



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Sectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-09-15
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 *	Giovanni Giacopello	Representative Title	ADG 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
ESDALCL5-1BM2	LLHJ*6TAPL23	A	Z6HA	2017-09-15
Amount	UoM	Unit type	ST ECOPACK Grade	
0.93	mg	Each	ECOPACK® 2	

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	Gold (Au)	Nickel (Ni)		

Package Designator	Size	Nbr of instances	Shape	
QFN	1 - 0.6 - 0.47	2	flat	
Comment	Package: VFQFPN 0.6x1 2L			

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 : 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			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.14	Leadframe	154839

QueryList : REACH-7th July 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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	LLHJ*6TAPL23				5000000.0	1000001.0
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	0.031	mg	supplier	die	Silicon (Si)	7440-21-3		0.027	mg	870968	29032
				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	64516	2151
				supplier	Passivation	Silicon Oxide	7631-86-9		0.001	mg	32258	1075
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.001	mg	32258	1075
Leadframe	M-004 Copper and its alloys	0.154	mg	supplier	alloy	Nickel (Ni)	7440-02-0		0.143	mg	928571	153763
				supplier	alloy	Silver (Ag)	7440-22-4		0.008	mg	51948	8602
				supplier	alloy	Gold (Au)	7440-57-5		0.003	mg	19481	3226
				supplier	alloy	Silver (Ag)	7440-22-4		0.043	mg	826923	46237
Die attach	M-011 Other inorganic materials	0.052	mg	supplier	glue	Silver (Ag)	7440-22-4		0.043	mg	826923	46237
				supplier	glue	Bisphenol A diglycidyl ether polymer	25036-25-3		0.002	mg	38462	2151
				supplier	glue	Propenenitrile polymer	68610-41-3		0.003	mg	57692	3226
				supplier	glue	aniline polymer	67784-74-1		0.003	mg	57692	3226
				supplier	glue	Epoxyde Bisphenol A Resin	25068-38-6		0.001	mg	19231	1075
Bonding wires	M-008 Precious metals	0.004	mg	supplier	wire	Gold (Au)	7440-57-5		0.004	mg	1000000	4301
Encapsulation	M-011 Other inorganic materials	0.689	mg	supplier	mold compound	silica vitreous	60676-86-0		0.609	mg	883890	654839
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.037	mg	53701	39785
				supplier	mold compound	Phenol Resin	205830-20-2		0.028	mg	40639	30108
				supplier	mold compound	epoxy resin	Proprietary		0.014	mg	20319	15054
				supplier	mold compound	carbon black	1333-86-4		0.001	mg	1451	1075