Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-12-07
Contact Name *	Refer to Supplier Comment section		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

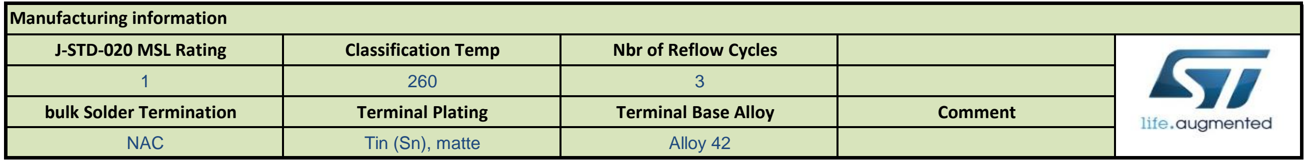
While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including 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 omprehensive 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**
ESDCAN05-2BWY	HJW9*TAY05VC	A	Z55A	2016-12-07
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	6.58	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	**Classification Temp**	**Nbr of Reflow Cycles**		
1	260	3		
bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
NAC	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-April 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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	false

Exemption Id.	**Description**

QueryList : REACH-20th June 2016				
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

Material Composition Declaration						Mfr Item Name	HJW9*TAY05VC					
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	0.372	mg	supplier	die	Silicon (Si)	7440-21-3		0.315	mg	846774	47872
				supplier	metallization	Aluminium (Al)	7429-90-5		0.047	mg	126344	7143
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	2688	152
				supplier	Passivation	Silicon Oxide	7631-86-9		0.006	mg	16129	912
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.003	mg	8065	456
Leadframe	Other Ferrous alloys, non-stainless ste	1.819	mg	Supplier	Alloy	Iron (Fe)	7439-89-6		1.050	mg	577240	159574
				Supplier	Alloy	Nickel (Ni)	7440-02-0		0.748	mg	411215	113678
				Supplier	Alloy	Manganese (Mn)	7439-96-5		0.010	mg	5497	1520
				Supplier	Alloy	Cobalt (Co)	7440-48-4		0.009	mg	4948	1368
				Supplier	Alloy	Silicon (Si)	7440-21-3		0.002	mg	1100	304
Die Attach	Other Organic Material	0.081	mg	Supplier	Glue	Treated silica	60676-86-0		0.002	mg	24692	304
				Supplier	Glue	Glycol ethers	Proprietary		0.008	mg	98765	1216
				Supplier	Glue	Metal Oxide	1344-28-1		0.010	mg	123457	1520
				Supplier	Glue	Curing agent & hardener	Proprietary		0.002	mg	24691	304
				Supplier	Glue	Epoxy resin	25068-38-6		0.010	mg	123457	1520
				Supplier	Glue	Epoxyde Bisphenol A Resin	25068-38-6		0.012	mg	148148	1824
				Supplier	Glue	Diaminodiphenylsulfone	80-08-0		0.003	mg	37037	456
				Supplier	Glue	Ethoxyethoxy-ethyl Acetate	112-15-2		0.023	mg	283951	3495
				Supplier	Glue	Bisphenol A diglycidyl ether polymer	25036-25-3		0.011	mg	135802	1672
Bonding Wire	Other Inorganic Material	0.056	mg	Supplier	Bonding Wire	Copper (Cu)	7440-50-8		0.055	mg	982143	8356
				Supplier	Bonding Wire	Palladium (Pd)	7440-05-3		0.001	mg	17857	152
Encapsulation	Other Organic Material	4.003	mg	Supplier	Molding Compound	phenolic resin	26834-02-6		0.095	mg	23732	14438
				Supplier	Molding Compound	epoxy resin	29690-82-2		0.095	mg	23732	14438
				Supplier	Molding Compound	Biphenyl epoxy resin	85954-11-6		0.142	mg	35473	21581
				Supplier	Molding Compound	Silica	60676-86-0		3.655	mg	913065	555471
				Supplier	Molding Compound	Carbon Black	1333-86-4		0.007	mg	1750	1064
				Supplier	Molding Compound	Tetrakis(2,6-dimethylphenyl) 1,3-phenylene bi	139189-30-3		0.009	mg	2248	1672
Connections coating	Solder	0.247	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.247	mg	1000000	37538