



## Materials Declaration Form

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

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-12-05
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giovanni Giacopello	<b>Representative Title</b>	ADG MD Champion
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**


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<b>Legal Statement</b>			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
TDA7803A-8ZX	H98Z*UAQ8BD1	A	3068	2017-12-05
Amount	UoM	Unit type	ST ECOPACK Grade	
7224.90	mg	Each	ECOPACK2	

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	
SIP	28.9-15.5-4.5	27	Through hole	
Comment	0			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 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)

Query : California Prop65 list, dated 27th January 2017			
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	7
Lead	12.02	Soft solder	1664

QueryList : REACH-12th January 2017				
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	H982*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	Other inorganic materials	17.903	mg	supplier	die	Silicon (Si)	7440-21-3		17.603	mg	983243	2436				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.013	mg	726	2				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.053	mg	2960	7				
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.010	mg	559	1				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.027	mg	1508	4				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.050	mg	2793	7				
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.003	mg	168	0				
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.144	mg	8043	20				
				Leadframe	Copper & its alloys	5451.401	mg	supplier	alloy	Copper (Cu)	7440-50-8		5444.314	mg	998700	753549
								supplier	alloy	Iron (Fe)	7439-89-6		2.508	mg	460	347
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						4.579	mg	840	634				
Soft solder	Solder	12.332	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	12.024	mg	975024	1664				
				supplier	solder	Silver (Ag)	7440-22-4		0.185	mg	15002	26				
				supplier	solder	Tin (Sn)	7440-31-5		0.123	mg	9974	17				
Bonding wires	Other inorganic materials	5.084	mg	supplier	wire	Copper (Cu)	7440-50-8		5.084	mg	1000000	704				
				Encapsulation	Other Organic Materials	1718.240	mg	supplier	mold compound	Amorphous silica	7631-86-9		1460.503	mg	850000	202149
								supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		103.094	mg	60000	14269
								supplier	mold compound	Phenol resin	proprietary		68.730	mg	40000	9513
								supplier	mold compound	Mercaptopropyl trimethoxysilane	4420-74-0		5.155	mg	3000	714
								supplier	mold compound	Other	Proprietary		63.575	mg	37000	8799
supplier	mold compound	carbon black	1333-86-4		12.028	mg	7000	1665								
				supplier	mold compound	Bismuth (Bi)	7440-69-9		5.155	mg	3000	714				
Connections coating	Solder	19.940	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		19.940	mg	1000000	2760				