



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 *	2018-06-25
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Authorized Representative *	Rossana Bonaccorso
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		


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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
	H9Z5*UAQ8BD1	A	0959	2018-06-25
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	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	15.9-11-3.5	36	gull wing	
Comment	Package: PowerSO 36 .43 SLUG UP - MDF valid for: TDA7803A-ZSX - TDA7803A-ZST			

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	0.14	Die	70
Lead	12.31	Soft solder	6393
Cobalt	0.002	Die	1

QueryList : REACH-15th January 2018				
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	H9Z5*UAQ8BD1					
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	19.524	mg	supplier	die	Silicon (Si)	7440-21-3		17.603	mg	901631	9144
				supplier	metallization	Aluminium (Al)	7429-90-5		0.042	mg	2151	22
				supplier	metallization	Copper (Cu)	7440-50-8		1.090	mg	55830	566
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	102	1
				supplier	metallization	Nickel (Ni)	7440-02-0		0.135	mg	6915	70
				supplier	metallization	Platinum (Pt)	7440-06-4		0.075	mg	3842	39
				supplier	metallization	Titanium (Ti)	7440-32-6		0.007	mg	359	4
				supplier	metallization	Tungsten (W)	7440-33-7		0.062	mg	3176	32
				supplier	Passivation	Silicon Nitride	12033-89-5		0.035	mg	1793	18
				supplier	Passivation	Silicon Oxide	7631-86-9		0.270	mg	13829	140
Leadframe	M-004 Copper and its alloys	1234.873	mg	supplier	polymer die coating	Polyimide AH 1200	Proprietary		0.203	mg	10372	105
				supplier	alloy	Copper (Cu)	7440-50-8		1232.966	mg	998456	640502
				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
				supplier	metallization	Silver (Ag)	7440-22-4		0.302	mg	244	157
Soft solder	Solder	12.622	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	12.307	mg	975044	6393
				supplier	solder	Silver (Ag)	7440-22-4		0.189	mg	14974	98
				supplier	solder	Tin (Sn)	7440-31-5		0.126	mg	9982	65
Bonding wires	M-011 Other inorganic materials	3.767	mg	supplier	wire	Copper (Cu)	7440-50-8		3.767	mg	1000000	1957
				supplier	mold compound	silica vitreous	60676-86-0		569.180	mg	878000	295678
Encapsulation	M-011 Other inorganic materials	648.269	mg	supplier	mold compound	Biphenyl epoxy resin	85954-11-6		38.896	mg	60000	20206
				supplier	mold compound	Phenol Resin	205830-20-2		25.931	mg	40000	13471
				supplier	mold compound	epoxy resin	25068-38-6		12.965	mg	19999	6735
				supplier	mold compound	carbon black	1333-86-4		1.297	mg	2001	674
Connections coating	Solder	5.946	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.946	mg	1000000	3089