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 *	24-08-2018
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		

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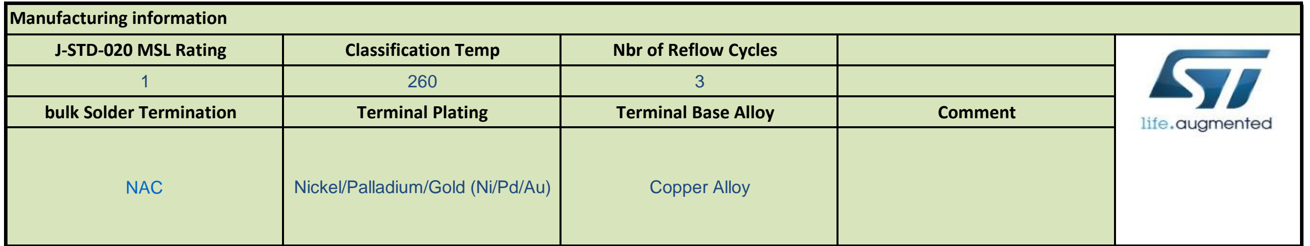
Legal Statement

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**
STM8S103F3U6TR	43E4*767XXX7	A	9996	24-08-2018
	Amount	UoM	**Unit type**	**ST ECOPACK Grade**
	19.10	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**		
1	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**	
QFN	3X3X0.6	20	No lead	
Comment	Package : A0A5 UFQFPN 3X3X0.6 20L 0.5 MM PITCH 8177031			

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 25th May 2018			
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	0.53	Underlayer Plating	27487

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**	**43E4*767XXX7**				7000001.0	999965.0
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	1.112	mg	supplier	die	Silicon (Si)	7440-21-3		1.030	mg	926259	53927
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	6295	366
				supplier	metallization	Copper (Cu)	7440-50-8		0.024	mg	21583	1257
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.003	mg	2698	157
				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	3597	209
				supplier	Passivation	Silicon Nitride	12033-89-5		0.006	mg	5396	314
				supplier	Passivation	Silicon Oxide	7631-86-9		0.038	mg	34173	1990
LEADFRAME (C7025RuPPF)	Copper and its alloy	9.289	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		8.936	mg	962000	468001
				supplier	ALLOY	Nickel (Ni)	7440-02-0		0.279	mg	30000	14595
				supplier	ALLOY	Silicon (Si)	7440-21-3		0.060	mg	6500	3162
				supplier	ALLOY	Magnesium (Mg)	7439-95-4		0.014	mg	1500	729
LEADFRAME (C7025RuPPF) Coating	M-011 Other inorganic materials	0.208	mg	supplier	COATING	Nickel (Ni)	7440-02-0		0.203	mg	975400	10655
				supplier	COATING	Palladium (Pd)	7440-05-3		0.004	mg	20700	226
				supplier	COATING	Gold (Au)	7440-57-5		0.001	mg	2200	24
				supplier	COATING	Silver (Ag)	7440-22-4		0.000	mg	1700	19
DIE ATTACH (ATB-F125E)	M-011 Other inorganic materials	0.116	mg	supplier	GLUE	Silicon dioxide	7631-86-9		0.070	mg	600000	3643
				supplier	GLUE	Butadiene,acrylonitrile polymer,carboxy-termi	68610-41-3		0.029	mg	250000	1518
				supplier	GLUE	Poly[oxy[(2-oxiranyl)-1,2cyclohexanediyl]],a-hy	244772-007		0.006	mg	50000	304
				supplier	GLUE	Phenol-formaldehyde polymer	9003-35-4		0.006	mg	50000	304
				supplier	GLUE	Reaction product:bisphenol-A-(epichlorhydrin	25068-38-6		0.006	mg	50000	304
BONDING WIRE	M-011 Other inorganic materials	0.030	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.030	mg	1000000	1687
ENCAPSULATION (EME G700Y)	M-011 Other inorganic materials	8.296	mg	supplier	MOLDING COMPOUND	Epoxy resin	Proprietary		0.753	mg	90000	39448
				supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		7.124	mg	860000	372656
				supplier	MOLDING COMPOUND	Phenol Resin	205830-20-2		0.377	mg	45000	19724
				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		0.042	mg	5000	2192
EXTERNAL PLATING	M-011 Other inorganic materials	0.049	mg	supplier	COATING	Nickel (Ni)	7440-02-0		0.043	mg	882600	2254
				supplier	COATING	Palladium (Pd)	7440-05-3		0.003	mg	52400	134
				supplier	COATING	Gold (Au)	7440-57-5		0.002	mg	36400	93
				supplier	COATING	Silver (Ag)	7440-22-4		0.001	mg	28600	73