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 *	20-06-2018
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

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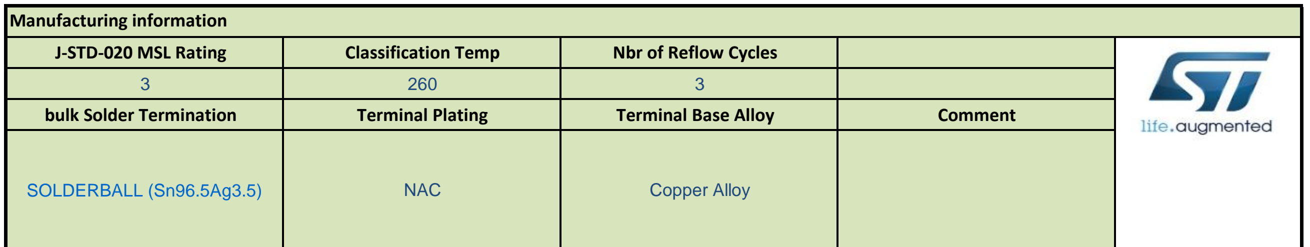
Legal Statement

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 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**
STM32F410RBI3	P12I*458HHHA	A	9996	20-06-2018
	Amount	UoM	**Unit type**	**ST ECOPACK Grade**
	36.20	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**	
SOLDERBALL (Sn96.5Ag3.5)	NAC	Copper Alloy		

Package Designator	**Size**	**Nbr of instances**	**Shape**	
BGA	5X5X0.6	64	No lead	
Comment	Package : A019 UFBGA 5X5X0.6 64L P 0.5 MM 8526322			

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	P12I*458HHHA				5999999.0	1000000.0
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	1.495	mg	supplier	die	Silicon (Si)	7440-21-3		1.182	mg	790635	32654
				supplier	metallization	Aluminium (Al)	7429-90-5		0.022	mg	14716	608
				supplier	metallization	Copper (Cu)	7440-50-8		0.142	mg	94983	3923
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.020	mg	13378	553
				supplier	metallization	Tungsten (W)	7440-33-7		0.064	mg	42809	1768
				supplier	Passivation	Silicon Nitride	12033-89-5		0.017	mg	11371	470
				supplier	Passivation	Silicon Oxide	7631-86-9		0.048	mg	32107	1326
SUBSTRATE (DS7409HGB)	M-011 Other inorganic materials	17.513	mg	supplier	CORE	Glass Cloth	65997-17-3		1.011	mg	57700	27916
				supplier	CORE	Epoxy resin	61788-97-4		0.182	mg	10400	5032
				supplier	CORE	Flame resistant epoxy resin	223769-10-6		0.161	mg	9200	4451
				supplier	CORE	Heat resistant resin	25722-66-1		0.161	mg	9200	4451
				supplier	CORE	Silica filler	7631-86-9		0.384	mg	21900	10595
				supplier	CORE	Metal Hydroxide	Proprietary		0.303	mg	17300	8370
				supplier	CORE	Copper foil	7440-50-8		7.093	mg	405000	195943
				supplier	SOLDERMASK (AUS308)	Talc containing no asbestiform fibers	14807-96-6		0.144	mg	8200	3967
				supplier	SOLDERMASK (AUS308)	Barium sulfate	7727-43-7		2.403	mg	137200	66379
				supplier	SOLDERMASK (AUS308)	Dipropylene glycol monomethyl ether	34590-94-8		0.968	mg	55300	26755
				supplier	SOLDERMASK (AUS308)	Napthalene	91-20-3		0.368	mg	21000	10160
				supplier	SOLDERMASK (AUS308)	Morpholine derivative	Proprietary		0.403	mg	23000	11128
				supplier	CU PLATING	Copper (Cu)	7440-50-8		2.904	mg	165800	80216
				supplier	NI PLATING	Nickel (Ni)	7440-02-0		0.830	mg	47400	22933
				supplier	AU PLATING	Gold (Au)	7440-57-5		0.200	mg	11400	5515
DIE ATTACH (ATB-130U)	M-011 Other inorganic materials	0.182	mg	supplier	GLUE	Butadiene,acrylonitrile polymer,carboxy-termi	68610-41-3		0.127	mg	700000	3520
				supplier	GLUE	Phenol-formaldehyde polymer	9003-35-4		0.018	mg	100000	503
				supplier	GLUE	Phenol polymer with formaldehyde,glycidyl et	28064-14-4		0.017	mg	92000	463
				supplier	GLUE	Dapsone	80-08-0		0.018	mg	97000	488
				supplier	GLUE	Reaction product bisphenol-A-(epichlorhydrin	25068-38-6		0.002	mg	10000	50
				supplier	GLUE	4,4, Isopropylidenediphenol	80-05-7		0.000	mg	1000	5
BONDING WIRE (MKE 4N)	M-011 Other inorganic materials	0.548	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.548	mg	1000000	15139
SOLDERBALL (Sn96.5Ag3.5)	M-011 Other inorganic materials	1.987	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		1.917	mg	965000	52971
				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0.070	mg	35000	1921
ENCAPSULATION (GE-100LFCS)	M-011 Other inorganic materials	14.473	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		12.997	mg	900000	359038
				supplier	MOLDING COMPOUND	Epoxy resin	Proprietary		0.664	mg	45000	18355
				supplier	MOLDING COMPOUND	Phenol resin	Proprietary		0.591	mg	40000	16316
				supplier	MOLDING COMPOUND	Metal Hydroxide	Proprietary		0.148	mg	10000	4079
				supplier	MOLDING COMPOUND	Carbon black	1333-86-4		0.074	mg	5000	2039