



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-11-18
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Antonella Lanzafame	Representative Title	AMG Materials Declaration 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	<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
TSV992AIDT	HDO7*V992ARL	A	BO2A	2016-11-18
Amount		UoM	Unit type	ST ECOPACK Grade
80.00		mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nicke/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	4.85 - 3.9 - 1.52	8	gull wing	
Comment	Package: SO 08 .15 JEDEC			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
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)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description

QueryList : ELV directive : 2000/53/EC amended 2013/28/EU _ May 2013	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	true
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Exemption Id.	Description
	#N/A

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						Mfr Item Name	HDO7*V992ARL					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies (choose)	Other inorganic materials	0.795	mg	supplier	die	Silicon (Si)	7440-21-3		0.768	mg	966038	9600
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	8805	88
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1258	13
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1258	13
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	2516	25
				supplier	Passivation	Silicon Oxide	7631-86-9		0.016	mg	20126	200
Leadframe	Copper & its alloys	30.796	mg	supplier	alloy	Copper (Cu)	7440-50-8		29.935	mg	972042	374188
				supplier	alloy	Iron (Fe)	7439-89-6		0.704	mg	22860	8800
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.042	mg	1364	525
				supplier	alloy	Zinc (Zn)	7440-66-6		0.037	mg	1201	463
				supplier	metallization	Nickel (Ni)	7440-02-0		0.071	mg	2305	888
				supplier	metallization	Palladium (Pd)	7440-05-3		0.005	mg	162	63
Die attach		0.318	mg	supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	65	25
				supplier	glue or tape (choose)	Silver (Ag)	7440-22-4		0.289	mg	908805	3613
				supplier	glue or tape	acrylate	Proprietary		0.016	mg	50314	200
				supplier	glue or tape	Methacrylate	Proprietary		0.013	mg	40881	163
Bonding wires	Other inorganic materials	0.047	mg	supplier	wire	Copper (Cu)	7440-50-8		0.047	mg	1000000	588
Encapsulation	Other Organic Materials	48.044	mg	supplier	mold compound	Silica, vitreous	60676-86-0		41.607	mg	866019	520088
				supplier	mold compound	Epoxy Resin	Proprietary		3.603	mg	74994	45038
				supplier	mold compound	Phenol Resin	Proprietary		2.402	mg	49996	30025
				supplier	mold compound	Carbon black	1333-86-4		0.240	mg	4995	3000
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.192	mg	3996	2400