



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 *	2018-01-22
Contact Name *	Refer to Supplier Comment section		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 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
	MUTR*U1N3AAY	A	Z7GA	2018-01-22
Amount	UoM	Unit type	ST ECOPACK Grade	
24.40	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		

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	
ting is used or other bulk terminat	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	3x3x0.95	6	No lead	
Comment	Package: A068 VFDFPN 6L 3X3X0.95 PITCH0.95 EP; MDF valid for LD39100PU33RY			

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-15th January 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						Mfr Item Name	MUTR*U1N3AAY					
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	0.601	mg	supplier	die	Silicon (Si)	7440-21-3		0.568	mg	945092	23279
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	11647	287
				supplier	metallization	Tungsten (W)	7440-33-7		0.006	mg	9983	246
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	1664	41
				supplier	Passivation	Silicon Oxide	7631-86-9		0.012	mg	19967	492
Leadframe	Copper & its alloys	7.354	mg	supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.007	mg	11647	287
				supplier	alloy	Copper (Cu)	7440-50-8		7.159	mg	973484	293402
				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
Die attach	Other Organic Materials	0.244	mg	supplier	metallization	Silver (Ag)	7440-22-4		0.144	mg	19581	5902
				supplier	glue	Silver (Ag)	7440-22-4		0.198	mg	811475	8115
				supplier	glue	(Octahydro-4,7-methano-1 H-indenediy)bis(m	42594-17-2		0.015	mg	61475	615
				supplier	glue	exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl met	7534-94-3		0.015	mg	61475	615
				supplier	glue	Isobornyl acrylate	5888-33-5		0.015	mg	61475	615
Bonding wires	Precious metals	0.208	mg	supplier	glue	2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane	3388-04-3		0.001	mg	4098	41
				supplier	wire	Gold (Au)	7440-57-5		0.208	mg	1000000	8525
Encapsulation	Other Organic Materials	14.781	mg	supplier	mold compound	Epoxy Resin	25068-38-6		0.739	mg	49997	30287
				supplier	mold compound	Phenol Resin	29690-82-2		0.340	mg	23003	13934
				supplier	mold compound	Silica (Amorphous)A	60676-86-0		12.564	mg	850010	514918
				JIG - I	mold compound	Silica (Amorphous)B	7631-86-9		0.739	mg	49997	30287
				supplier	mold compound	Metal Hydroxide	Trade secret		0.340	mg	23003	13934
Finishing	Solder	1.213	mg	supplier	mold compound	Carbon Black	1333-86-4		0.059	mg	3992	2418
				supplier	Connection coating	Tin (Sn)	7440-31-5		1.213	mg	1000000	49713