



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 *	2018-11-06
Company Unique ID			
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 *	Antonella Lanzafame	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
LD39130SPUR	MQAE*UAD7BBA	A	Z6HA SC	2018-11-06
	Amount	UoM	Unit type	ST ECOPACK Grade
	1.94	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
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	1.2X1.3X0.4	6	flat	
Comment	VFDFPN 6L 1.2X1.3X0.4 0.4 P			

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 : California Prop65 list, dated 7th July 2017			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.02	alloy	7732

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	MQAE*UAD78BA				5000002.0	999998.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or dies	M-011 Other inorganic materials	0.134	mg	supplier	die	Silicon (Si)	7440-21-3		0.122	mg	910448	62887
				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	29851	2062
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	7463	515
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	52239	3608
Leadframe	M-004 Copper and its alloys	0.568	mg	supplier	Alloy	Magnesium	7439-95-4		0.001	mg	1761	515
				supplier	Alloy	Nickel	7440-02-0		0.015	mg	26408	7732
				supplier	Alloy	Silicon	7440-21-3		0.004	mg	7042	2062
				supplier	Alloy	Copper	7440-50-8		0.547	mg	963028	281959
				supplier	Alloy	Palladium	7440-05-3		0.001	mg	1761	515
die attach	Other Organic Materials	0.069	mg	supplier	Epoxy	CP Bisphenol A Diglycidylether	25036-25-3		0.014	mg	202899	7216
				supplier	Epoxy	Carbinol acetate	112-15-2		0.017	mg	246377	8763
				supplier	Epoxy	Reaction product:bisphenol-A-(epichlorhydrin)	25068-38-6		0.007	mg	101449	3608
				supplier	Epoxy	Epoxy resin	25068-38-6		0.027	mg	391304	13918
				supplier	Epoxy	Dapsone	80-08-0		0.003	mg	43478	1546
Bonding wires	Other inorganic materials	0.023	mg	supplier	Epoxy	3-Aminopropyltriethoxysilane	919-30-2		0.001	mg	14493	515
				supplier	Bonding Wire	Au	7440-57-5		0.023	mg	1000000	11856
Encapsulation	M-015 Other organic materials	1.146	mg	supplier	molding compound	Epoxy resin	25068-38-6		0.011	mg	9599	5670
				supplier	molding compound	Phenol resin	29690-82-2		0.011	mg	9599	5670
				supplier	molding compound	Silica (Amorphous) A	60676-86-0		0.966	mg	842932	497938
				supplier	molding compound	Silica (Amorphous) B	7631-86-9		0.155	mg	135253	79897
				supplier	molding compound	Carbon Black	1333-86-4		0.003	mg	2618	1546