



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 *	2018-10-23
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 *	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

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
	MUTR*U1J0AAY	A	Z7GA	2018-10-23
Amount	UoM	Unit type	ST ECOPACK Grade	
24.4	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
3	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	
QFN	3x3x0.95	6	flat	
Comment	A068 VFD FPN 6L 3X3X0.95 PITCH0.95 EP; MDF is valid for LD39100PU18RY			

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 : 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	MUTR*U1J0AAY				5999999.0	1000003.0
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	0.602	mg	supplier	die	Silicon (Si)	7440-21-3		0.568	mg	943522	23279
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	11628	287
				supplier	metallization	Tungsten (W)	7440-33-7		0.006	mg	9967	246
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	3322	82
				supplier	Passivation	Silicon Oxide	7631-86-9		0.012	mg	19934	492
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.007	mg	11628	287
Leadframe	M-004 Copper and its alloys	7.353	mg	supplier	alloy	Copper (Cu)	7440-50-8		7.158	mg	973480	293361
				supplier	alloy	Chromium (Cr)	7440-47-3		0.019	mg	2584	779
				supplier	alloy	Tin (Sn)	7440-31-5		0.018	mg	2448	738
				supplier	alloy	Zinc (Zn)	7440-66-6		0.014	mg	1904	574
				supplier	metallization	Silver (Ag)	7440-22-4		0.144	mg	19584	5902
				supplier	glue	Silver (Ag)	7440-22-4		0.198	mg	811475	8115
Die attach	M-015 Other organic materials	0.244	mg	supplier	glue	[Octahydro-4,7-methano-1 H-indenediy]bis(methyl	42594-17-2		0.015	mg	61475	615
				supplier	glue	exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacryl	7534-94-3		0.015	mg	61475	615
				supplier	glue	Isobornyl acrylate	5888-33-5		0.015	mg	61475	615
				supplier	glue	2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane	3388-04-3		0.001	mg	4098	41
				supplier	glue	Gold (Au)	7440-57-5		0.208	mg	1000000	8525
Bonding wires	M-008 Precious metals	0.208	mg	supplier	glue	Epoxy Resin	25068-38-6		0.739	mg	50000	30287
				supplier	molding compound	Phenol Resin	29690-82-2		0.340	mg	23004	13934
				supplier	molding compound	Silica (Amorphous)A	60676-86-0		12.563	mg	850000	514877
				supplier	molding compound	Silica (Amorphous)B	7631-86-9		0.739	mg	50000	30287
				supplier	molding compound	Metal Hydroxide	Proprietary		0.340	mg	23004	13934
Encapsulation	M-015 Other organic materials	14.780	mg	supplier	molding compound	Carbon Black	1333-86-4		0.059	mg	3992	2418
				supplier	molding compound	Tin (Sn)	7440-31-5		1.213	mg	1000000	49713
connections coating	M-011 Other inorganic materials	1.213	mg	supplier	solder	Tin (Sn)	7440-31-5		1.213	mg	1000000	49713