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 *	23-01-2018
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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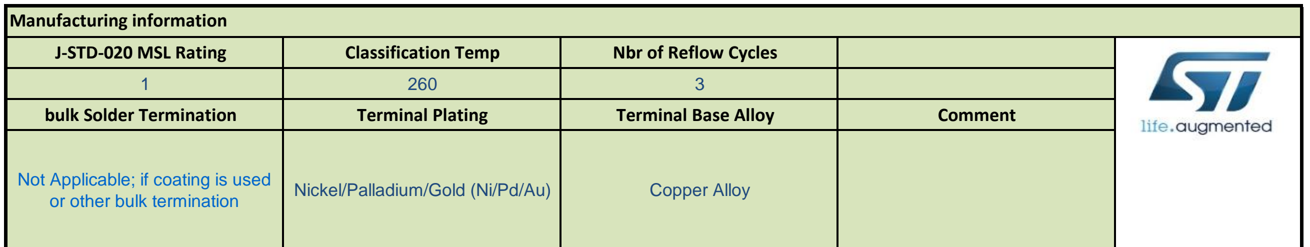
Legal Statement

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**
STM32F042F4P6 STM32F042F4P6TR	P1YA*445XXXA	A	9998	23-01-2018
	Amount	UoM	**Unit type**	**ST ECOPACK Grade**
	72.00	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
1	260	3		
bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
Not Applicable; if coating is used or other bulk termination	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	**Size**	**Nbr of instances**	**Shape**	
-	6.5x4.4x1	20		
Comment	Package : YA TSSOP 20 BODY 4.4 PITCH 0.65 0087225			

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**	**P1YA*445XXXA**				5999997.0	0.0
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	4.905	mg	supplier	die	Silicon (Si)	7440-21-3		4.632	mg	944343	64332
				supplier	metallization	Aluminium (Al)	7429-90-5		0.019	mg	3874	264
				supplier	metallization	Copper (Cu)	7440-50-8		0.093	mg	18960	1292
				supplier	metallization	Cobalt (Co)	7440-48-4		0.017	mg	3466	236
				supplier	metallization	Titanium (Ti)	7440-32-6		0.005	mg	1019	69
				supplier	metallization	Tungsten (W)	7440-33-7		0.010	mg	2039	139
				supplier	Passivation	Silicon Nitride	12033-89-5		0.012	mg	2446	167
				supplier	Passivation	Silicon Oxide	7631-86-9		0.117	mg	23853	1625
LEADFRAME	Copper and its alloy	36.431	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		34.408	mg	944470	477882
				supplier	ALLOY	Nickel (Ni)	7440-02-0		1.073	mg	29453	14903
				supplier	ALLOY	Silicon (Si)	7440-21-3		0.232	mg	6368	3222
				supplier	ALLOY	Magnesium (Mg)	7439-95-4		0.054	mg	1482	750
				supplier	COATING	Nickel (Ni)	7440-02-0		0.647	mg	17760	8986
				supplier	COATING	Palladium (Pd)	7440-05-3		0.014	mg	384	194
				supplier	COATING	Gold (Au)	7440-57-5		0.003	mg	82	42
DIE ATTACH	M-011 Other inorganic materials	0.848	mg	supplier	GLUE	Epoxy resin A	9003-36-5		0.059	mg	69575	819
				supplier	GLUE	Epoxy resin B	68475-94-5		0.034	mg	40094	472
				supplier	GLUE	Silver(Ag)	7440-22-4		0.653	mg	770047	9069
				supplier	GLUE	Lactone	96-48-0		0.034	mg	40094	472
				supplier	GLUE	Polyoxypropylenediamine	9046-10-0		0.034	mg	40094	472
				supplier	GLUE	2,6-Diglycidyl phenyl allyl ether oligomer	Proprietary		0.034	mg	40094	472
BONDING WIRE	M-011 Other inorganic materials	0.270	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.267	mg	988889	3708
				supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.003	mg	11111	42
ENCAPSULATION	M-011 Other inorganic materials	25.897	mg	supplier	MOLDING COMPOUND	Epoxy Resin	Proprietary		2.772	mg	94685	38499
				supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		24.348	mg	831671	-661836
				supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		2.002	mg	68384	27805
				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		0.154	mg	5260	2139
FINISHING	M-011 Other inorganic materials	0.271	mg	supplier	CONNECTION COATING	Nickel (Ni)	7440-02-0		0.264	mg	974170	3667
				supplier	CONNECTION COATING	Palladium (Pd)	7440-05-3		0.006	mg	22140	83
				supplier	CONNECTION COATING	Gold (Au)	7440-57-5		0.001	mg	3690	14