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 ***	15-08-2023
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 *	Material Declaration champion	**Representative Title**	Material Declaration 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.

Signature Not
Verified

Digitally signed by
MDF Champion
Date: 2023.08.15
15:06:28 +08:00

Product				
Mfr Item Number	**Mfr Item Name**	**Version**	**Mfr Site**	**Date**
STM32L476QGI3 STM32L476QGI3TR	25PG*415XXX4	A	9991	15-08-2023
	Amount	UoM	**Unit type**	**ST ECOPACK Grade**
	62.78	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 termaination : add in comments	NAC	Copper Alloy	**96.5Sn/3.5Ag**

Package Designator	**Size**	**Nbr of instances**	**Shape**	
BGA	7x7	132	bulk solder	
Comment	Package : A0G8 UFBGA 7X7X0.6 132L P 0.5 R 12X12 8298393			

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-10 Jun 2022	
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**	**25PG*415XXX4**				6000000.0	1000016.2
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	2.947	mg	supplier	die	Silicon (Si)	7440-21-3		2.377	mg	806583	37862
				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	9162	430
				supplier	metallization	Copper (Cu)	7440-50-8		0.242	mg	82117	3855
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	339	16
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.078	mg	26468	1242
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	1018	48
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	679	32
				supplier	Passivation	Silicon Nitride	12033-89-5		0.061	mg	20699	972
				supplier	Passivation	Silicon Oxide	7631-86-9		0.156	mg	52935	2485
Substrate (A26884A)	M-011 Other inorganic materials	23.101	mg	supplier	BT-substrate	Thermosetting resin (Inorganic filler)	Proprietary		1.386	mg	60000	22078
					BT-substrate	Glass cloth	65997-17-3		8.570	mg	371000	136516
					BT-substrate	Copper foil	7440-50-8		10.557	mg	457000	168161
					Solder mask	2-benzyl-2-dimethylamino-4-morpholinobutyr	119313-12-1		0.820	mg	35500	13063
					Solder mask	Propanol, 1(or 2)-(2-methoxymethylethoxy)-	34590-94-8		0.843	mg	36500	13431
					Solder mask	Solvent naphtha (petroleum), heavy arom.	64742-94-5		0.774	mg	33500	12327
					Solder mask	Copper,[29H,31H-phthalocyaninato(2-)-.kappa.	147-14-8		0.150	mg	6500	2392
DAF (ATB-125)	M-011 Other inorganic materials	4.297	mg	supplier	film	Butadiene, acrylonitrile polymer, carboxy-termi	68610-41-3		2.949	mg	686250	46971
					film	Formaldehyde, polymer with (chloromethyl)ox	37382-79-9		1.104	mg	256850	17580
					film	Dapsone	80-08-0		0.159	mg	36900	2526
					film	[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.043	mg	10000	684
					film	Reaction product: bisphenol-A-(epichlorhydrin)	25068-38-6		0.043	mg	10000	684
Bonding wire (Cu)	Precious metals	0.600	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.002	mg	3500	33
					Bonding wire	Copper (Cu)	7440-50-8		0.579		965500	9227
					Bonding wire	Palladium (Pd)	7440-05-3		0.019		31000	296
Encapsulation (KE-G1250AAS)	M-011 Other inorganic materials	28.626	mg	supplier	Molding Compound	Epoxy resin	Proprietary		1.145	mg	40000	18239
					Molding Compound	Silica(Fused)	60676-86-0,7631-86-9		25.763	mg	900000	410376
					Molding Compound	Phenol resin	Proprietary		1.603	mg	56000	25535
					Molding Compound	Carbon Black	1333-86-4		0.115	mg	4000	1824
Solder balls (96.5Sn/3.5Ag)	Solder	3.210	mg	supplier	Solder	Tin (Sn)	7440-31-5		3.096	mg	964500	49316
					Solder	Silver(Ag)	7440-22-4		0.114	mg	35500	1815