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 ***	2017-04-12
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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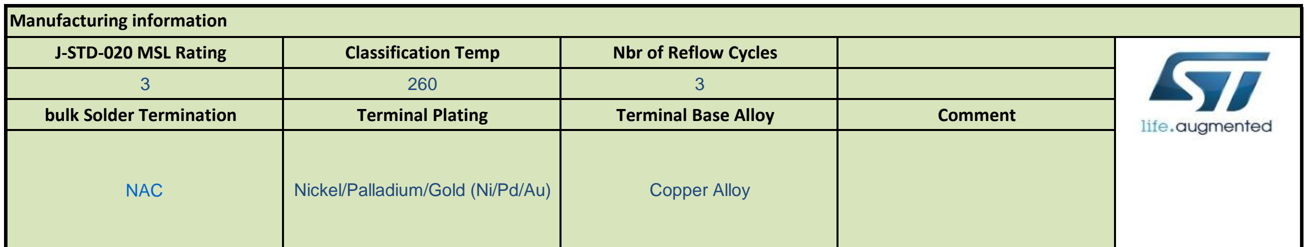
Legal Statement

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	A41A*414XXX2	A	1054	2017-04-12
	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**	
NAC	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 27th January 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	9.29	Underlayer Plating	7064

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**	**A41A*414XXX2**				7000001.0	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	18.001	mg	supplier	die	Silicon (Si)	7440-21-3		17.244	mg	957947	13113
				supplier	metallization	Aluminium (Al)	7429-90-5		0.051	mg	2833	39
				supplier	metallization	Copper (Cu)	7440-50-8		0.257	mg	14277	195
				supplier	metallization	Cobalt (Co)	7440-48-4		0.048	mg	2667	37
				supplier	metallization	Titanium (Ti)	7440-32-6		0.014	mg	778	11
				supplier	metallization	Tungsten (W)	7440-33-7		0.028	mg	1555	21
				supplier	Passivation	Silicon Nitride	12033-89-5		0.034	mg	1889	26
				supplier	Passivation	Silicon Oxide	7631-86-9		0.325	mg	18055	247
Lead-frame	M-011 Other inorganic materials	265.814	mg	supplier	alloy	Copper (Cu)	7440-50-8		255.713	mg	962000	194458
				supplier	alloy	Nickel (Ni)	7440-02-0		7.974	mg	30000	6064
				supplier	alloy	Silicium (Si)	7440-21-3		1.728	mg	6500	1314
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.399	mg	1500	303
Lead-frame Coating	M-011 Other inorganic materials	1.404	mg	supplier	coating	Nickel (Ni)	7440-02-0		1.306	mg	930510	993
				supplier	coating	Palladium (Pd)	7440-05-3		0.053	mg	37710	40
				supplier	coating	Gold (Au)	7440-57-5		0.045	mg	31780	34
Die Attach	M-011 Other inorganic materials	6.647	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		5.234	mg	787500	3980
				supplier	glue or soft solder	Urethane acrylate oligomer	Proprietary		0.465	mg	70000	354
				supplier	glue or soft solder	Isobornyl Methacrylate	7534-94-3		0.465	mg	70000	354
				supplier	glue or soft solder	Acrylate	Proprietary		0.465	mg	70000	354
				supplier	glue or soft solder	HC C6-13 aliph. arom	64742-48-9		0.017	mg	2500	13
Wires	M-011 Other inorganic materials	5.759	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		5.759	mg	1000000	4380
Encapsulation	M-011 Other inorganic materials	1017.368	mg	supplier	Moulding Compound	Solid Epoxy Resin	Proprietary		70.001	mg	68806	53233
				supplier	Moulding Compound	Phenol Resin	Proprietary		50.001	mg	49147	38023
				supplier	Moulding Compound	Silica, vitreous	60676-86-0		882.366	mg	867303	671000
				supplier	Moulding Compound	Carbon-black	1333-86-4		5.000	mg	4915	3802
				supplier	Bismuth/Bismuth Compounds	Bismuth	7440-69-9		10.000	mg	9829	7605
Finishing	M-011 Other inorganic materials	0.009	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.009	mg	930510	7
				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	37710	0
				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	31780	0