




## 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  *: Required Field

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-05-29
<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>	Floriana San Biagio	<b>Representative Title</b>	AMS Materials Declaration 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/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

Uncertainty Statement	
	<p>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.</p>
Legal Statement	
<b>Supplier Acceptance *</b>	true
	<b>Legal Declaration *</b> <b>Standard</b>
<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
	1YNB*0393BG6	A	Z6HA	2015-05-29
Amount	UoM	Unit type	ST ECOPACK Grade	
8.07	mg	Each	ECOPACK® 2	

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 ; if coating is used or other bulk termination : add in comments	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	2 - 2 - 0.6	8	No lead	
Comment	Package:UFSON 2x2x0.6 8 PITCH 0.5; MDF valid for LM393QT			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
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

QueryList : REACH-17th December 2014				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	1YNB*0393BG6					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Silicon die	Other inorganic materials	0.314	mg	supplier	die	Silicon (Si)	7440-21-3		0.305	mg	971338	37794
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	12739	496
Silicon die				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	6369	248
Silicon die				supplier	Passivation	Silicon Oxide	7631-86-9		0.003	mg	9554	372
Leadframe	Copper and its alloy	3.261	mg	supplier	alloy	Copper (Cu)	7440-50-8		3.064	mg	939589	379678
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		0.017	mg	5213	2107
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		0.112	mg	34345	13879
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.004	mg	1227	496
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.003	mg	920	372
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.017	mg	5213	2107
Leadframe				supplier	alloy	Manganese (Mn)	7439-96-5		0.002	mg	613	248
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.038	mg	11653	4709
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.003	mg	920	372
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	307	124
Die attach	Other inorganic materials	0.119	mg	supplier	glue	Epoxyde Bisphenol A Resin	25068-38-6		0.011	mg	92437	1363
Die attach				supplier	glue	Silica, vitreous	60676-86-0		0.036	mg	302521	4461
Die attach				supplier	glue	Ethoxyethoxy-ethyl Acetate	112-15-2		0.026	mg	218487	3222
Die attach				supplier	glue	Aluminium oxide	1344-28-1		0.024	mg	201681	2974
Die attach				supplier	glue	Bisphenol A diglycidyl ether polymer	25036-25-3		0.017	mg	142857	2107
Die attach				supplier	glue	Glycol ether ester	Proprietary		0.002	mg	16807	248
Die attach				supplier	glue	Diaminodiphenylsulfone	80-08-0		0.002	mg	16807	248
Die attach				supplier	glue	Aminopropyltriethoxysilane	919-30-2		0.001	mg	8403	124
Bonding wire	Precious metals	0.053	mg	supplier	wire	Gold (Au)	7440-57-5		0.053	mg	1000000	6568
encapsulation	Other inorganic materials	4.315	mg	supplier	mold compound	Silica Fused	60676-86-0		3.78	mg	876014	468401
encapsulation				supplier	mold compound	Epoxy Resin	85954-11-6		0.255	mg	59096	31599
encapsulation				supplier	mold compound	Phenol Resin	26834-02-6		0.255	mg	59096	31599
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		0.025	mg	5794	3098