



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 *	2014-11-21
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 *	Laurent TOSI	Representative Title	MMS MD CHAMPION
Representative Phone *	33 442 685 795	Representative Email *	laurent.tosi@st.com
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/online_tech_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
M24128-BFMC6TG	CGZW*24281TA	A	P1C7	2014-11-21
	Amount	UoM	Unit type	ST ECOPACK Grade
	16.00	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	
NAC	Nicke/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	2X3X0.6	8	No lead	
Comment	UFDFPN 2x3x0.6			

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	CGZW*24281TA					
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	0.4080	mg	supplier	die	Silicon (Si)	7440-21-3		0.3860	mg	946078	24125
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.0020	mg	4902	125
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.0020	mg	4902	125
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.0010	mg	2451	63
die (s)				supplier	passivation	Indium Tin oxide (In2O3:SnO2)	50926-11-9		0.0170	mg	41667	1063
Lead-frame	Other inorganic materials	3.0071	mg	supplier	alloy	Copper (Cu)	7440-50-8		2.9177	mg	970270	182353
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.0702	mg	23358	4390
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.0036	mg	1195	225
Lead-frame				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.0025	mg	836	157
Lead-frame				supplier	coating	Nickel (Ni)	7440-02-0		0.0120	mg	3980	748
Lead-frame				supplier	coating	Palladium (Pd)	7440-05-3		0.0008	mg	255	48
Lead-frame				supplier	coating	Gold (Au)	7440-57-5		0.0003	mg	106	20
Die Attach	Other inorganic materials	0.3355	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		0.2295	mg	684000	14341
Die Attach				supplier	glue or soft solder	methylene diacrylate	42594-17-2		0.0839	mg	250000	5242
Die Attach				supplier	glue or soft solder	Dicyclopentenylxyethyl methacrylate	68586-19-6		0.0101	mg	30000	629
Die Attach				supplier	glue or soft solder	Polymer of Polybutadiene + Anhydride	Proprietary		0.0101	mg	30000	629
Die Attach				supplier	glue or soft solder	Palladium (Pd)	7440-05-3		0.0003	mg	1000	21
Die Attach				supplier	glue or soft solder	Bis(alpha-dimethylbenzyl) peroxide	80-43-3		0.0017	mg	5000	105
Wires	Other inorganic materials	0.0106	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.0106	mg	1000000	664
Encapsulation	Other inorganic materials	12.2388	mg	supplier	Moulding Compound	silica vitreous	60676-86-0		10.7334	mg	877001	670838
Encapsulation				supplier	Moulding Compound	Phenolic resin	Proprietary		0.5723	mg	46760	35768
Encapsulation				supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.4479	mg	36595	27992
Encapsulation				supplier	Moulding Compound	carbon black	1333-86-4		0.0249	mg	2033	1555
Encapsulation				supplier	Moulding Compound	Zinc hydroxide	20427-58-1		0.0124	mg	1017	778
Encapsulation				supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.4479	mg	36595	27992
Finishing	Other inorganic materials	0.0001	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.0001	mg	916800	7
Finishing				supplier	connections coating	Palladium (Pd)	7440-05-3		0.0000	mg	58700	0
Finishing				supplier	connections coating	Gold (Au)	7440-57-5		0.0000	mg	24500	0