



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2016-10-13</b>
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	<b>Floriana San Biagio</b>	<b>Representative Title</b>	<b>AMG MD CHAMPION</b>
<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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**Legal Statement**


<b>Supplier Acceptance *</b>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
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**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
	H9ZS*U126BA6	A	MU1A	2016-10-13
Amount	UoM	Unit type	ST ECOPACK Grade	
1925.00	mg	Each	ECOPACK® 2	
	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		
3	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte, annealed	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	15.9x11x3.6	36	gull wing	
Comment	Package: ZS PowerSO 36 .43 SLUG UP; MDF valid for STA50813TR			

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)

QueryList : REACH-20th June 2016				
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	H92S*U1268A6					
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	13.175	mg	supplier	die	Silicon (Si)	7440-21-3		12.553	mg	952789	6521
				supplier	metallization	Aluminium (Al)	7429-90-5		0.083	mg	6300	43
				supplier	metallization	Tungsten (W)	7440-33-7		0.131	mg	9943	68
				supplier	Passivation	Silicon Nitride	12033-89-5		0.020	mg	1518	10
				supplier	Passivation	Silicon Oxide	7631-86-9		0.193	mg	14649	100
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.007	mg	531	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.019	mg	1442	10
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.064	mg	4858	33
				supplier	glass coating	Glass: Silicon Dioxide	7631-86-9		0.008	mg	607	4
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.097	mg	7362	50
Leadframe	Copper & its alloys	1077.293	mg	supplier	alloy	Copper (Cu)	7440-50-8		1070.806	mg	993978	556263
				supplier	alloy	Iron (Fe)	7439-89-6		0.493	mg	458	256
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.901	mg	836	468
				supplier	metallization	Silver (Ag)	7440-22-4		5.093	mg	4728	2646
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	8.921	mg	974973	4634
Soft solder	Solder	9.150	mg	supplier	solder	Silver (Ag)	7440-22-4		0.137	mg	14973	71
				supplier	solder	Tin (Sn)	7440-31-5		0.092	mg	10055	48
				supplier	wire	Copper (Cu)	7440-50-8		2.617	mg	1000000	1359
Encapsulation	Other Organic Materials	818.524	mg	supplier	mold compound	silica vitreous	60676-86-0		724.393	mg	884999	376308
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		43.382	mg	53000	22536
				supplier	mold compound	Phenol Resin	205830-20-2		32.741	mg	40000	17008
				supplier	mold compound	epoxy resin	Proprietary		16.371	mg	20001	8504
				supplier	mold compound	carbon black	1333-86-4		1.637	mg	2000	850
connections coating	Solder	4.241	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.241	mg	1000000	2203