Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D * : Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-02-26
Contact Name *	Refer to " Supplier Comment" section	Contact Title	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	IPD 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/internet/com/support/online_tech_support.jsp		

Uncertainty Statement

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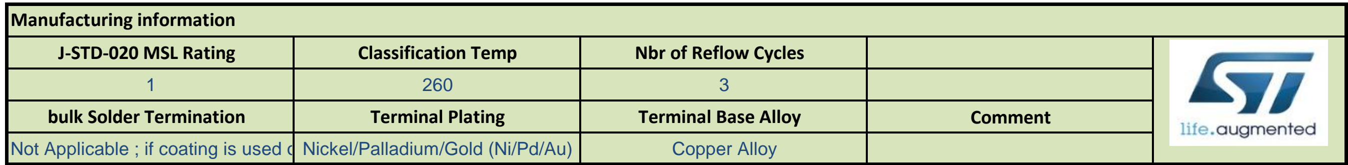
Legal Statement

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 omprehensive 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
ESDA13P70-1U1M	812Q*6TAN13A	A	Z6HA	2016-02-26
	Amount	UoM	Unit type	ST ECOPACK Grade
	2.40	mg	Each	ECOPACK® 2



Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used d	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
NAC	1 - 1.6 - 0.6	2	No lead	
Comment	Package:DFN.16.10.06-105-2L			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	**Response**
Product(s) meets EU RoHS requirement without any exemptions	**true**
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false

Exemption Id.	**Description**

QueryList : REACH-17th December 2015	
Query	**Response**
The product 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	812Q*6TAN13A					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Silicon die	Other inorganic materials	0.233	mg	supplier	die	Silicon (Si)	7440-21-3		0.218	mg	935622	90833
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	21459	2083
Silicon die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.006	mg	25751	2500
Silicon die				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	4292	417
Silicon die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.003	mg	12876	1250
Leadframe	Copper and its alloy	0.698	mg	supplier	alloy	Copper (Cu)	7440-50-8		0.655	mg	938395	272917
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		0.024	mg	34384	10000
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		0.004	mg	5731	1667
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.001	mg	1433	417
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.001	mg	1433	417
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.004	mg	5731	1667
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.008	mg	11461	3333
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	1433	417
Die attach	Other organic materials	0.032	mg	supplier	glue	Silver (Ag)	7440-22-4		0.024	mg	750000	10000
Die attach				supplier	glue	Butyl diethylene glycol acetate	124-17-4		0.003	mg	93750	1250
Die attach				supplier	glue	Bismaleimide resin	Proprietary		0.002	mg	62500	833
Die attach				supplier	glue	High boiling methacrylate	Proprietary		0.001	mg	31250	417
Die attach				supplier	glue	Acrylic monomer	Proprietary		0.001	mg	31250	417
Die attach				supplier	glue	Acrylate	Proprietary		0.001	mg	31250	417
Bonding wire	Other inorganic materials	0.021	mg	supplier	bonding wire	Copper (Cu)	7440-50-8		0.021	mg	1000000	8750
Encapsulation	Other inorganic materials	1.416	mg	supplier	molding compound	Silica Fused	60676-86-0		1.326	mg	936441	552500
Encapsulation				supplier	molding compound	Epoxy Resin	Proprietary		0.043	mg	30367	17917
Encapsulation				supplier	molding compound	Phenol Resin	Proprietary		0.043	mg	30367	17917
Encapsulation				supplier	molding compound	Carbon Black	1333-86-4		0.004	mg	2825	1667