Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2019-05-17
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		

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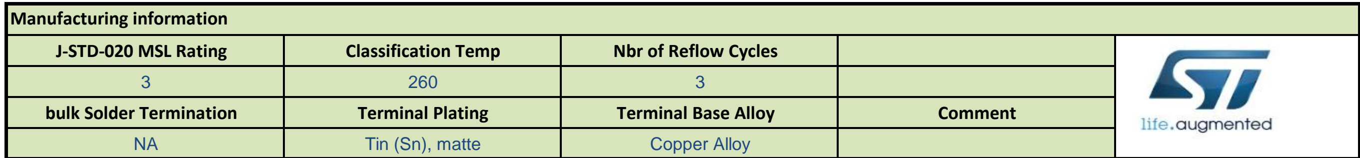
Legal Statement

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 omprehensive 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**
L99MOD54XPTR	GSEH*UH75AB6	A	0959	2019-05-17
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	1925.00	mg	Each	ECOPACK2
,	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**		
3	260	3		
bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	**Size**	**Nbr of instances**	**Shape**	
QFP	10.3-7.5-2.28	36	Gull Wing	
Comment	PowerSSO36			

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
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
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 23rd November 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	0.07	Die	37
Lead	9.99	Soft solder	5191

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				**FALSE**
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	9.99	Soft solder	5191
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				**FALSE**
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	9.992	Soft solder	974924

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						**Mfr Item Name**	**GSEH*UH75AB6**					
Homogeneous Material	**Material Group**	Mass	**UoM**	**Level**	**Substance Category**	**Substance**	**CAS**	**Exempt**	**Mass**	**UoM**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**
Die	M-011 Other inorganic materials	14.836	mg	supplier	die	Silicon (Si)	7440-21-3		14.194	mg	956727	7374
				supplier	metallization	Aluminium (Al)	7429-90-5		0.121	mg	8156	63
				supplier	metallization	Titanium (Ti)	7440-32-6		0.014	mg	943	7
				supplier	Passivation	Silicon Nitride	12033-89-5		0.024	mg	1618	12
				supplier	Passivation	Silicon Oxide	7631-86-9		0.262	mg	17660	136
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.008	mg	539	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.022	mg	1483	11
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.072	mg	4853	37
				supplier	glass coating	Glass: Silicon Dioxide	7631-86-9		0.009	mg	607	5
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.110	mg	7414	57
Leadframe	M-004 Copper and its alloys	159.462	mg	supplier	alloy	Copper (Cu)	7440-50-8		155.396	mg	974502	80725
				supplier	alloy	Iron (Fe)	7439-89-6		3.655	mg	22920	1899
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.220	mg	1380	114
				supplier	alloy	Zinc (Zn)	7440-66-6		0.191	mg	1198	99
Soft solder	Solder	10.249	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	9.992	mg	974924	5190
				supplier	solder	Silver (Ag)	7440-22-4		0.154	mg	15026	80
				supplier	solder	Tin (Sn)	7440-31-5		0.103	mg	10050	54
Bonding wires	M-008 Precious metals	1.993	mg	supplier	wire	Gold (Au)	7440-57-5		1.670	mg	837933	868
	M-004 Copper and its alloys			supplier	wire	Copper (Cu)	7440-50-8		0.316	mg	158555	164
				supplier	wire	Palladium (Pd)	7440-05-3		0.005	mg	2508	3
				supplier	wire	Platinium (Pt)	7440-06-4		0.002	mg	1004	1
Encapsulation	M-011 Other inorganic materials	1734.208	mg	supplier	mold compound	silica vitreous	60676-86-0		1522.635	mg	878000	790979
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		104.053	mg	60000	54054
				supplier	mold compound	Phenol Resin	205830-20-2		69.368	mg	40000	36035
				supplier	mold compound	epoxy resin	25068-38-6		34.684	mg	20000	18018
				supplier	mold compound	carbon black	1333-86-4		3.468	mg	2000	1802
connections coating	Solder	4.252	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.252	mg	1000000	2209