

Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute	version	2
Sectionals *	Material Info	Subsectionals *	A-D
	Manufacturing Info		* : Required Field
		·	
upplier Information			
Company Name *	STMicroelectronics	Response Date *	2022-02-17
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
uthorized Representative *	giovanni giacopello	Representative Title	ADG Material Declaration champion
epresentative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
While STMicroelectronics has er TMicroelectronics disclaims all nerchantability, fitness for a par	warranties, express or implied related to this	document and its contents, includi	ing but not limited to implied warranties of completeness, truth, accur
While STMicroelectronics has er STMicroelectronics disclaims all merchantability, fitness for a par- indirectly, from the use or inability Legal Statement	warranties, express or implied related to this ticular purpose and non-infringement. ST shall have	document and its contents, includi ve no responsibility and assumes no	nt and its contents are provided on a strict 'as is' and 'as available' ba ing but not limited to implied warranties of completeness, truth, accura liability for any cost, loss or damage of any kind which could arise, directly
STMicroelectronics disclaims all merchantability, fitness for a part	warranties, express or implied related to this ticular purpose and non-infringement. ST shall have	document and its contents, includi	ing but not limited to implied warranties of completeness, truth, accur, liability for any cost, loss or damage of any kind which could arise, directly

Product								
Mfr Item Number	Mfr Item Name	Date						
BTA26-600BRG	BTA26-600BRG QBVS*C20C26Q		993J	2022-02-17				
Amount		UoM	Unit type	ST ECOPACK Grade				
	4757.65	Each	ECOPACK [®] 2					
	ECOPACK® 2 is STMicroelectronics trade na without Antimony oxide flame retardant (in ea		hout Brominated and Chlorinated o	compound (900ppm) and				

Manufacturing information								
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles						
Not Applicable	Not Applicable	Not Applicable						
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	life.augmented				
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00826984	morodaginomod				
-								
Package Designator	Package Size	Nbr of instances	Shape					
SIP	15.30,12.63,4.50	3	through-hole					
Comment	TOP3 ISOL. MDF valid for CPs: BTA26-600BRG,BTA	26-700BRG,BTA26-800BRG						

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 fa							
2 - Product(s) meets EU RoHS requirement	false						
3 - Product(s) meets EU RoHS requirement	s by application of the selected exemption(s)	true					
4 - Product(s) does not meet EU RoHS requ	4 - Product(s) does not meet EU RoHS requirements and is not under exemptions						
Exemption Id.	Description						
7a Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)							
7c-1 Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass ceramic matrix compound							
QueryList : ELV directive : 2000/53/EC a	mended 2020/363_March 2020						
	Query	Response					
1 - Product(s) meets EU ELV requirements	without any exemptions	false					
2 - Product(s) meets EU RoHS requirement	s by application of the selected exemption(s)	true					
Exemption Id.	Description						
8(e)	8(e) 8(e) - Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)						
10(a) - Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound. 10(a) - Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic material or in a glass-ceramic material or in a glass ceramic material or in a glass or ceramic material or in a glass or ceramic material or in a glass ceramic material or in a glass ceramic material or in a glass or ceramic material or ceramic material or in a glass or ceramic material or ceramic material or components listed under 10(b), 10(c) and 10(d) or ceramic material or ceramic m							

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 t	false					
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to con	sumers is foreseen	true				
Substance	amount in product (mg)	Application	ppm in product			
Nickel	1.715	die - leadframe - heatsink	360			
Lead	135.996	soft solder	28585			
Lead-Borate Glass	3.064	die	644			

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014								
	Response							
1 - Product(s) requires marking for the pr for Administration of the control of pollu	true							
2 - Product(s) is eligible for marking with	false							
	I	Hasardous substance						
Lead (Pb)	Lead (Pb) Cadmium (Cd) Mercury (Hg) Hexavalent Chromium (Cr VI)							
х	0	0	0	0				
Die,Soft solder,Soft solder 2,solder paste								
Homogeneous Material(s) containing Lead								

QueryList : REACH-17 Jan 2022									
	Response								
1 - Product(s) does not contain REACH Sub	false								
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product					
Lead	1000 ppm	402.44	Soft solder, Soft solder 2, solder paste	84588					
2 - Product(s) does not contain REACH St REACH	ubstances Of Very High Concern in any Embedded	article nor Homogeneous Material abc	we the limits per the definition within	false					
CategoryLevel_Name	ategoryLevel_Name CategoryLevel_Threshold Amount in Embedded Article / Application - Article / Homoger Homogeneous Material (mg) Material								
Lead	1000 ppm	115.03	Soft solder	935006					
Lead	1000 ppm	7.153	Soft solder 2	934910					
Lead	1000 ppm	11.964 solder paste		920308					

