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 *	2022-05-09
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 *	giovanni giacopello	Representative Title	ADG 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		

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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 comprehensive 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
giovanni giacopello
Date: 2022.10.28
08:28:28 +02:00

Product				
Mfr Item Number	**Mfr Item Name**	**Version**	**Mfr Site**	**Date**
STPSC20G12WLY	BF02*5G20BT7	A	998G	2022-05-09
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	5900	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**	
Not Applicable	Not Applicable	,	
Bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00832364

Package Designator	Package Size	Nbr of instances	Shape	
SIP	15.80 - 21 - 5	2	Through-hole	
Comment	DO247 LONG LEADS			

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 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 : ELV directive : 2000/53/EC amended 2020/363_March 2020	
Query	**Response**
1 - Product(s) meets EU ELV requirements without any exemptions	**true**
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false

Exemption Id.	**Description**

QueryList : California Prop65 list, dated 17th Dec 2021	
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	29.717	die - leadframe	5037

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014	
Query	**Response**
1 - Product(s) requires marking for the presence of restricted substances and must be marked with an Environmental Protection Use Period under China's Measures for Administration of the control of pollution by Electronic Information Products	false
2 - Product(s) is eligible for marking with the e code under China's Measures for Administration of the control of pollution by Electronic Information Products	false

Hasardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
O	O	O	O	O

QueryList : REACH-17 Jan 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

2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH	**true**

CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

QueryList : Responsible metals sourcing	
Query	**Response**
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	**true**
The following metals are present is the component :	**Tin,**
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update	
Query	**Response**
The Product does contain at least one of the substances listed in Chemical Control Act	**false**

China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 application date 1st December 2020	
Query	**Response**
The product contains adhesives identified under GB 33372	**false**

Stockholm Convention Persistent Organic Pollutants	
Query	**Response**
Product is compliant with Stockholm Convention Persistent Organic Pollutants Annex I	**false**

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						**Mfr Item Name**	**BF02*5G20BT7**						
Homogeneous Material	**Material Group**	**Mass**	**UoM**	**Level**	**Substance Category**	**Substance**	**CAS**	**Exempt**	**Mass**	**UoM**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**	
Die	M-011 Other inorganic materials	5.745	mg	supplier	die	Silicium carbide	409-21-2		5.326	mg	927067	903	
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.097	mg	16884	16	
				supplier	metallisation	Silicon(Si)	7440-21-3		0.023	mg	4003	4	
				supplier	metallisation	Copper(Cu)	7440-50-8		0.013	mg	2263	2	
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.083	mg	14447	14	
				supplier	metallisation	Silver(Ag)	7440-22-4		0.086	mg	14970	15	
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.010	mg	1741	2	
				supplier	metallisation	Vanadium(V)	7440-62-2		0.003	mg	522	1	
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.016	mg	2785	3	
				supplier	passivation	Silicon oxide	7631-86-9		0.025	mg	4352	4	
				supplier	polymer coating	polyimide	proprietary		0.063	mg	10966	11	
Leadframe	M-004 Copper and its alloys	3704.269	mg	supplier	alloy	Copper (Cu)	7440-50-8		3669.819	mg	990700	622003	
				supplier	alloy	Iron(Fe)	7439-89-6		3.704	mg	1000	628	
				supplier	metallization	Nickel (Ni)	7440-02-0		29.634	mg	8000	5023	
				supplier	metallization	Phosphorus (P)	7723-14-0		1.112	mg	300	188	
Soft solder	Solder	2.367	mg	supplier	solder	Tin(Sn)	7440-31-5		1.538	mg	649767	261	
				supplier	solder	Silver(Ag)	7440-22-4		0.592	mg	250106	100	
				supplier	solder	Antimony (Sb)	7440-36-0		0.237	mg	100127	40	
Bonding wires	M-003 Aluminum and its alloys	4.156	mg	supplier	wire	Aluminium (Al)	7429-90-5		4.156	mg	1000000	704	
Encapsulation	M-011 Other inorganic materials	2152.812	mg	supplier	mold compound	Epoxy resin	29690-82-2		215.281	mg	100000	36488	
				supplier	mold compound	Phenol resin	25068-38-6		161.461	mg	75000	27366	
				supplier	mold compound	Silica	60676-86-0		1722.250	mg	800000	291907	
				supplier	mold compound	Fire Retardant	Proprietary		43.056	mg	20000	7298	
				supplier	mold compound	Carbon black	1333-86-4		10.764	mg	5000	1824	
Connections coating	Solder	30.651	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		30.651	mg	1000000	5195	