



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 *	2017-04-04
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	FLORIANA SAN BIAGIO	Representative Title	AMG MD CHAMPION
Representative Phone *	Refer to Supplier Comment section		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
	AYOF*0339BJ6	A	SA1A	2017-04-04
Amount	UoM	Unit type	ST ECOPACK Grade	
24.70	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		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
tin is used or other bulk terminati	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
QFN	3x3x0.9	16	No lead	
Comment	Package: OF VFQFPN 3x3x0.9 1.7 16L; MDF valid for LM339QT			

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-12th January 2017				
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	AYOF*0339BJ6					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	0.795	mg	supplier	die	Silicon (Si)	7440-21-3		0.782	mg	983648	31660
				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	7547	243
				supplier	Passivation	Silicon Nitride	12033-89-5		0.003	mg	3774	121
				supplier	Passivation	Silicon Oxide	7631-86-9		0.004	mg	5031	162
Leadframe	Copper & its alloys	9.071	mg	supplier	alloy	Copper (Cu)	7440-50-8		8.747	mg	964282	354130
				supplier	alloy	Iron (Fe)	7439-89-6		0.211	mg	23261	8543
				supplier	alloy	Zinc (Zn)	7440-66-6		0.011	mg	1213	445
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.008	mg	882	324
				supplier	metallization	Silver (Ag)	7440-22-4		0.094	mg	10363	3806
Die attach	Other Organic Materials	0.130	mg	supplier	glue	Silver (Ag)	7440-22-4		0.090	mg	692308	3644
				supplier	glue	methylene diacrylate	42594-17-2		0.032	mg	246154	1296
				supplier	glue	Dicyclopentenylxyethyl methacrylate	68586-19-6		0.004	mg	30769	162
				supplier	glue	Polymer of Polybutadiene + Anhydride	Proprietary		0.004	mg	30769	162
Bonding wires	Precious metals	0.096	mg	supplier	wire	Gold (Au)	7440-57-5		0.096	mg	1000000	3887
Encapsulation	Other Organic Materials	14.588	mg	supplier	mold compound	Silica, vitreous	60676-86-0		13.510	mg	926104	546964
				supplier	mold compound	epoxy resin	85954-11-6		0.583	mg	39964	23603
				supplier	mold compound	phenol resin	26834-02-6		0.437	mg	29956	17692
				JIG - I	mold compound	carbon black	1333-86-4		0.058	mg	3976	2348
Finishing	Solder	0.022	mg	supplier	Connection coating	Tin (Sn)	7440-31-5		0.022	mg	1000000	891