



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 *	2018-10-22
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 *	Floriana SAN BIAGIO	Representative Title	AMS 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
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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
	JYE3*0158BG6	A	ZS1A	2018-10-22
Amount	UoM	Unit type	ST ECOPACK Grade	
23.538	mg	Each	ECOPACK® 3	
	Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony		

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	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOJ	3x3x0.86	8	J bend	
Comment	E3 MSOP/TSSOP 8 BODY3.00 PITCH0.65; MDF valid for LM258AST			

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
Exemption Id.	Description

QueryList : ELV directive : 2000/53/EC amended 2016/774 _May 2016	
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 : 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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	JYE3*0158BG6				6000000.0	999999.0
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	0.517	mg	supplier	die	Silicon (Si)	7440-21-3		0.504	mg	974855	21412
				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	11605	255
				supplier	Passivation	Silicon Nitride	12033-89-5		0.003	mg	5803	127
				supplier	Passivation	Silicon Oxide	7631-86-9		0.004	mg	7737	170
Leadframe	M-004 Copper and its alloys	9.396	mg	supplier	alloy	Copper (Cu)	7440-50-8		9.076	mg	965943	385589
				supplier	alloy	Iron (Fe)	7439-89-6		0.212	mg	22563	9007
				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	213	85
				supplier	alloy	Zinc (Zn)	7440-66-6		0.012	mg	1277	510
				supplier	metallization	Silver (Ag)	7440-22-4		0.094	mg	10004	3994
Die attach	M-015 Other organic materials	0.198	mg	supplier	glue	Silver (Ag)	7440-22-4		0.136	mg	686869	5778
				supplier	glue	methylene diacrylate	42594-17-2		0.050	mg	252525	2124
				supplier	glue	Dicyclopentenyloxyethyl methacrylate	68586-19-6		0.006	mg	30303	255
				supplier	glue	Polymer of Polybutadiene + Anhydride	Proprietary		0.006	mg	30303	255
Bonding wires	M-008 Precious metals	0.294	mg	supplier	wire	Gold (Au)	7440-57-5		0.294	mg	1000000	12490
Encapsulation	M-015 Other organic materials	12.484	mg	supplier	molding compound	Silica, vitreous	60676-86-0		10.643	mg	852531	452162
				supplier	molding compound	phenolic resin	25068-38-6		0.438	mg	35085	18608
				supplier	molding compound	epoxy resin	29690-82-2		0.501	mg	40131	21285
				supplier	molding compound	Biphenyl epoxy resin	85954-11-6		0.250	mg	20026	10621
				supplier	molding compound	carbon black	1333-86-4		0.025	mg	2003	1062
				supplier	molding compound	Zinc hydroxide	20427-58-1		0.126	mg	10093	5353
				supplier	molding compound	Magnesium hydroxide	1309-42-8		0.501	mg	40131	21285
connections coating	Solder	0.649	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.649	mg	1000000	27572