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 *	15-05-2019
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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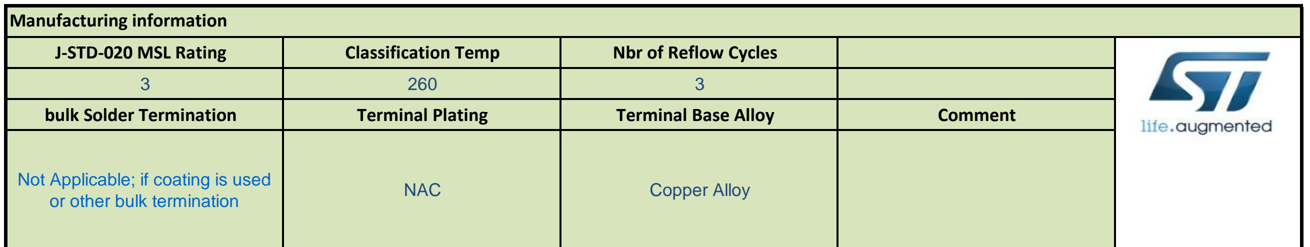
Legal Statement

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**
STM32L4R7AII6	P5OQ*470XXXW	A	9996	15-05-2019
	Amount	UoM	**Unit type**	**ST ECOPACK Grade**
	72.25	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	NAC	Copper Alloy		

Package Designator	**Size**	**Nbr of instances**	**Shape**	
BGA	7,7,0.6	169	No lead	
Comment	Package : A0YV UFBGA 7X7X0.6 169L P 0.5 MM 8502430			

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-15th January 2019	
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**	**P5OQ*470XXXW**				6000000.0	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	5.775	mg	supplier	die	Silicon (Si)	7440-21-3		4.837	mg	837576	66948
				supplier	metallization	Aluminium (Al)	7429-90-5		0.045	mg	7792	623
				supplier	metallization	Copper (Cu)	7440-50-8		0.397	mg	68745	5495
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	173	14
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.129	mg	22338	1785
				supplier	metallization	Titanium (Ti)	7440-32-6		0.005	mg	866	69
				supplier	metallization	Tungsten (W)	7440-33-7		0.003	mg	519	42
				supplier	Passivation	Silicon Nitride	12033-89-5		0.101	mg	17489	1398
				supplier	Passivation	Silicon Oxide	7631-86-9		0.257	mg	44502	3557
SUBSTRATE (DS7409HGB)	M-011 Other inorganic materials	34.207	mg	supplier	CORE	Glass Cloth	65997-17-3		5.815	mg	170000	80487
				supplier	CORE	Epoxy resin	61788-97-4		1.368	mg	40000	18938
				supplier	CORE	Flame resistant epoxy resin	223769-10-6		1.368	mg	40000	18938
				supplier	CORE	Heat resistant resin	25722-66-1		1.368	mg	40000	18938
				supplier	CORE	Silica filler	7631-86-9		3.763	mg	110000	52080
				supplier	CORE	Metal Hydroxide	Proprietary		0.684	mg	20000	9469
				supplier	CORE	Copper (Cu)	7440-50-8		14.367	mg	420000	198851
				supplier	SOLDERMASK (AUS320)	Solvent naptha(petroleum),heavy aromatic	64742-94-5		1.881	mg	55000	26040
				supplier	SOLDERMASK (AUS320)	Napthalene	91-20-3		0.198	mg	5800	2746
				supplier	SOLDERMASK (AUS320)	Phosphinoxide derivative	Proprietary		0.068	mg	2000	947
				supplier	SOLDERMASK (AUS320)	Talc containing no asbestiform fibers	14807-96-6		0.513	mg	15000	7102
				supplier	SOLDERMASK (AUS320)	Barium sulfate	7727-43-7		0.855	mg	25000	11836
				supplier	SOLDERMASK (AUS320)	Dipropylene glycol monomethyl ether	34590-94-8		0.513	mg	15000	7102
				supplier	CU PLATING	Copper (Cu)	7440-50-8		1.231	mg	36000	17045
				supplier	NI PLATING	Nickel (Ni)	7440-02-0		0.171	mg	5000	2367
				supplier	AU PLATING	Gold (Au)	7440-57-5		0.041	mg	1200	568
DIE ATTACH (ATB-130U)	M-011 Other inorganic materials	0.686	mg	supplier	GLUE	Butadiene,acrylonitrile polymer,carboxy-termi	68610-41-3		0.480	mg	700000	6648
				supplier	GLUE	Phenol-formaldehyde polymer	9003-35-4		0.069	mg	100000	950
				supplier	GLUE	Phenol polymer with formaldehyde,glycidyl et	28064-14-4		0.063	mg	92000	874
				supplier	GLUE	Dapsone	80-08-0		0.067	mg	97000	921
				supplier	GLUE	Reaction product bisphenol-A-(epichlorhydrin	25068-38-6		0.007	mg	10000	95
				supplier	GLUE	4,4, Isopropylidenediphenol	80-05-7		0.001	mg	1000	9
BONDING WIRE (MKE 4N)	M-011 Other inorganic materials	0.826	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.826	mg	1000000	11437
SOLDERBALL (Sn96.5Ag3.5)	M-011 Other inorganic materials	5.248	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		5.064	mg	965000	70090
				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0.184	mg	35000	2542
ENCAPSULATION (GE-100LFCS)	M-011 Other inorganic materials	25.508	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		22.863	mg	900000	-683554
				supplier	MOLDING COMPOUND	Epoxy resin	Proprietary		1.190	mg	45000	16471
				supplier	MOLDING COMPOUND	Phenol resin	Proprietary		1.058	mg	40000	14641
				supplier	MOLDING COMPOUND	Metal Hydroxide	Proprietary		0.264	mg	10000	3660
				supplier	MOLDING COMPOUND	Carbon black	1333-86-4		0.132	mg	5000	1831