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Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-04-28
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 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/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
	8BBR*UX70AD5	A	ZW1A	2016-04-28
Amount	UoM	Unit type	ST ECOPACK Grade	
26.00	mg	Each	ECOPACK® 2	

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

Package Designator	Size	Nbr of instances	Shape	
QFN	7.0,7.0,0.9	20	flat	
Comment	VFQFPN 20L 3X3 0,4, MD valid for CP: SPV1050TTR			

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	8BBR*UX70AD5					
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	1.292	mg	supplier	DIE	Silicon (Si)	7440-21-3		1.2	mg	928793	46154
SILICON DIE				supplier	METALLIZATION	Aluminium (Al)	7429-90-5		0.015	mg	11610	577
SILICON DIE				supplier	METALLIZATION	Titanium Nitride (TiN)	25583-20-4		0.008	mg	6192	308
SILICON DIE				supplier	METALLIZATION	Tungsten (W)	7440-33-7		0.012	mg	9288	462
SILICON DIE				supplier	PASSIVATION	Silicon Nitride (SiN)	68034-42-4		0.003	mg	2322	115
SILICON DIE				supplier	PASSIVATION	Silicon Oxide(SiO2)	7631-86-9		0.025	mg	19350	962
SILICON DIE				supplier	PASSIVATION	PIX1 Gamma-butyrolactone	96-48-0		0.015	mg	11610	577
SILICON DIE				supplier	BACK SIDE METALLIZATION	Chromium (Cr)	7440-47-3		0.001	mg	774	38
SILICON DIE				supplier	BACK SIDE METALLIZATION	Gold (Au)	7440-57-5		0.003	mg	2322	115
SILICON DIE				supplier	BACK SIDE METALLIZATION	Nickel (Ni)	7440-02-0		0.01	mg	7740	385
LEADFRAME	Copper and its alloy	13.724	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		13.175	mg	973618	506731
LEADFRAME				supplier	ALLOY	Iron (Fe)	7439-89-6		0.317	mg	23426	12192
LEADFRAME				supplier	ALLOY	Iron Phosphide (Fe2P)	1310-43-6		0.004	mg	296	154
LEADFRAME				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.016	mg	1182	615
LEADFRAME				supplier	COATING	Nickel (Ni)	7440-02-0		0.206	mg	15223	7923
LEADFRAME				supplier	COATING	Palladium (Pd)	7440-05-3		0.004	mg	296	154
LEADFRAME				supplier	COATING	Gold (Au)	7440-57-5		0.002	mg	148	77
DIE ATTACH	Other organic materials	0.211	mg	supplier	GLUE	Silver (Ag)	7440-22-4		0.179	mg	848341	6885
DIE ATTACH				supplier	GLUE	2-propionic acid methylester reaction product	Proprietary		0.029	mg	137441	1115
DIE ATTACH				supplier	GLUE	Dicyclopentenylxyethyl methacrylate	68586-19-6		0.003	mg	14218	115
BONDING WIRE	Other inorganic materials	0.051	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.051	mg	1020000	1962
ENCAPSULATION	Other organic materials	10.722	mg	supplier	MOLDING COMPOUND	Epoxy resin	25068-38-6		0.965	mg	90002	37115
ENCAPSULATION				supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		9.006	mg	839955	346385
ENCAPSULATION				supplier	MOLDING COMPOUND	Phenol Resin	29690-82-2		0.697	mg	65007	26808
ENCAPSULATION				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		0.054	mg	5036	2077