



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 *	2017-12-04
Company Unique ID	NL 008751171801		
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 *	Floriana SAN BIAGIO	Representative Title	AMG 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
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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
	DSO7*0393BC6	A	Z9LA	2017-12-04
Amount	UoM	Unit type	ST ECOPACK Grade	
80	mg	Each	ECOPACK® 3	
	Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85x3.9x1.52	8	gull wing	
Comment	Package: O7 SO 08 .15 JEDEC; MDF valid for LM393DT			

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	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 : REACH-7th July 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	DSO7*0393BC6				5999998.0	1000020.0
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	0.549	mg	supplier	die	Silicon (Si)	7440-21-3		0.539	mg	981785	6738
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	9107	63
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	3643	25
				supplier	Passivation	Silicon Oxide	7631-86-9		0.003	mg	5464	38
				supplier	alloy	Copper (Cu)	7440-50-8		29.207	mg	972853	365088
Leadframe	M-004 Copper and its alloys	30.022	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.751	mg	25015	9388
				supplier	alloy	Phosphorus (P)	7723-14-0		0.030	mg	999	375
				supplier	alloy	Zinc (Zn)	7440-66-6		0.030	mg	999	375
				JIG - R	alloy	Lead (Pb)	7439-92-1		0.001	mg	33	13
				supplier	metallization	Silver (Ag)	7440-22-4		0.003	mg	100	38
Die attach	M-015 Other organic materials	0.711	mg	supplier	glue	Silver	7440-22-4		0.494	mg	694796	6175
				supplier	glue	Acrylate monomer	Proprietary		0.142	mg	199719	1775
				supplier	glue	Acrylate oligomer	Proprietary		0.050	mg	70323	625
				supplier	glue	Bismaleimide resin	35325-39-4		0.021	mg	29536	263
				supplier	glue	Epoxy resin	29690-82-2		0.004	mg	5626	50
Bonding wires	M-011 Other inorganic materials	0.052	mg	supplier	wire	Copper (Cu)	7440-50-8		0.052	mg	1000000	650
Encapsulation	M-015 Other organic materials	47.914	mg	supplier	mold compound	Epoxy Resin 1	Trade secret		0.479	mg	9997	5988
				supplier	mold compound	Epoxy Resin 2	29690-82-2		0.479	mg	9997	5988
				supplier	mold compound	Epoxy Resin 3	Trade secret		0.479	mg	9997	5988
				supplier	mold compound	Phenol Resin	25068-38-6		1.437	mg	29991	17963
				supplier	mold compound	Carbon black	1333-86-4		0.048	mg	1002	600
				supplier	mold compound	Amorphous silica	60676-86-0		44.513	mg	929019	556413
				supplier	mold compound	Crystal silica	14808-60-7		0.479	mg	9997	5988
connections coating	M-011 Other inorganic materials	0.753	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.753	mg	1000000	9413