



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 *	2018-05-18
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 Giacobello	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
ESDA24P140-1U3M	806A*6TAN24A	A	Z6HA	2018-05-18
	Amount	UoM	Unit type	ST ECOPACK Grade
	7	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	2X2X0.5	3	flat	
Comment	Package: DFN.20.20.060-130-3L-E			

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 15th December 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	0.12	Die - Leadframe	17571

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	806A*GTAN24A					
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	0.851	mg	supplier	die	Silicon (Si)	7440-21-3		0.781	mg	917744	111571
				supplier	metallization	Aluminium (Al)	7429-90-5		0.036	mg	42303	5141
				supplier	Passivation	Silicon Oxide	7631-86-9		0.021	mg	24677	3000
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	1175	143
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	2350	286
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.010	mg	11751	1429
Leadframe	M-004 Copper and its alloys	2.913	mg	supplier	alloy	Copper (Cu)	7440-50-8		2.756	mg	946104	393714
				supplier	alloy	Silicon	7440-21-3		0.032	mg	10985	4571
				supplier	alloy	Magnesium	7439-95-4		0.008	mg	2746	1143
				supplier	alloy	Nickel	7440-02-0		0.113	mg	38792	16143
				supplier	alloy	Gold	7440-57-5		0.001	mg	343	143
				supplier	alloy	Silver	7440-22-4		0.001	mg	343	143
Die attach	M-011 Other inorganic materials	0.119	mg	supplier	alloy	Palladium	7440-05-3		0.002	mg	687	286
				supplier	glue	Silver	7440-22-4		0.089	mg	747899	12714
				supplier	glue	Butadiene,acrylonitrile polymer,carboxy-termin	68610-41-3		0.010	mg	84034	1429
				supplier	glue	2-(2-ethoxyethoxy)ethyl acetate	112-15-2		0.008	mg	67227	1143
				supplier	glue	Formaldehyde,polymer with aniline,maleated,	67784-74-1		0.005	mg	42017	714
				supplier	glue	Carbonic Ester	Proprietary		0.001	mg	8403	143
Bonding wires	M-011 Other inorganic materials	0.049	mg	supplier	glue	Phenol 4'4-(1-methylethylidene)bis-,polymer w	25036-25-3		0.005	mg	42017	714
				supplier	glue	Aromatic polyamine	Proprietary		0.001	mg	8403	143
				supplier	wire	Copper (Cu)	7440-50-8		0.049	mg	1000000	7000
				supplier	mold compound	Epoxy resin	Proprietary		0.030	mg	9779	4286
				supplier	mold compound	Phenol resin	Proprietary		0.030	mg	9778	4286
				supplier	mold compound	Silica (Amorphous) A	60676-86-0		2.586	mg	842894	369429
Encapsulation	M-011 Other inorganic materials	3.068	mg	supplier	mold compound	Silica (Amorphous) B	7631-86-9		0.414	mg	134941	59143
				supplier	mold compound	Carbon black	1333-86-4		0.008	mg	2608	1143