



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2014-09-26
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	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
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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
	BYOF*V524AAJ	A	SA1A	2014-09-26
Amount	UoM	Unit type	ST ECOPACK Grade	
25.00	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	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
QFN	3X3X0.9	16	No lead	
Comment	VFQFPN 3x3x0.9 1.7 16L; MDF valid for TSV524IQ4T			

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	BYOF*V524AAJ					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	0.721	mg	supplier	die	Silicon (Si)	7440-21-3		0.693	mg	961165	27720
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	8322	240
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1387	40
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1387	40
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.002	mg	2774	80
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.012	mg	16644	480
die (s)				supplier	passivation	Gamma-butyrolactone	96-48-0		0.004	mg	5548	160
die (s)				supplier	passivation	Polyhydroxyamide	55295-98-2		0.002	mg	2774	80
Leadframe	Copper & its alloys	9.212	mg	supplier	alloy	Copper (Cu)	7440-50-8		8.884	mg	964394	355360
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.214	mg	23231	8560
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.011	mg	1194	440
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.008	mg	868	320
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.095	mg	10313	3800
Die attach	Other inorganic materials	0.132	mg	supplier	glue	Silver (Ag)	7440-22-4		0.091	mg	689394	3640
Die attach				supplier	glue	methylene diacrylate	42594-17-2		0.033	mg	250000	1320
Die attach				supplier	glue	Dicyclopentenylxyethyl methacrylate	68586-19-6		0.004	mg	30303	160
Die attach				#N/A	glue	Polymer of Polybutadiene + Anhydride	Proprietary		0.004	mg	30303	160
Bonding wire	Precious metals	0.097	mg	supplier	wire	Gold (Au)	7440-57-5		0.097	mg	1000000	3880
encapsulation	Other inorganic materials	14.816	mg	supplier	mold compound	Silica, vitreous	60676-86-0		13.721	mg	926093	548840
encapsulation				supplier	mold compound	epoxy resin	85954-11-6		0.592	mg	39957	23680
encapsulation				supplier	mold compound	phenol resin	26834-02-6		0.444	mg	29968	17760
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.059	mg	3982	2360
connections coating	Solder	0.022	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.022	mg	1000000	880