

## **Materials Declaration Form**

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

Supplier Information								
Company Name *	STMicroelectronics	Response Date *	19-04-2018					
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 - STMicroele http://www.st.com/web/en/support/s							

## **Uncertainty Statement**

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Legal	Statement	
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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					
M24C64-FDW6P	PT6P*24641TA	А	3068	19-04-2018				
	Amount	UoM	Unit type	ST ECOPACK Grade				
	34.00	mg	Each	ECOPACK® 2				
,		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							
1 260		3	3						
bulk Solder Termination Terminal Plating		Terminal Base Alloy	Comment	life.augmented					
NAC	NiThPdAgAu	Copper Alloy		moradginomod					

Package Designator	Size	Nbr of instances	Shape	
TSSOP	NAC	8	L Bend	
Comment	Package: 6P TSSOP 8 BODY 4.4 PITCH (	0.65 0079397		

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							
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							
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							
ategoryLevel_Name CategoryLevel_Threshold amount in product (mg) Application							

Waterial Composition Declaration: note: Substance present with less 0.001mg will not be declared in this document					Mfr Item Name	PT6P*2	24641TA			6000001.0	1000001.0	
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	0.381	mg	supplier	die	Silicon (Si)	7440-21-3		0.367	mg	963255	10794
				supplier	metallization	Aluminium (AI)	7429-90-5		0.001	mg	2625	29
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	2625	29
				supplier	Passivation	Silicon Oxide	7631-86-9		0.012	mg	31496	353
Lead-frame	M-011 Other inorganic materials	14.517	mg	supplier	alloy	Copper (Cu)	7440-50-8		14.147	mg	974500	416079
				supplier	alloy	Iron (Fe)	7439-89-6		0.341	mg	23460	10017
				supplier	alloy	Zinc (Zn)	7440-66-6		0.017	mg	1200	512
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.012	mg	840	359
Lead-frame Coating	M-011 Other inorganic materials	0.062	mg	supplier	coating	Nickel (Ni)	7440-02-0		0.057	mg	914840	1675
				supplier	coating	Palladium (Pd)	7440-05-3		0.002	mg	29660	54
				supplier	coating	Gold (Au)	7440-57-5		0.002	mg	27750	51
				supplier	coating	Silver (Ag)	7440-22-4		0.002	mg	27750	51
Die Attach	M-011 Other inorganic materials	0.049	mg	supplier	glue or soft solder	Poly(tetrafluoroethylene)	9002-84-0		0.025	mg	510000	735
				supplier	glue or soft solder	Synthetic resin	Proprietary		0.010	mg	200000	288
				supplier	glue or soft solder	Bismaleimide resin	Proprietary		0.010	mg	200000	288
				supplier	glue or soft solder	Titanium dioxide	13463-67-7		0.002	mg	40000	58
				supplier	glue or soft solder	Silica, amorphous	7631-86-9		0.002	mg	50000	72
Wires	M-011 Other inorganic materials	0.019	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.019	mg	1000000	546
Encapsulation	M-011 Other inorganic materials	18.972	mg	supplier	Moulding Compound	Epoxy Resin	Proprietary		1.434	mg	75595	42183
				supplier	Moulding Compound	Phenol Resin	Proprietary		0.956	mg	50397	28122
				supplier	Moulding Compound	Silica, vitreous	60676-86-0		16.410	mg	864936	482644
				supplier	Moulding Compound	Carbon black	1333-86-4		0.096	mg	5040	2812
				supplier	Moulding Compound	Bismuth (Bi)	7440-69-9		0.076	mg	4032	2250