842
Lead-Borate Glass	0.170	passivation	8947

QueryList : REACH-16th January 2020				
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 Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Homogeneous Material (mg)	Application - Homogeneous Material	ppm in Homogeneous Material

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update				
Query				Response
The Product does contain at least one of the substances listed in Chemical Control Act				NO
Substance present in device Homogeneous Material				
Substance	Homogeneous Material impacted	Concentration in the material(%)	Application Purpose	

Material Composition Declaration						Mfr Item Name	D53N*MV36BFA		19-0000		489997.0	100003.0				
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	3.224	mg	supplier	die	Silicon(Si)	7440-21-3		2.994	mg	928660	157579				
				supplier	metallisation	Aluminum(Al)	7429-90-5		0.007	mg	2171	368				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.008	mg	2481	421				
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.002	mg	620	105				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.003	mg	931	158				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	310	53				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.006	mg	1861	316				
				supplier	passivation	Silicon Oxide	7631-86-9		0.033	mg	10236	1737				
				JIG-R & California 65	glass	Lead-Borate Glass	65997-18-4	7c-1-Electrical and electr	0.170	mg	52730	8947				
				Substrate	M-015 Other organic materials	3.973	mg	supplier	laminata	Fiber glass	65997-17-3		0.753	mg	189529	39632
								supplier	laminata	Bismaleimide polymer	105391-33-1		0.252	mg	63428	13263
								supplier	laminata	Triazine (T)	25722-66-1		0.252	mg	63428	13263
								supplier	laminata	Thermosetting resin	54208-63-8		0.423	mg	106469	22263
supplier	laminata	Aluminium hydroxide	21645-61-2						0.017	mg	4279	895				
supplier	laminata	Calcium sulfate	7778-18-9						0.009	mg	2285	474				
supplier	laminata	Zinc hydroxide	20427-68-1						0.005	mg	1258	263				
supplier	laminata	Barium sulfate	7727-43-7						0.318	mg	80040	16757				
supplier	laminata	Bisphenol F type epoxy resin	9003-36-5						0.308	mg	77523	16211				
supplier	laminata	polymerized Biphenyl resin	85954-11-6						0.125	mg	31462	6579				
supplier	laminata	Talc containing no asbestiform fibers	14807-96-6						0.077	mg	19381	4053				
supplier	laminata	Methoxymethylethoxy propanol	34590-94-8						0.076	mg	19129	4000				
supplier	laminata	Amorphous silica	7631-86-9						0.058	mg	14599	3053				
M-004 Copper and its alloys	supplier	metallisation	Copper(Cu)					7440-50-8		1.259	mg	316889	66263			
M-006 Nickel and its alloys	supplier	metallisation	Nickel(Ni)					7440-02-0		0.035	mg	8809	1842			
supplier	metallisation	Gold(Au)	7440-67-5						0.006	mg	1510	316				
Die attach	M-015 Other organic materials	0.092	mg					supplier	tape	Epoxy resin	25068-38-6		0.058	mg	630435	3053
								supplier	tape	Polypropylene	9003-07-0		0.002	mg	21739	105
								supplier	tape	epoxy resin	29690-82-2		0.009	mg	97826	474
				supplier	tape	Propenoate polymer	538311-13-6		0.018	mg	195652	947				
				supplier	tape	Bisphenol A diglycidyl ether	1675-54-3		0.005	mg	54348	263				
Bonding wire	M-008 Precious metals	0.093	mg	supplier	wire	Gold(Au)	7440-57-5		0.092	mg	989247	4842				
				0	supplier	wire	Palladium(Pd)	7440-05-3		0.001	mg	10753	53			
encapsulation	M-015 Other organic materials	11.618	mg	supplier	mold compound	Silica vitreous	60676-86-0		10.513	mg	904889	553316				
				supplier	mold compound	Epoxyde bisphenol A resin	25068-38-6		0.291	mg	25047	15316				
				supplier	mold compound	Epoxy resin	proprietary		0.465	mg	40024	24474				
				supplier	mold compound	Phenol Resin	proprietary		0.291	mg	25047	15316				
				supplier	mold compound	Carbon black	1333-86-4		0.058	mg	4992	3053				