



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2019-04-08
Company Unique ID	NL 008751171B01		
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
STGIPQ8C60T-HZ	IG2U*RR6225F	A	998G	2019-04-08
	Amount	UoM	Unit type	ST ECOPACK Grade
	4595	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
Not Applicable	Not Applicable	Not Applicable		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
ZIP	32.05 - 12.35 - 4	26	Through-hole	
Comment	Package: N2DIP-26L			

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-l	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		
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)		

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017			
Query			Response
1 - Product(s) meets EU ELV requirements without any exemptions			FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)			TRUE
Exemption Id.	Description		
10a	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)		
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)		

QueryList : California Prop65 list, dated 26th October 2018			
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	0.84	Die - NTC	184
Lead	1.16	Soft solder	253
Lead-Borate Glass	0.02	NTC	3

QueryList : REACH-15th January 2019				
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	IGZU*RR6225F					
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	25.267	mg	supplier	die	Silicon (Si)	7440-21-3		24.059	mg	952191	5236
				supplier	metallization	Aluminium (Al)	7429-90-5		0.489	mg	19353	106
				supplier	Passivation	Silicon Nitride	12033-89-5		0.162	mg	6412	35
				supplier	Passivation	Silicon Oxide	7631-86-9		0.293	mg	11596	64
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	79	0
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	79	0
				supplier	back side metallization	Gold (Au)	7440-57-5		0.007	mg	277	2
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.044	mg	1741	10
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	40	0
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.007	mg	277	2
				supplier	polymer die coating	Durimide	Proprietary		0.201	mg	7955	44
				NTC	Other inorganic materials	5.007	mg	supplier	ceramic	Manganese oxide	1317-35-7	
supplier	ceramic	Nickel oxide	1313-99-1						0.800	mg	159776	174
supplier	ceramic	Cobalt oxide	1308-06-1						0.706	mg	141003	154
supplier	ceramic	Gold (Au)	7440-57-5						0.285	mg	56920	62
JIG - R	metallization	Lead borate Glass	65997-18-4					7c-1-Electrical and e	0.015	mg	2996	3
Leadframe	Copper & its alloys	1498.661	mg	supplier	alloy	Copper (Cu)	7440-50-8		1455.201	mg	971001	316692
				supplier	alloy	Iron (Fe)	7439-89-6		31.471	mg	20999	6849
				supplier	alloy	Phosphorus (P)	12185-10-3		0.749	mg	500	163
				supplier	alloy	Zinc (Zn)	7440-66-6		2.248	mg	1500	489
				supplier	metallization	Silver(Ag)	7440-22-4		8.992	mg	6000	1957
				supplier	glue	Silver (Ag)	7440-22-4		0.022	mg	846154	5
Die attach	Other inorganic materials	0.026	mg	supplier	glue	Acrylate resins	7534-94-3		0.003	mg	115385	1
				supplier	glue	Heterocyclic organic compound	3006-93-7		0.001	mg	38461	0
				JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.149	mg	873100	250
Soft solder	Solder	1.316		supplier	solder	Tin (Sn)	7440-31-5		0.128	mg	97264	28
				supplier	solder	Hydrogenated Rosin	65997-06-0		0.039	mg	29636	8
				supplier	wire	Gold(Au)	7440-57-5		2.547	mg	1000000	554
Bonding wire	Precious metals	2.547	mg	supplier	wire	Aluminium oxide	1344-28-1		2511.374	mg	826000	546545
				supplier	silica vitrous	60676-86-0		152.021	mg	50000	33084	
Encapsulation	Other Organic Material	3040.406	mg	supplier	mold compound	Epoxy resin	25068-38-6		243.232	mg	80000	52934
				supplier	mold compound	Phenol resin	29690-82-2		121.617	mg	40000	26467
				supplier	mold compound	Carbon Black	1333-86-4		12.162	mg	4000	2647
				supplier	solder alloy	Tin (Sn)	7440-31-5		21.770	mg	1000000	4738
Connections coating	Solder	21.770	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		21.770	mg	1000000	4738