



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 *	2019-02-25
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
TDA75610S-ZST	H9ZS*UK99AA6	A	0959	2019-02-25
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	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
QFP	15.9-11-3.5	36	gull wing
Comment	PowerSO 36 .43 SLUG UP		

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	0.13	Die	69
Lead	17.93	Soft solder	9312

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	17.926	soft solder	9312
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	17.926	soft solder	974981

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	H925*UK99AA6					
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	27.485	mg	supplier	die	Silicon (Si)	7440-21-3		26.202	mg	953320	13611
				supplier	metallization	Aluminium (Al)	7429-90-5		0.173	mg	6294	90
				supplier	metallization	Tungsten (W)	7440-33-7		0.273	mg	9933	142
				supplier	Passivation	Silicon Nitride	12033-89-5		0.042	mg	1528	22
				supplier	Passivation	Silicon Oxide	7631-86-9		0.404	mg	14699	210
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.015	mg	546	8
				supplier	back side metallization	Gold (Au)	7440-57-5		0.040	mg	1455	21
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.133	mg	4839	69
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.203	mg	7386	104
				Leadframe	M-004 Copper and its alloys	1234.571	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						1.235	mg	1000	642
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.370	mg	300	192
Soft solder	Solder	18.386	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	17.926	mg	974981	9312
				supplier	solder	Silver (Ag)	7440-22-4		0.276	mg	15011	143
				supplier	solder	Tin (Sn)	7440-31-5		0.184	mg	10008	96
Bonding wires	M-011 Other inorganic materials	3.588	mg	supplier	wire	Copper (Cu)	7440-50-8		3.588	mg	1000000	1864
Encapsulation	M-011 Other inorganic materials	635.024	mg	supplier	mold compound	silica vitreous	60676-86-0		557.551	mg	878000	289637
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		38.101	mg	59999	19793
				supplier	mold compound	Phenol Resin	205830-20-2		25.401	mg	40000	13195
				supplier	mold compound	epoxy resin	25068-38-6		12.701	mg	20001	6598
				supplier	mold compound	carbon black	1333-86-4		1.270	mg	2000	660
Connections coating	Solder	5.946	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.946	mg	1000000	3089