Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D * : Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	30-08-2018
Company Unique ID	NL 008751171B01		
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 *	MDG MD CHAMPION	Representative Title	MDG 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

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.

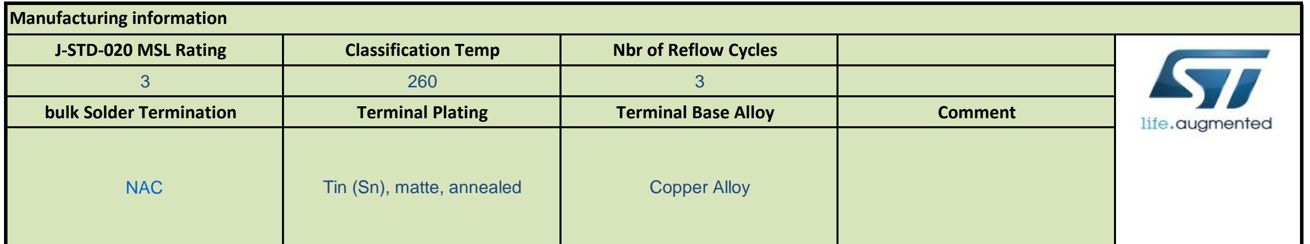
Legal Statement

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 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
STM32F417IGT7	Y91T*413XXXY	B	9991	30-08-2018
	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	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte, annealed	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-27th June 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**	**Y91T*413XXXY**				5999999.0	1000002.0
Homogeneous Material	**Material Group**	**Mass**	**UoM**	**Level**	**Substance Category**	**Substance**	**CAS**	**Exempt**	**Mass**	**UoM**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**
Die or dies	M-011 Other inorganic materials	13.728	mg	supplier	die	Silicon (Si)	7440-21-3		13.151	mg	957969	7970
				supplier	metallization	Aluminium (Al)	7429-90-5		0.028	mg	2040	17
				supplier	metallization	Copper (Cu)	7440-50-8		0.244	mg	17774	148
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	73	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.079	mg	5755	48
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	219	2
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	146	1
				supplier	Passivation	Silicon Nitride	12033-89-5		0.062	mg	4516	38
				supplier	Passivation	Silicon Oxide	7631-86-9		0.158	mg	11509	96
Encapsulation	M-011 Other inorganic materials	946.000	mg	supplier	Molding Compound	Epoxy Resin A	Proprietary		41.840	mg	44228	25358
					Molding Compound	Epoxy Resin B	Proprietary		41.840	mg	44228	25358
					Molding Compound	Phenol Resin	Proprietary		62.760	mg	66342	38036
					Molding Compound	Carbon Black	1333-86-4		4.184	mg	4423	2536
					Molding Compound	Silica Fused	60676-86-0		795.376	mg	840778	482046
Leadframe	M-011 Other inorganic materials	666.052	mg	supplier	Alloy	Copper (CU)	7440-50-8		626.402	mg	940470	379638
					Alloy	Nickel (Ni)	7440-02-0		24.780	mg	37204	15018
					Alloy	Silicon (Si)	7440-21-3		5.370	mg	8062	3255
					Alloy	Silver (Ag)	7440-22-4		8.260	mg	12401	5006
					Alloy	Magnesium (Mg)	7439-95-4		1.240	mg	1862	752
Die Attach	M-011 Other inorganic materials	3.010	mg	supplier	Glue	Silver Flake	7440-22-4		2.330	mg	774086	1412
					Glue	Epoxy Acylate	15625-89-5		0.150	mg	49834	91
					Glue	Substiyuted Polyamine	68490-66-4		0.050	mg	16611	30
					Glue	Bisphenol F	28064-14-4		0.300	mg	99668	182
					Glue	2-Ethylhexyl glycidyl ether	2461-15-6		0.180	mg	59801	109
Bonding wire	M-011 Other inorganic materials	2.510	mg	supplier	Bonding wire	Au	7440-57-5		2.480	mg	988048	1503
					Bonding wire	Pd	7440-05-3		0.030	mg	11952	18
Finishing	M-011 Other inorganic materials	18.700	mg	supplier	Connection coating	Tin(Sn)	7440-31-5		18.700	mg	1000000	11333