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 *	21-08-2017
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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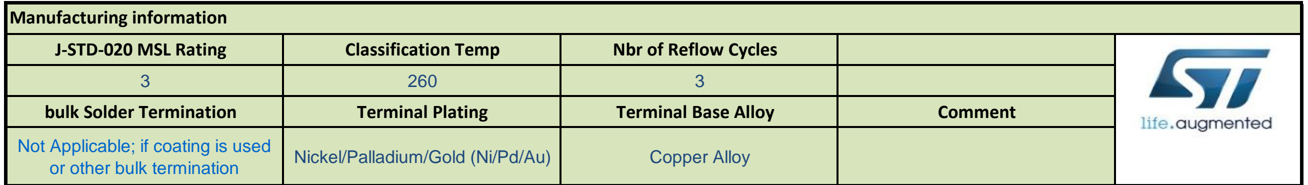
Legal Statement

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**
STM32F101ZDT6	P41A*414XXX3	A	9998	21-08-2017
	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**		
3	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**	
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 : California Prop65 list, dated 7th July 2017			
Query			**Response**
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			**FALSE**
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			**TRUE**
Substance	amount in product (mg)	Application	ppm in product
Nickel	10.10	Underlayer Plating	7683

QueryList : REACH-7th July 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**	**P41A*414XXX3**				6000002.0	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	18.400	mg	supplier	die	Silicon (Si)	7440-21-3		17.500	mg	951087	13308
				supplier	metallization	Aluminium (Al)	7429-90-5		0.051	mg	2772	39
				supplier	metallization	Copper (Cu)	7440-50-8		0.257	mg	13967	195
				supplier	metallization	Cobalt (Co)	7440-48-4		0.048	mg	2609	37
				supplier	metallization	Titanium (Ti)	7440-32-6		0.014	mg	761	11
				supplier	metallization	Tungsten (W)	7440-33-7		0.028	mg	1522	21
				supplier	Passivation	Silicon Nitride	12033-89-5		0.034	mg	1848	26
				supplier	Passivation	Silicon Oxide	7631-86-9		0.325	mg	17663	247
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.143	mg	7772	109
LEADFRAME (MHT- C194 PPF)	M-011 Other inorganic materials	256.512	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		240.882	mg	939067	183180
				supplier	ALLOY	Iron (Fe)	7439-89-6		5.932	mg	23126	4511
				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.297	mg	1158	226
				supplier	ALLOY	Phosphorus (P)	7723-14-0		0.074	mg	288	56
				supplier	COATING	Nickel (Ni)	7440-02-0		9.042	mg	35250	6876
				supplier	COATING	Palladium (Pd)	7440-05-3		0.192	mg	749	146
				supplier	COATING	Gold (Au)	7440-57-5		0.093	mg	363	71
DIE ATTACH (CRM - 1076YB)	M-011 Other inorganic materials	1.993	mg	supplier	GLUE	Epoxy resin A	9003-36-5		0.100	mg	50176	76
				supplier	GLUE	Epoxy resin B	Proprietary		0.149	mg	74762	113
				supplier	GLUE	Silver(Ag)	7440-22-4		1.395	mg	699950	1061
				supplier	GLUE	Silica	Proprietary		0.299	mg	150025	227
				supplier	GLUE	Hardener	Proprietary		0.050	mg	25088	38
BONDING WIRE (Heraeus - HTS Au wi	M-011 Other inorganic materials	2.518	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		2.493	mg	990071	1896
				supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.025	mg	9929	19
ENCAPSULATION (Sumitomo -G631H(	M-011 Other inorganic materials	1034.488	mg	supplier	MOLDING COMPOUND	Epoxy Resin	Proprietary		104.035	mg	101288	79114
				supplier	MOLDING COMPOUND	Silica fused (SiO3)	60676-86-0		868.032	mg	837939	-339900
				supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		57.219	mg	55708	43513
				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		5.202	mg	5065	3956
FINISHING - (MHT - PPF)	M-011 Other inorganic materials	1.089	mg	supplier	CONNECTION COATING	Nickel (Ni)	7440-02-0		1.061	mg	974288	807
				supplier	CONNECTION COATING	Palladium (Pd)	7440-05-3		0.023	mg	21120	17
				supplier	CONNECTION COATING	Gold (Au)	7440-57-5		0.005	mg	4591	4