



## 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>	2018-04-05
<b>Company Unique ID</b>	NL 008751171801		
<b>Contact Name *</b>	Refer to Supplier Comment section		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>	Floriana SAN BIAGIO	<b>Representative Title</b>	AMS 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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**Legal Statement**

**Supplier Acceptance \*** true **Legal Declaration \*** 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
	EU6P*0393BC6	A	Z8GA	2018-04-05
Amount	UoM	Unit type	ST ECOPACK Grade	
34.89	mg	Each	ECOPACK® 1	
	Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices		

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	4.4x3x0.9	8	gull wing	
Comment	6P TSSOP 8 BODY 4.4 PITCH 0.65; MDF valid for LM393PT			

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-15th January 2018				
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	EUGP*0393BC6				5999999.0	999999.0
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	15449
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	9107	143
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	3643	57
				supplier	Passivation	Silicon Oxide	7631-86-9		0.003	mg	5464	86
Leadframe	M-004 Copper and its alloys	15.339	mg	supplier	alloy	Copper (Cu)	7440-50-8		15.126	mg	986114	433534
				supplier	alloy	Iron (Fe)	7439-89-6		0.123	mg	8019	3525
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.007	mg	456	201
				supplier	alloy	Zinc (Zn)	7440-66-6		0.006	mg	391	172
				supplier	metallization	Nickel (Ni)	7440-02-0		0.070	mg	4564	2006
				supplier	metallization	Palladium (Pd)	7440-05-3		0.005	mg	326	143
Die attach	M-015 Other organic materials	0.240	mg	supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	130	57
				supplier	glue	Silver (Ag)	7440-22-4		0.200	mg	833333	5732
				supplier	glue	epoxy resin	29690-82-2		0.024	mg	100000	688
				supplier	glue	1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8		0.012	mg	50000	344
Bonding wires	M-008 Precious metals	0.107	mg	supplier	glue	Aromatic polyamine	Proprietary		0.004	mg	16667	115
				supplier	wire	Gold (Au)	7440-57-5		0.107	mg	1000000	3067
				supplier	wire	Gold (Au)	7440-57-5		0.107	mg	1000000	3067
Encapsulation	M-015 Other organic materials	17.833	mg	supplier	mold compound	Epoxy Resin	29690-82-2		1.783	mg	99983	51103
				supplier	mold compound	Phenol resin	25068-38-6		1.109	mg	62188	31786
				supplier	mold compound	Carbon black	1333-86-4		0.277	mg	15533	7939
				supplier	mold compound	Fused Silica	60676-86-0		13.832	mg	775641	396446
				supplier	mold compound	Antimony Trioxide	1309-64-4		0.555	mg	31122	15907
Finishing	M-011 Other inorganic materials	0.822	mg	supplier	mold compound	Brominated epoxy resin	Proprietary		0.277	mg	15533	7939
				supplier	Connection Coating	Tin (Sn)	7440-31-5		0.822	mg	1000000	23560