



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 *	21-11-2023
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	
<p>While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.</p>	
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
M24M02E-FDW6TP	PT6P*24M20VA	A	3068	21-11-2023
	Amount	UoM	Unit type	ST ECOPACK Grade
	34.00	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	
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	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-14th June 2023				
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	PT6P*24M20VA				7000000.0	999982.5
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	1.550	mg	supplier	die	Silicon (Si)	7440-21-3		1.467	mg	946452	43147
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	4516	206
				supplier	metallization	Copper (Cu)	7440-50-8		0.024	mg	15484	706
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.003	mg	1935	88
				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	2581	118
				supplier	Passivation	Silicon Nitride	12033-89-5		0.006	mg	3871	176
				supplier	Passivation	Silicon Oxide	7631-86-9		0.039	mg	25161	1147
Lead-frame	M-011 Other inorganic materials	14.517	mg	supplier	alloy	Copper(Cu)	7440-50-8		13.965	mg	962000	410742
				supplier	alloy	Nickel(Ni)	7440-02-0		0.436	mg	30000	12809
				supplier	alloy	Silicium (Si)	7440-21-3		0.094	mg	6500	2775
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.022	mg	1500	640
Lead-frame Coating	M-011 Other inorganic materials	0.060	mg	supplier	coating	Nickel (Ni)	7440-02-0		0.056	mg	940951	1658
				supplier	coating	Palladium (Pd)	7440-05-3		0.002	mg	30507	54
				supplier	coating	Gold (Au)	7440-57-5		0.002	mg	28542	50
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	Gold (Au)	7440-57-5		0.019	mg	1000000	546
Encapsulation	M-011 Other inorganic materials	17.804	mg	supplier	Moulding Compound	Epoxy Resin	Proprietary		1.434	mg	80554	42183
				supplier	Moulding Compound	Phenol Resin	Proprietary		0.956	mg	53703	28122
				supplier	Moulding Compound	Silica, vitreous	60676-86-0		15.242	mg	856077	448294
				supplier	Moulding Compound	Carbon black	1333-86-4		0.096	mg	5370	2812
				supplier	Moulding Compound	Bismuth (Bi)	7440-69-9		0.076	mg	4296	2250
Finishing	M-011 Other inorganic materials	0.001	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.001	mg	940951	17
				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	30507	1
				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	28542	1