



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 *	2018-09-25
Company Unique ID	NL 008751171801		
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 *	Rossana Bonaccorso	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
ESDCAN04-2BWY	HJW9*BAY02VC	A	Z55A	2018-09-25
	Amount	UoM	Unit type	ST ECOPACK Grade
	6.58	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	Alloy 42		

Package Designator	Size	Nbr of instances	Shape	
DSO	2 - 1.26 - 0.93	3	gull wing	
Comment	Package: SOT 323 - 3 LEADS			

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	0.78	Die	118085
Cobalt	0.01	Die	1368

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	HIW9*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	0.129	mg	supplier	die	Silicon (Si)	7440-21-3		0.105	mg	813953	15957
				supplier	metallization	Aluminium (Al)	7429-90-5		0.022	mg	170543	3343
				supplier	Passivation	Silicon Oxide	7631-86-9		0.002	mg	15504	304
Leadframe	Other Ferrous alloys, non-stainless ste	1.889	mg	supplier	alloy	Iron (Fe)	7439-89-6		1.091	mg	577554	165805
				supplier	alloy	Nickel (Ni)	7440-02-0		0.777	mg	411329	118085
				supplier	alloy	Manganese (Mn)	7439-96-5		0.010	mg	5294	1520
				supplier	alloy	Cobalt (Co)	7440-48-4		0.009	mg	4764	1368
				supplier	alloy	Silicon (Si)	7440-21-3		0.002	mg	1059	304
Die Attach	Other Organic Material	0.082	mg	supplier	glue	Treated silica	60676-86-0		0.002	mg	24390	304
				supplier	glue	Glycol ethers	Proprietary		0.008	mg	97561	1216
				supplier	glue	Metal Oxide	1344-28-1		0.010	mg	121951	1520
				supplier	glue	Curing agent & hardener	Proprietary		0.002	mg	24392	302
				supplier	glue	Epoxy resin	Proprietary		0.010	mg	121951	1520
				supplier	glue	Epoxyde Bisphenol A Resin	25068-38-6		0.012	mg	146341	1824
				supplier	glue	Diaminodiphenylsulfone	80-08-0		0.003	mg	36585	456
				supplier	glue	Ethoxyethoxy-ethyl Acetate	112-15-2		0.024	mg	292683	3647
Bonding Wire	Other Inorganic Material	0.058	mg	supplier	glue	Bisphenol A diglycidyl ether polymer	25036-25-3		0.011	mg	134146	1672
				supplier	wire	Copper (Cu)	7440-50-8		0.057	mg	982759	8663
				supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	17241	152
Encapsulation	Other Organic Material	4.165	mg	supplier	mold compound	phenolic resin	26834-02-6		0.099	mg	23770	15046
				supplier	mold compound	epoxy resin	29690-82-2		0.099	mg	23770	15046
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.148	mg	35534	22492
				supplier	mold compound	Silica	60676-86-0		3.803	mg	913085	577964
				supplier	mold compound	Carbon Black	1333-86-4		0.007	mg	1681	1064
Connections coating	Solder	0.257	mg	supplier	mold compound	Tetrakis(2,6-dimethylphenyl) 1,3-phenylene bis	139189-30-3		0.009	mg	2160	1368
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.257	mg	1000000	39058