



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-09-10
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 Giapello	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
TDA7802PDTR	H6ZS*UI09BC1	A	0959	2018-09-10
	Amount	UoM	Unit type	ST ECOPACK Grade
	1925	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	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 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
Lead	17.90	Soft solder	9297

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	17.896	Soft solder	9297
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	17.896	Soft solder	974993

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	H6ZS*UI09B1					
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	27.044	mg	supplier	die	Silicon (Si)	7440-21-3		26.092	mg	964798	13554
				supplier	metallization	Aluminium (Al)	7429-90-5		0.200	mg	7395	104
				supplier	metallization	Tungsten (W)	7440-33-7		0.159	mg	5879	83
				supplier	Passivation	Silicon Nitride	12033-89-5		0.042	mg	1554	22
				supplier	Passivation	Silicon Oxide	7631-86-9		0.342	mg	12646	178
				supplier	polymer die coating	PDI Gamma-butyrolactone	96-48-0		0.209	mg	7728	109
Leadframe	M-004 Copper and its alloys	1234.873	mg	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	154
				supplier	metallization	Lead (Pb)	7439-92-1	7a-Lead in high mel	17.896	mg	974993	9297
Soft solder	Solder	18.355	mg	JIG - R	solder	Silver (Ag)	7440-22-4		0.275	mg	14982	143
				supplier	solder	Tin (Sn)	7440-31-5		0.184	mg	10025	96
				supplier	wire	Gold (Au)	7440-57-5		7.879	mg	1000000	4093
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	17.896	mg	974993	9297
Bonding wires	M-008 Precious metals	7.879	mg	supplier	wire	Gold (Au)	7440-57-5		7.879	mg	1000000	4093
				supplier	mold compound	silica vitreous	60676-86-0		553.933	mg	878000	287757
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		37.854	mg	60000	19664
				supplier	mold compound	Phenol Resin	205830-20-2		25.236	mg	40000	13110
				supplier	mold compound	epoxy resin	25068-38-6		12.618	mg	20000	6555
connections coating	Solder	5.946	mg	supplier	mold compound	carbon black	1333-86-4		1.262	mg	2000	656
				supplier	solder alloy	Tin (Sn)	7440-31-5		5.946	mg	1000000	3089