



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-10-06
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 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

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.


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.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STPSC10H12GY-TR	BSD2*HC15AT7	A	3068	2020-10-06
	Amount	UoM	Unit type	ST ECOPACK Grade
	1380	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		 life.augmented
1	245	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00362894	

Package Designator	Size	Nbr of instances	Shape	
SIP	10.20,9.15,4.50	3	gull wing	
Comment	D2PAK			

QueryList : RoHS Directive 2011/65/EU-July 2011 Annex II amended by Delegated Directive 2015/863-March 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	FALSE
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)	TRUE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : ELV directive : 2000/53/EC amended 2020/363_ March 2020	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 3rd January 2020			
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	0.16	die - leadfrmae	119
Lead	2.18	soft solder	1580

QueryList : REACH-25th June 2020				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	2.18	Soft solder	1580
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				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	2.18	Soft solder	954884

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 .	

Material Composition Declaration :						Mfr Item Name	BSD2*HC15AT7					
note : Substance present with less 0.001mg will not be declared in this document												
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	3.760	mg	supplier	die	Silicium carbide	409-21-2		3.560	mg	946810	2580
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.040	mg	10638	29
				supplier	metallisation	Gold(Au)	7440-57-5		0.012	mg	3191	9
				supplier	metallisation	Nicke(Ni)	7440-02-0		0.059	mg	15691	43
				supplier	metallisation	Silver(Ag)	7440-22-4		0.068	mg	18085	49
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.004	mg	1064	3
				supplier	polymer coating	Polyimide	Proprietary		0.017	mg	4521	12
				supplier	alloy & coating	Copper(Cu)	7440-50-8		777.532	mg	998551	563429
Leadframe	M-004 Copper and its alloys	778.660	mg	supplier	alloy & coating	Nicke(Ni)	7440-02-0		0.105	mg	135	76
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.358	mg	460	259
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.654	mg	840	474
				supplier	alloy & coating	Phosphorus metal	7723-14-0		0.011	mg	14	8
				supplier	alloy & coating	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	2.180	mg	954884	1580
Soft solder	Solder	2.283	mg	SVHC	solder	Silver(Ag)	7440-22-4		0.057	mg	24967	41
				supplier	solder	Tin(Sn)	7440-31-5		0.046	mg	20149	33
Bonding wires	M-003 Aluminum and its alloys	2.832	mg	supplier	wire	Aluminium (Al)	7429-90-5		2.832	mg	1000000	2052
Encapsulation	M-011 Other inorganic materials	589.976	mg	supplier	mold compound	Silica vitreous	60676-86-0		516.229	mg	875000	374079
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		23.599	mg	40000	17101
				supplier	mold compound	Epoxy type resin	proprietary		17.699	mg	30000	12825
				supplier	mold compound	Phenol type resin	proprietary		29.499	mg	50000	21376
				supplier	mold compound	Carbon black	1333-86-4		2.950	mg	5000	2138
connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804