



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 *	2018-11-13
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	LAURENT TOSI	Representative Title	MDG MD CHAMPION
Representative Phone *	33 442 685 795	Representative Email *	laurent.tosi@st.com
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

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				
Supplier Acceptance *	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; text-align: center;">true</td> <td style="width: 33%; text-align: center;">Legal Declaration *</td> <td style="width: 33%; text-align: center;">Standard</td> </tr> </table>	true	Legal Declaration *	Standard
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 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.</p>			

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32H743ZIT6	P01A*450XXXV	A	9998	2018-11-13
	Amount	UoM	Unit type	ST ECOPACK Grade
	1315.00	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	3		
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	20x20x1.4	144	L bend	
Comment	Package: 1A LQFP 144 20X20X1.4 2 0099183			

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	P01A*450XXXV					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	16.439	mg	supplier	die	Silicon (Si)	7440-21-3		15.697	mg	954863	11937
				supplier	metallization	Aluminium (Al)	7429-90-5		0.088	mg	5353	67
				supplier	metallization	Copper (Cu)	7440-50-8		0.276	mg	16789	210
				supplier	passivation	Nickel (Ni)	7440-02-0		0.001	mg	61	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.045	mg	2737	34
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	487	6
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	61	1
				supplier	Passivation	Silicon Oxide	7631-86-9		0.323	mg	19648	246
LEADFRAME (MHT - C194)	Other inorganic materials	246.909	mg	supplier	ALLOY	Copper (Cu)	7440-50-8	0.9745	240.612	mg	974500	182975
				supplier	ALLOY	Iron (Fe)	7439-89-6	0.024	5.926	mg	24000	4506
				supplier	ALLOY	Zinc (Zn)	7440-66-6	0.0012	0.296	mg	1200	225
				supplier	ALLOY	Metallic Phosphorous (P)	7723-14-0	0.0003	0.074	mg	300	56
LEADFRAME (MHT - Ag Plating)	Other inorganic materials	1.640	mg	supplier	COATING	Silver(Ag)	7440-22-4	1	1.640	mg	1000000	1247
DIE ATTACH (Evertech - AP4200)	Other inorganic materials	2.572	mg	supplier	GLUE	Silver(Ag)	7440-22-4	0.78	2.006	mg	780000	1526
				supplier	GLUE	Phenolic Resin	9003-35-4	0.015	0.039	mg	15000	29
				supplier	GLUE	Ethylene glycol monobutyl ether acetate	112-07-2	0.04	0.103	mg	40000	78
				supplier	GLUE	Polymer with oxirane and Phenol	9003-36-5	0.15	0.386	mg	150000	293
				supplier	GLUE	1,4-Butanedioldiglycidyl Ether	2425-79-8	0.015	0.039	mg	15000	29
BONDING WIRE (Hesung - Au HTS V	Other inorganic materials	2.518	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5	0.99006	2.493	mg	990060	1896
				supplier	BONDING WIRE	Calcium (Ca)	7440-70-2	0.00004	0.000	mg	40	0
				supplier	BONDING WIRE	Palladium (Pd)	7440-05-3	0.0099	0.025	mg	9900	19
ENCAPSULATION (Sumitomo -G6315H	Other inorganic materials	1037.064	mg	supplier	MOLDING COMPOUND	Epoxy Resin A	Trade secret	0.03	31.134	mg	30021	23676
				supplier	MOLDING COMPOUND	Epoxy resin B	85954-11-6	0.04	41.512	mg	40029	31568
				supplier	MOLDING COMPOUND	Silica Amorphous A (SiO3)	60676-86-0	0.7	725.722	mg	699785	551880
				supplier	MOLDING COMPOUND	Silica Amorphous B (SiO3)	7631-86-9	0.155	160.860	mg	155111	122327
				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4	0.005	5.189	mg	5004	3946
FINISHING (Sytron - Sn100)	Other inorganic materials	7.858	mg	supplier	MOLDING COMPOUND	Phenol Resin	205830-20-2	0.07	72.646	mg	70050	55244
				supplier	COATING	Tin (Sn)	7440-31-5	1	7.858	mg	1000000	5976