



## 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  <i>* : Required Field</i>


Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-09-05
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<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**

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			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
	A9ZS*UAQ8BD1	A	MU1A	2017-09-05
Amount	UoM	Unit type	ST ECOPACK Grade	
1925.00	mg	Each	ECOPACK® 2	

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	
Tin - 3.5Ag	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	15.9x11x3.45	63	flat	
Comment	Package: PowerSO 36 .43 SLUG UP - MD valid for CPs: TDA7803A-ZST and TDA7803-ZSX			

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

Query		Response
Product(s) meets EU RoHS requirement without any exemptions		false
Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7a' exemption (other selected exemptions may apply)		false
Product(s) meets EU RoHS requirements by application of the selected exemption(s)		true
Product(s) does not meet EU RoHS requirements and is not under exemptions		false
Product(s) is obsolete, no information is available		false
Product(s) is unknown, no information is available		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 : REACH-12th January 2017

Query				Response
The product 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						Mfr Item Name	A925*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	19.578	mg	supplier	die	Silicon (Si)	7440-21-3		17.603	mg	899121	9144
				supplier	metallization	Aluminium (Al)	7429-90-5		0.042	mg	2145	22
				supplier	metallization	Copper (Cu)	7440-50-8		1.083	mg	55317	563
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	102	1
				supplier	metallization	Titanium (Ti)	7440-32-6		0.011	mg	562	6
				supplier	metallization	Tungsten (W)	7440-33-7		0.062	mg	3167	32
				supplier	metallization	Nickel (Ni)	7440-02-0		0.134	mg	6844	70
				supplier	metallization	Platinum (Pt)	7440-06-4		0.075	mg	3831	39
				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.035	mg	1788	18
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.270	mg	13791	140
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.010	mg	510	5
				supplier	back side metallization	Gold (Au)	7440-57-5		0.027	mg	1379	14
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.077	mg	3933	40
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.006	mg	308	2
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.141	mg	7202	73
Leadframe	Copper & its alloys	1265.968	mg	supplier	alloy	Copper (Cu)	7440-50-8		1261.044	mg	996110	655088
				supplier	alloy	Iron (Fe)	7439-89-6		0.581	mg	460	302
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.061	mg	838	551
				supplier	metallization	Silver (Ag)	7440-22-4		3.282	mg	2592	1705
Die attach	Solder	11.146	mg	JIG - R	Soft solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	10.868	mg	975058	5646
				supplier	Soft solder	Silver (Ag)	7440-22-4		0.167	mg	14983	87
				supplier	Soft solder	Tin (Sn)	7440-31-5		0.111	mg	9959	58
Bonding wire	Other inorganic materials	2.289	mg	supplier	wire	Copper (Cu)	7440-50-8		2.289	mg	1000000	1189
Encapsulation	Other Organic Materials	616.126	mg	supplier	mold compound	Phenol Resin	205830-20-2		24.645	mg	40000	12803
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		18.484	mg	30000	9602
				supplier	mold compound	epoxy resin	25068-38-6		18.484	mg	30000	9602
				supplier	mold compound	carbon black	1333-86-4		1.232	mg	2000	640
				supplier	mold compound	Silica, vitreous	60676-86-0		553.281	mg	898000	287419
Connections coating	Solder	9.893	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		9.893	mg	1000000	5139