



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 *	2019-01-14
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 *	Rossana Bonaccorso	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
L99H02XP	G6EH*UH49AF6	A	0959	2019-01-14
Amount	UoM	Unit type	ST ECOPACK Grade	
484.70	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 25th May 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	0.05	Die	97
Lead	6.65	Soft solder	13712

QueryList : REACH-27th June 2018				
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	6.65	Soft solder	13712
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	6.65	Soft solder	975059

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	G6EH*UH49AF6					
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	9.582	mg	supplier	die	Silicon (Si)	7440-21-3		9.174	mg	957420	18927
				supplier	metallization	Aluminium (Al)	7429-90-5		0.078	mg	8140	161
				supplier	metallization	Titanium (Ti)	7440-32-6		0.009	mg	939	19
				supplier	Passivation	Silicon Nitride	12033-89-5		0.015	mg	1565	31
				supplier	Passivation	Silicon Oxide	7631-86-9		0.169	mg	17637	349
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.005	mg	522	10
				supplier	back side metallization	Gold (Au)	7440-57-5		0.014	mg	1461	29
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.047	mg	4905	97
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.071	mg	7411	146
				Leadframe	M-004 Copper and its alloys	161.654	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						0.160	mg	990	330
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.048	mg	297	99
supplier	metallization	Silver (Ag)	7440-22-4						2.190	mg	13547	4518
Soft solder	Solder	6.816	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	6.646	mg	975059	13712
				supplier	solder	Silver (Ag)	7440-22-4		0.102	mg	14965	210
				supplier	solder	Tin (Sn)	7440-31-5		0.068	mg	9976	140
Bonding wires		8.675	mg	supplier	wire	Gold (Au)	7440-57-5		8.662	mg	998501	17871
				supplier	wire	Copper (Cu)	7440-50-8		0.008	mg	922	17
				supplier	wire	Palladium (Pd)	7440-05-3		0.004	mg	461	8
				supplier	wire	Platinum (Pt)	7440-06-4		0.001	mg	116	2
Encapsulation	M-011 Other inorganic materials	293.721	mg	supplier	mold compound	silica vitreous	60676-86-0		257.888	mg	878003	532057
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		17.623	mg	59999	36359
				supplier	mold compound	Phenol Resin	205830-20-2		11.749	mg	40001	24240
				supplier	mold compound	epoxy resin	25068-38-6		5.874	mg	19999	12119
				supplier	mold compound	carbon black	1333-86-4		0.587	mg	1998	1211
Connections coating	Solder	4.252	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.252	mg	1000000	8772