




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 *	2017-05-15
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	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
Legal Statement	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
L99SM81VQ6TR	A0VV*UAJ4BCP	A	Z7GA	2017-05-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	107.00	mg	Each	ECOPACK® 2

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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	6x6x10	40	flat	
Comment	Package: VFQFPN 6X6X10 40L PITCH 0.50			

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

Query : California Prop65 list, dated 27th January 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	0.07	die metal-die backside metal	692
Cobalt	0.001	die metal	9

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	AOVV*UAJ4BCP					
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	7.927	mg	supplier	die	Silicon (Si)	7440-21-3		7.117	mg	897818	66514
				supplier	metallization	Aluminium (Al)	7429-90-5		0.017	mg	2145	159
				supplier	metallization	Copper (Cu)	7440-50-8		0.438	mg	55254	4093
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	126	9
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	378	28
				supplier	metallization	Tungsten (W)	7440-33-7		0.025	mg	3154	234
				supplier	metallization	Nickel (Ni)	7440-02-0		0.054	mg	6812	505
				supplier	metallization	Platinum (Pt)	7440-06-4		0.031	mg	3911	290
				supplier	Passivation	Silicon Nitride	12033-89-5		0.014	mg	1766	131
				supplier	Passivation	Silicon Oxide	7631-86-9		0.109	mg	13750	1019
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.004	mg	505	37
				supplier	back side metallization	Gold (Au)	7440-57-5		0.011	mg	1388	103
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.020	mg	2523	187
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	126	9
				supplier	polymer die coating	Polyimide AH 1200	Proprietary		0.082	mg	10344	766
Leadframe	Copper & its alloys	42.301	mg	supplier	Alloy	Copper (Cu)	7440-50-8		41.156	mg	972932	384636
				supplier	Alloy	Chromium (Cr)	7440-47-3		0.112	mg	2648	1047
				supplier	Alloy	Tin (Sn)	7440-31-5		0.104	mg	2459	972
				supplier	Alloy	Zinc (Zn)	7440-66-6		0.083	mg	1961	776
				supplier	metallization	Silver (Ag)	7440-22-4		0.846	mg	20000	7907
Die Attach	Other Organic Materials	2.371	mg	supplier	glue	Silver (Ag)	7440-22-4		1.933	mg	815268	18065
				supplier	glue	(Octahydro-4,7-methano-1 H-indenediyl)bis(m	42594-17-2		0.142	mg	59890	1327
				supplier	glue	exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl met	7534-94-3		0.142	mg	59890	1327
				supplier	glue	isobornyl acrylate	5888-33-5		0.142	mg	59890	1327
				supplier	glue	Bis(.alpha.,.alpha.-Dimethylbenzyl) peroxide	80-43-3		0.012	mg	5062	112
Bonding wire	Other inorganic materials	0.819	mg	supplier	wire	Copper (Cu)	7440-50-8		0.819	mg	1000000	7654
Encapsulation	Other Organic Materials	50.336	mg	supplier	mold compound	Silica fused	60676-86-0		45.554	mg	904998	425738
				supplier	mold compound	Epoxy resin	25068-38-6		2.366	mg	47004	22112
				supplier	mold compound	Phenol resin	29690-82-2		2.366	mg	47004	22112
				supplier	mold compound	Carbon black	1333-86-4		0.050	mg	994	468
Connections coating	Solder	3.246	mg	supplier	solder	Tin (Sn)	7440-31-5		3.246	mg	1000000	30336