



## 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>	2017-03-30
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Patrick Crudo	<b>Representative Title</b>	MMS MD CHAMPION
<b>Representative Phone *</b>	(+33) 442 688 339	<b>Representative Email *</b>	<a href="mailto:patrick.crudo@st.com">patrick.crudo@st.com</a>
<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>	true	<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	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 omprehensive 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
STM32F769IIT6	E11T*451XXXZ	A	9991	2017-03-30
	Amount	UoM	Unit type	ST ECOPACK Grade
	1650.00	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		 life.augmented
3	260	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used or other bulk termination : add in comments	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	24x24x1.4	176	L bend	
Comment	Package: 1T LQFP 176 24X24X1.4 0110489			

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-12th January 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	E11T*451XXXZ					
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	25.457	mg	supplier	die	Silicon (Si)	7440-21-3		23.875	mg	937856	14470
Die or Dies (choose)				supplier	metallization	Aluminium (Al)	7429-90-5		0.111	mg	4360	67
Die or Dies (choose)				supplier	metallization	Copper (Cu)	7440-50-8		0.719	mg	28244	436
Die or Dies (choose)				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	79	1
Die or Dies (choose)				supplier	metallization	Tantalum (Ta)	7440-25-7		0.100	mg	3928	61
Die or Dies (choose)				supplier	metallization	Tungsten (W)	7440-33-7		0.323	mg	12688	196
Die or Dies (choose)				supplier	Passivation	Silicon Nitride	12033-89-5		0.084	mg	3300	51
Die or Dies (choose)				supplier	Passivation	Silicon Oxide	7631-86-9		0.243	mg	9546	147
Mold Compound (Sumitomo G631H)	Other inorganic materials	1424.523	mg	supplier	Molding Compound	Epoxy Resin A	Proprietary		42.783	mg	30033	25929
Mold Compound (Sumitomo G631H)				supplier	Molding Compound	Epoxy Resin B	proprietary		42.783	mg	30033	25929
Mold Compound (Sumitomo G631H)				supplier	Molding Compound	Phenol Resin	proprietary		50.305	mg	35314	30488
Mold Compound (Sumitomo G631H)				supplier	Molding Compound	Silica(Amorphous) A	60676-86-0		1141.764	mg	801506	691978
Mold Compound (Sumitomo G631H)				supplier	Molding Compound	Silica(Amorphous) B	7631-86-9		142.610	mg	100111	86430
Mold Compound (Sumitomo G631H)				supplier	Molding Compound	Carbon Black	1333-86-4		4.278	mg	3003	2593
Leadframe (C7025)	Other inorganic materials	169.700	mg	supplier	Leadframe	Copper (Cu)	7440-50-8		155.785	mg	918000	94415
Leadframe (C7025)				supplier	Leadframe	Nickel (Ni)	7440-02-0		5.430	mg	32000	3291
Leadframe (C7025)				supplier	Leadframe	Silicon (Si)	7440-21-3		2.036	mg	12000	1234
Leadframe (C7025)				supplier	Leadframe	Magnesium (Mg)	7439-95-4		0.509	mg	3000	309
Leadframe (C7025)				supplier	Leadframe	Silver (Ag)	7440-22-4		5.940	mg	35000	3600
Die Attach (YIZ 8143)	Other inorganic materials	6.000	mg	supplier	Die Attach	Silver Flake	7440-22-4		4.650	mg	775000	2818
Die Attach (YIZ 8143)				supplier	Die Attach	Epoxy Acylate	15625-89-5		0.300	mg	50000	182
Die Attach (YIZ 8143)				supplier	Die Attach	Substiyuted Polyamine	68490-66-4		0.090	mg	15000	55
Die Attach (YIZ 8143)				supplier	Die Attach	Bisphenol F	28064-14-4		0.600	mg	100000	364
Die Attach (YIZ 8143)				supplier	Die Attach	2-Ethylhexyl glycidyl ether	2461-15-6		0.360	mg	60000	218
Wire (Au)	Other inorganic materials	3.420	mg	supplier	Wire	Au	7440-57-5		3.386	mg	990000	2052
Wire (Au)				supplier	Wire	Palladium	7440-05-3		0.034	mg	10000	21
External Plating (Matte Sn)	Other inorganic materials	20.900	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5		20.898	mg	999900	12665
External Plating (Matte Sn)				supplier	Matte Sn	Impurities	-		0.002	mg	100	1