



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 *	2018-10-17
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 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


While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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
L5963D-EHT	HREH*UAE2AEX	A	0959	2018-10-17
	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		 life.augmented
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	Package: PowerSSO36 - MDF valid for CPs: L5963DN-EHX - L5963DN-EHT - L5963D-EHX			

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	0.07	Die	36
Lead	6.59	Soft solder	3421

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	6.585	Soft solder	3421
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	6.585	Soft solder	974978

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	HREH*UAEZAX					
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	19.125	mg	supplier	die	Silicon (Si)	7440-21-3		18.198	mg	951529	9454
				supplier	metallization	Aluminium (Al)	7429-90-5		0.078	mg	4078	41
				supplier	metallization	Copper (Cu)	7440-50-8		0.563	mg	29438	292
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	54	1
				supplier	metallization	Nickel (Ni)	7440-02-0		0.070	mg	3660	36
				supplier	metallization	Platinum (Pt)	7440-06-4		0.039	mg	2039	20
				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	209	2
				supplier	metallization	Tungsten (W)	7440-33-7		0.032	mg	1673	17
				supplier	Passivation	Silicon Oxide	7631-86-9		0.140	mg	7320	73
				supplier	alloy	Copper (Cu)	7440-50-8		159.255	mg	998696	82730
Leadframe	M-004 Copper and its alloys	159.463	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.160	mg	1003	83
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.048	mg	301	25
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	6.585	mg	974978	3420
Soft solder	Solder	6.754	mg	supplier	solder	Silver (Ag)	7440-22-4		0.101	mg	14954	52
				supplier	solder	Tin (Sn)	7440-31-5		0.068	mg	10068	35
				supplier	wire	Copper (Cu)	7440-50-8		2.810	mg	1000000	1460
Bonding wires	M-004 Copper and its alloys	2.810	mg	supplier	alica vitreous	60676-86-0		1521.219	mg	878000	790244	
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		103.956	mg	60000	54003
Encapsulation	M-011 Other inorganic materials	1732.596	mg	supplier	mold compound	Phenol Resin	205830-20-2		69.304	mg	40000	36002
				supplier	mold compound	epoxy resin	25068-38-6		34.652	mg	20000	18001
				supplier	mold compound	carbon black	1333-86-4		3.465	mg	2000	1800
connections coating	Solder	4.252	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.252	mg	1000000	2209