



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 *	2017-03-11
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	MDG MD CHAMPION	Representative Title	MDG MD 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
Legal Statement	<p>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.</p>

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
M24C32-XMC5TG	CGZW*2432CKA	A	P1C7	2017-03-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	16.00	mg	Each	ECOPACK® 2
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	2X3X0.6	8	No lead	
Comment	Package : ZW UDFPN 2x3x0.6 8L 0.5MM PITCH 7558452			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	TRUE
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description

QueryList : REACH-12th January 2017				
Query				Response
1 - Product(s) 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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CGZW*2432CKA				5.999999.0	100.0062.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or dies	M-011 Other inorganic materials	0.486	mg	supplier	die	Silicon (Si)	7440-21-3		0.462	mg	950617	28875
				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	4115	125
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	4115	125
Lead-frame	M-011 Other inorganic materials	3.007	mg	supplier	Passivation	Silicon Oxide	7631-86-9		0.020	mg	41152	1250
				supplier	alloy	Copper (Cu)	7440-50-8		2.918	mg	970270	182353
				supplier	alloy	Iron (Fe)	7439-89-6		0.070	mg	23358	4390
				supplier	alloy	Zinc (Zn)	7440-66-6		0.004	mg	1195	225
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.003	mg	836	157
				supplier	coating	Nickel (Ni)	7440-02-0		0.012	mg	3980	748
				supplier	coating	Palladium (Pd)	7440-05-3		0.001	mg	255	48
Die Attach	M-011 Other inorganic materials	0.335	mg	supplier	coating	Gold (Au)	7440-57-5		0.000	mg	106	20
				supplier	glue or soft solder	Silver (Ag)	7440-22-4		0.229	mg	684000	14341
				supplier	glue or soft solder	methylene diacrylate	42594-17-2		0.084	mg	250000	5242
				supplier	glue or soft solder	Dicyclopentenyloxyethyl methacrylate	68586-19-6		0.010	mg	30000	629
				supplier	glue or soft solder	Polymer of Polybutadiene + Anhydride	Proprietary		0.010	mg	30000	629
Wires	M-011 Other inorganic materials	0.021	mg	supplier	glue or soft solder	Palladium (Pd)	7440-05-3		0.000	mg	1000	21
				supplier	glue or soft solder	Bis(α,α-dimethylbenzyl) peroxide	80-43-3		0.002	mg	5000	105
				supplier	Bonding wire	Gold (Au)	7440-57-5		0.021	mg	990000	1324
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.000	mg	10000	13
Encapsulation	M-011 Other inorganic materials	12.150	mg	supplier	Moulding Compound	silica vitreous	60676-86-0		10.645	mg	876112	665350
				supplier	Moulding Compound	Phenolic resin	Proprietary		0.572	mg	47098	35768
				supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.448	mg	36859	27992
				supplier	Moulding Compound	carbon black	1333-86-4		0.025	mg	2048	1555
				supplier	Moulding Compound	Zinc hydroxide	20427-58-1		0.012	mg	1024	778
Finishing	M-011 Other inorganic materials	0.000	mg	supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.448	mg	36859	27992
				supplier	connections coating	Nickel (Ni)	7440-02-0		0.000	mg	916800	7
				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	58700	0
				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	24500	0