Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2014-08-20
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	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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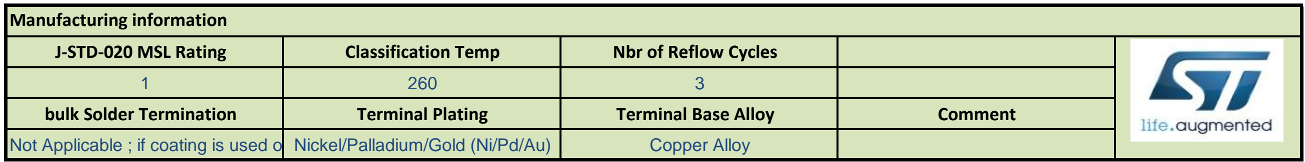
Legal Statement

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**
	MFBB*UAT4AA5	A	Z8GA	2014-08-20
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	1.94	mg	Each	ECOPACK® 2



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 ; if coating is used o	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	1X1X038	4	No lead	
Comment	Package: VFDFPN 1.0X1.0X0.38 4L PITCH 0,6; MDF valid for LD39020ATPU33R			

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 June 2014	
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	MFBB*UAT4AA5					
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	0.066	mg	supplier	die	Silicon (Si)	7440-21-3		0.061	mg	924242	31443
Silicon die			mg	supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	30303	1031
Silicon die			mg	supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.003	mg	45455	1546
Leadframe	Copper and its alloy	1.809	mg	Supplier	alloy	Copper(CU)	7440-50-8		1.783	mg	985627	919072
Leadframe			mg	Supplier	alloy	Chromium(Cr)	7440-47-3		0.005	mg	2764	2577
Leadframe			mg	Supplier	alloy	Zinc(Zn)	7440-66-6		0.004	mg	2211	2062
Leadframe			mg	Supplier	alloy	Tin(Sn)	7440-31-5		0.005	mg	2764	2577
Leadframe			mg	Supplier	metallization	Nickel (Ni)	7440-02-0		0.004	mg	2211	2062
Leadframe			mg	Supplier	metallization	Palladium (Pd)	7440-05-3		0.004	mg	2211	2062
Leadframe			mg	Supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	2211	2062
Die attach	Other inorganic materials	0.041	mg	Supplier	Glue	Silver(Ag)	7440-22-4		0.033	mg	804878	17010
Die attach			mg	Supplier	Glue	Epoxy	68475-94-5		0.003	mg	73171	1546
Die attach			mg	Supplier	Glue	Anhydride	Proprietary		0.003	mg	73171	1546
Die attach			mg	Supplier	Glue	Epoxy resin	EC 500-006-8		0.001	mg	24390	515
Die attach			mg	Supplier	Glue	Ethylene glycol monobutyl ether acetate	112-07-2		0.001	mg	24390	515
Bonding wire	Precious metals	0.021	mg	Supplier	Bonding wire	Gold(Au)	7440-57-5		0.021	mg	1000000	10825
Encapsulation	Other inorganic materials	0.0025	mg	Supplier	Molding compound	Epoxy Resin	Proprietary		0.0001	mg	40000	52
Encapsulation			mg	Supplier	Molding compound	Biphenyl epoxy resin	85954-11-6		0.0001	mg	40000	52
Encapsulation			mg	Supplier	Molding compound	Phenol Resin	9003-35-4		0.0001	mg	40000	52
Encapsulation			mg	Supplier	Molding compound	Magnesium hydroxide	1309-42-8		0.0002	mg	80000	103
Encapsulation			mg	Supplier	Molding compound	Amorphous silica	60676-86-0		0.002	mg	800000	1031