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 :	Gold, 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						
The Product does contain at least one of the substances listed in Chemical Control Act						
	Query	Query	Query			

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	true

Material Composition Declaration note : Substance present with less	on : s 0.001mg will not be declared in this document	g will not be declared in this document Mrr. Item Name				Mfr Item Name QBV5*C20C26Q <th< th=""><th></th><th></th></th<>						
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	17.888	mg	supplier	die	Silicon(Si)	7440-21-3		13.980	mg	781530	2936
				supplier	metallisation	Gold(Au)	7440-57-5		0.071	mg	3969	15
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.660	mg	36896	139
				supplier	passivation	Silicon oxide	7631-86-9		0.113	mg	6317	24
				JIG-R & California 65	glass	Lead-BorateGlass	65997-18-4	7c-I-Electrical and electronic (3.064	mg	171288	644
leadframe	M-004 Copper and its alloys	681.701	mg	supplier	alloy	Copper (Cu)	7440-50-8		680.609	mg	998398	143056
				supplier	alloy	Iron(Fe)	7439-89-6		0.682	mg	1000	143
				supplier	metallization	Nickel (Ni)	7440-02-0		0.205	mg	301	43
				supplier	metallization	Phosphorus (P)	7723-14-0		0.205	mg	301	43
Soft solder	Solder	123.027	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	115.031	mg	935006	24178
				supplier	solder	Tin(Sn)	7440-31-5		6.151	mg	49997	1293
				supplier	solder	Silver(Ag)	7440-22-4		1.845	mg	14997	388
Soft solder 2	Solder	7.651	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	7.153	mg	934910	1503
				supplier	solder	Tin(Sn)	7440-31-5		0.383	mg	50059	81
				supplier	solder	Silver(Ag)	7440-22-4		0.115	mg	15031	24
Encapsulation	M-011 Other inorganic materials	982.987	mg	supplier	mold compound	Silica vitreous	60676-86-0		729.373	mg	741997	153305
				supplier	mold compound	Phenol resin	9003-35-4		49.150	mg	50001	10331
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		108.130	mg	110001	22728
				supplier	mold compound	other	proprietary		88.470	mg	90001	18595
				supplier	mold compound	Carbon black	1333-86-4		7.864	mg	8000	1653
solder paste	Solder	13.000	mg	SVHC	solder	Lead(Pb)	7439-92-1		11.964	mg	920308	2515
				supplier	solder	Silver(Ag)	7440-22-4		0.324	mg	24923	68
				supplier	solder	Tin(Sn)	7440-31-5		0.647	mg	49769	136
				supplier	solder	Flux residue	proprietary		0.065	mg	5000	14
Connections coating	Solder	10.975	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		10.975	mg	1000000	2307
Connection 1	M-004 Copper and its alloys	8.210	mg	supplier	alloy	Copper(Cu)	7440-50-8		8.210	mg	1000000	1726
Coonection 2	M-004 Copper and its alloys	66.080	mg	supplier	alloy	Copper(Cu)	7440-50-8		66.047	mg	999501	13882
				supplier	alloy	Copper Posphorous	12517-41-8		0.033	mg	499	7
Heatsink	M-004 Copper and its alloys	2656.630	mg	supplier	alloy	Copper(Cu)	7440-50-8		2652.379	mg	998400	557498
				supplier	alloy	Iron(Fe)	7439-89-6		2.657	mg	1000	558
				supplier	metallization	Phosphorus(P)	7723-14-0		0.797	mg	300	168
				supplier	metallization	Nickel(Ni)	7440-02-0		0.797	mg	300	168
Ceramic base	M-010 Ceramics / glass	189.501	mg	supplier	Ceramic	Aluminium oxide (Al 2 O 3)	1344-28-1		179.820	mg	948913	37796
				supplier	Ceramic	Silicon oxide (SiO2)	7631-86-9		5.679	mg	29968	1194
				supplier	Ceramic	Magnesium Oxide (MgO)	309-48-4		3.786	mg	19979	796
				supplier	Ceramic	Molybdenum (Mo)	7439-98-7		0.154	mg	813	32
				supplier	Ceramic	(Mo-Mn) Manganese (Mn)	7439-96-5		0.008	mg	42	2
				supplier	metallzation	Nickel (Ni)	7440-02-0		0.053	mg	280	11
				supplier	metallzation	Phosphorus (P)	7723-14-0		0.001	mg	5	0