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 *	2014-05-16
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 *	Antonella Lanzafame	Representative Title	AMS & IPD Materials Declaration 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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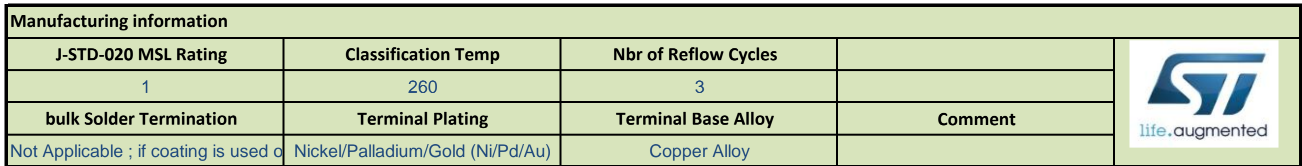
Legal Statement

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**
	AYNB*0391AE6	A	Z6HA	2014-05-16
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	11.60	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 o	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	2x2x0.6	8	No lead	
Comment	**UFSON 2x2x0.6 8 PITCH 0.5; MD valid for CP: TS391IQ2T.**			

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-16th December 2013				
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	AYNB*0391AE6					
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	0.297	mg	supplier	Die	Silicon (Si)	7440-21-3		0.288	mg	969697	24828
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	13468	345
Silicon die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.002	mg	6734	172
Silicon die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.003	mg	10101	259
Leadframe	Copper and its alloy	2.924	mg	SUPPLIER	Alloy	Copper (Remaining)	7440-50-8		2.749	mg	#REF!	236983
Leadframe				SUPPLIER	Alloy	Silicon (0.25-1.2%)	7440-21-3		0.015	mg	#REF!	1293
Leadframe				SUPPLIER	Alloy	Nickel (2.2-4.2%)	7440-02-0		0.1	mg	#REF!	8621
Leadframe				SUPPLIER	Alloy	Magnesium (0.05-0.3%)	7439-95-4		0.004	mg	#REF!	345
Leadframe				SUPPLIER	Alloy	Iron (0.2% max)	7439-89-6		0.003	mg	#REF!	259
Leadframe				SUPPLIER	Alloy	Zinc (1.0% max)	7440-66-6		0.015	mg	#REF!	1293
Leadframe				SUPPLIER	Alloy	Manganese (0.10% max)	7439-96-5		0.001	mg	#REF!	86
Leadframe				SUPPLIER	Alloy	Nickel plating (0.8-1.5%)	7440-02-0		0.034	mg	#REF!	2931
Leadframe				SUPPLIER	Alloy	Palladium (0.05-0.15%)	7440-05-3		0.003	mg	#REF!	259
Die attach	Other organic materials	0.051	mg	SUPPLIER	Epoxy	Aluminium oxide (20-35%)	1344-28-1		0.015	mg	294118	1293
Die attach				SUPPLIER	Epoxy	Diethylene glycol monoethyl ether acetate (2	112-15-2		0.02	mg	392157	1724
Die attach				SUPPLIER	Epoxy	Epoxy resin (1-10%)	25068-38-6		0.004	mg	78431	345
Die attach				SUPPLIER	Epoxy	Epoxy resin (10-30%)	Proprietary		0.01	mg	196078	862
Die attach				SUPPLIER	Epoxy	Aromatic amine (1-5%)	Proprietary		0.002	mg	39216	172
Bonding wire	Other inorganic materials	0.03	mg	SUPPLIER	Bonding Wire	Au	7440-57-5		0.03	mg	1000000	2586
Encapsulation	Other organic materials	8.298	mg	SUPPLIER	molding compound	Silica Fused (85~95%)	60676-86-0		7.775	mg	936973	670259
Encapsulation				SUPPLIER	molding compound	Epoxy Resin (1~5%)	Proprietary		0.249	mg	30007	21466
Encapsulation				SUPPLIER	molding compound	Phenol Resin (1~5%)	Proprietary		0.249	mg	30007	21466
Encapsulation				SUPPLIER	molding compound	Carbon Black (0.1~0.5%)	1333-86-4		0.025	mg	3013	2155