



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 *	2018-10-31
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
ESDCAN04-2BLY	AJWS*BAY02VC	A	9955	2018-10-31
	Amount	UoM	Unit type	ST ECOPACK Grade
	9.8	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	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Alloy 42		

Package Designator	Size	Nbr of instances	Shape	
DSO	2.75 - 1.2 - 0.89	0	gull wing	
Comment	SOT 23 ANODE COMMUNE			

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	1.16	Die	118673

QueryList : REACH-15th January 2018				
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
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	AWS*BAY02VC					
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	0.113	mg	supplier	die	Silicon (Si)	7440-21-3		0.105	mg	929204	10714
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	44247	511
				supplier	Passivation	Silicon Oxide	7631-86-9		0.003	mg	26549	306
Leadframe	M-002 Other ferrous alloys, non-stain	2.948	mg	supplier	alloy	Iron (Fe)	7439-89-6		1.628	mg	552239	166122
				supplier	alloy	Nickel (Ni)	7440-02-0		1.163	mg	394505	118673
				supplier	alloy	Manganese (Mn)	7439-96-5		0.017	mg	5767	1735
				supplier	alloy	Chromium (Cr)	7440-47-3		0.002	mg	678	204
				supplier	alloy	Cobalt (Co)	7440-48-4		0.014	mg	4749	1429
				supplier	alloy	Silicon (Si)	7440-21-3		0.005	mg	1696	510
Die attach	M-011 Other inorganic materials	0.079	mg	supplier	metallization	Silver (Ag)	7440-22-4		0.119	mg	40366	12143
				supplier	glue	Epoxyde Bisphenol A Resin	25068-38-6		0.007	mg	88608	714
				supplier	glue	Silica, vitreous	60676-86-0		0.024	mg	303797	2449
				supplier	glue	2-(2-Ethoxyethoxy)ethyl Acetate	112-15-2		0.017	mg	215190	1735
				supplier	glue	Aluminium oxide	1344-28-1		0.016	mg	202532	1633
				supplier	glue	Bisphenol A diglycidyl ether polymer	25036-25-3		0.011	mg	139241	1122
Bonding wires	M-004 Copper and its alloys	0.013	mg	supplier	glue	Glycol ether ester	Proprietary		0.002	mg	25316	204
				supplier	glue	Diaminodiphenylsulfone	80-08-0		0.002	mg	25316	204
Encapsulation	M-011 Other inorganic materials	6.350	mg	supplier	wire	Copper (Cu)	7440-50-8		0.013	mg	1000000	1327
				supplier	mold compound	Silicon dioxide	60676-86-0		5.543	mg	872913	565612
				supplier	mold compound	Epoxy Resin	39690-82-2		0.318	mg	50079	32449
				supplier	mold compound	Phenol Resin	26834-02-6		0.318	mg	50079	32449
Connections coating	Solder	0.297	mg	supplier	mold compound	Aromatic poly-phosphate	Proprietary		0.158	mg	24882	16122
				supplier	mold compound	Carbon black	1333-86-4		0.013	mg	2047	1327
Connections coating	Solder	0.297	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.297	mg	1000000	30306