



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 *	2017-04-04
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Antonella Lanzafame	Representative Title	AMG 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
LD39030DTPU33R	MFBB*UAY4AA5	A	Z8GA	2017-04-04
	Amount	UoM	Unit type	ST ECOPACK Grade
	1.943	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	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	1x1x0.38	4	No lead	
Comment				

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

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

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			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	0.004	alloy	2059

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	MFBB*UA4AA5				4999998.0	999742.0
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 (choose)	Other Inorganic materials	0.249	mg	Supplier	die	Silicon (Si)	7440-21-3		0.243	mg	975904	125064
				Supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	8032	1029
				Supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	4016	515
				Supplier	Passivation	Silicon Oxide	7631-86-9		0.003	mg	12048	1544
				Supplier	Alloy	Copper(CU)	7440-50-8		1.609	mg	984098	828101
Leadframe	Copper and its alloy	1.635	mg	Supplier	Alloy	Chromium(Cr)	7440-47-3		0.005	mg	3058	2573
				Supplier	Alloy	Zinc(Zn)	7440-66-6		0.004	mg	2446	2059
				Supplier	Alloy	Tin(Sn)	7440-31-5		0.005	mg	3058	2573
				Supplier	Alloy	Nickel (Ni)	7440-02-0		0.004	mg	2446	2059
				Supplier	Alloy	Palladium (Pd)	7440-05-3		0.004	mg	2446	2059
				Supplier	Alloy	Gold (Au)	7440-57-5		0.004	mg	2446	2059
				Supplier	Epoxy	Silver(Ag)	7440-22-4		0.030	mg	789474	15440
Die Attach	Other Organic Material	0.038	mg	Supplier	Epoxy	Epoxy	proprietary		0.003	mg	78947	1544
				Supplier	Epoxy	Anhydride	proprietary		0.003	mg	78947	1544
				Supplier	Epoxy	Epoxy resin	25068-38-6		0.001	mg	26316	515
				Supplier	Epoxy	Ethylene glycol monobutyl ether acetate	112-07-2		0.001	mg	26316	515
Bonding wire	Other Inorganic Material	0.018	mg	Supplier	Bonding wire	Gold(Au)	7440-57-5		0.018	mg	1000000	9264
Encapsulation	Other Organic Material	0.003	mg	Supplier	Molding compound	Epoxy Resin 1	proprietary		0.000	mg	40000	51
				Supplier	Molding compound	Epoxy Resin 2	proprietary		0.000	mg	40000	51
				Supplier	Molding compound	Phenol Resin	29690-82-2		0.000	mg	40000	51
				Supplier	Molding compound	Metal hydroxide	21645-51-2		0.000	mg	80000	103
				Supplier	Molding compound	Amorphous silica	60676-86-0		0.002	mg	800000	1029