



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-09-24
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


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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.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STIB1060DM2T-L	IBZ4*FR65B62	A	3068	2018-09-24
	Amount	UoM	Unit type	ST ECOPACK Grade
	9160	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
Not Applicable	Not Applicable	Not Applicable		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DIP	37.50 - 23.50 - 13.50	26	Through-hole	
Comment	Package: SDIP2B-26L			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-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 2017/2096 _November 2017	
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 25th May 2018			
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	1.35	Dies	148

QueryList : REACH-27th June 2018				
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	IB24*FR65862					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	Other inorganic materials	68.008	mg	supplier	die	Silicon (Si)	7440-21-3		64.586	mg	949682	7051
Dies				supplier	metallization	Aluminium (Al)	7429-90-5		1.542	mg	22674	168
Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.014	mg	206	2
Dies				supplier	Passivation	Silicon Nitride	12033-89-5		0.414	mg	6088	46
Dies				supplier	Passivation	Silicon Oxide	7631-86-9		0.635	mg	9337	69
Dies				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.037	mg	543	4
Dies				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.006	mg	88	1
Dies				supplier	back side metallization	Gold (Au)	7440-57-5		0.016	mg	235	2
Dies				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.554	mg	8146	60
Dies				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	16	0
Dies				supplier	back side metallization	Silver (Ag)	7440-22-4		0.184	mg	2706	20
Dies				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.019	mg	279	2
Leadframe	Copper & its alloys	2895.307	mg	supplier	alloy	Copper (Cu)	7440-50-8		2818.484	mg	973466	307695
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		66.29	mg	22896	7237
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		3.991	mg	1378	436
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		3.471	mg	1199	379
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		3.071	mg	1061	335
NTC	Other inorganic materials	5	mg	supplier	ceramic	Manganese oxide	1317-35-7		3.196	mg	639200	349
NTC				supplier	ceramic	Nickel oxide	1313-99-1		0.799	mg	159800	87
NTC				supplier	ceramic	Cobalt oxide	1308-06-1		0.705	mg	141000	77
NTC				supplier	ceramic	Gold (Au)	7440-57-5		0.285	mg	57000	31
NTC				JIG - R	metallization	Lead borate Glass	65997-18-4		0.015	mg	3000	2
DBC	Ceramics / Glass	2668.004	mg	supplier	ceramic	Alumina	1344-28-1		1157.113	mg	433700	126322
DBC				supplier	ceramic	Calcium oxide	1305-78-8		18.196	mg	6820	1986
DBC				supplier	metallization	Copper (Cu)	7440-50-8		1492.695	mg	559480	162958
Die attach	Other inorganic materials	2.418	mg	supplier	glue	Silver (Ag)	7440-22-4		1.837	mg	759718	201
Die attach				supplier	glue	2,6-Diglycidylphenyl allyl ether	13561-08-5		0.387	mg	160050	42
Die attach				supplier	glue	1,4-bis (2,3-epoxypropoxy) butane	2425-79-8		0.097	mg	40116	11
Die attach				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.097	mg	40116	11
Soft solder	Solder	43.681	mg	supplier	solder	Tin (Sn)	7440-31-5		42.148	mg	964905	4601
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		1.529	mg	35003	167
Soft solder				JIG - R	solder	Lead (Pb)	7439-92-1		0.004	mg	92	0
Bonding wires	M-008 Precious metals	2.422	mg	supplier	wire	Gold (Au)	7440-57-5		0.18	mg	74319	20
Bonding wires				supplier	wire	Copper (Cu)	7440-50-8		1.076	mg	444261	117
Bonding wires				supplier	wire	Aluminium (Al)	7429-90-5		1.16	mg	478943	127
Bonding wires				supplier	wire	Magnesium (Mg)	7439-95-4		0.006	mg	2477	1
Encapsulation	Other Organic Materials	3276.211	mg	supplier	mold compound	Silicone dioxide (Fused Silica)	60676-86-0		2686.495	mg	820000	293285
Encapsulation				supplier	mold compound	Phenol Novolac resin	9003-35-4		196.572	mg	60000	21460
Encapsulation				supplier	mold compound	Ortho Cresol Novolac Epoxy resin	29690-82-2		196.572	mg	60000	21460
Encapsulation				supplier	mold compound	Diglycidylether of Tetramethyl biphenol	85954-11-6		180.191	mg	55000	19672
Encapsulation				supplier	mold compound	Carbon black	1333-86-4		16.381	mg	5000	1788
solder paste	Solder	143.713	mg	supplier	solder	Tin (Sn)	7440-31-5		138.669	mg	964902	15139
solder paste				supplier	solder	Silver (Ag)	7440-22-4		5.03	mg	35000	547
solder paste				JIG - R	solder	Lead (Pb)	7439-92-1		0.014	mg	98	2
connections coating	Solder	55.236	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		55.236	mg	1000000	6030