



## Materials Declaration Form


<b>IPC</b>	<b>1752</b>	<b>Version</b>	<b>2</b>
<b>Form Type *</b>	<b>Distribute</b>		
<b>Sectionals *</b>	<b>Material Info</b> <b>Manufacturing Info</b>	<b>Subsectionals *</b>	<b>A-D</b>

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>23-04-2020</b>
<b>Company Unique ID</b>	<b>NL 008751171B01</b>		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	<b>MDG MD CHAMPION</b>	<b>Representative Title</b>	<b>MDG MD CHAMPION</b>
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

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	
<b>Supplier Acceptance *</b>	<b>true</b>
<b>Legal Declaration *</b>	<b>Standard</b>
<b>Legal Statement</b>	<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
M24128-DRMN8TP/K	PGO7*24281KV	A	3068	23-04-2020
	Amount	UoM	Unit type	ST ECOPACK Grade
	80.00	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	
SON	STDJEDEC	8	Gull Wing	
Comment	Package : 07 SO 08 .15 JEDEC 0016023			

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-16th January 2020				
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	PGO7*24281KV				6999999.0	1000002.5
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	0.988	mg	supplier	die	Silicon (Si)	7440-21-3		0.950	mg	961538	11875
				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	4049	50
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1012	12
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1012	12
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	2024	25
Lead-frame	M-011 Other inorganic materials	24.984	mg	supplier	Passivation	Silicon Oxide	7631-86-9		0.030	mg	30364	375
				supplier	alloy	Copper (Cu)	7440-50-8		24.347	mg	974500	304339
				supplier	alloy	Iron (Fe)	7439-89-6		0.586	mg	23460	7327
				supplier	alloy	Zinc (Zn)	7440-66-6		0.030	mg	1200	375
Lead-frame Coating	M-011 Other inorganic materials	0.124	mg	supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.021	mg	840	262
				supplier	coating	Nickel (Ni)	7440-02-0		0.114	mg	916800	1425
				supplier	coating	Palladium (Pd)	7440-05-3		0.007	mg	58700	91
Die Attach	M-011 Other inorganic materials	1.027	mg	supplier	coating	Gold (Au)	7440-57-5		0.003	mg	24500	38
				supplier	glue or soft solder	Silver (Ag)	7440-22-4		0.925	mg	900000	11557
				supplier	glue or soft solder	acrylate	Proprietary		0.062	mg	60000	770
Wires	M-011 Other inorganic materials	0.062	mg	supplier	glue or soft solder	Methacrylate	Proprietary		0.039	mg	38000	488
				supplier	glue or soft solder	acrylate	Proprietary		0.002	mg	2000	26
				supplier	Bonding wire	Gold (Au)	7440-57-5		0.062	mg	1000000	776
Encapsulation	M-011 Other inorganic materials	52.813	mg	supplier	Moulding Compound	Epoxy Resin	Proprietary		3.938	mg	74567	49226
				supplier	Moulding Compound	Phenol Resin	Proprietary		2.625	mg	49711	32818
				supplier	Moulding Compound	Silica, vitreous	60676-86-0		45.777	mg	866774	572213
				supplier	Moulding Compound	Carbon-black	1333-86-4		0.263	mg	4971	3282
Finishing	M-011 Other inorganic materials	0.001	mg	supplier	Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.210	mg	3977	2625
				supplier	connections coating	Nickel (Ni)	7440-02-0		0.001	mg	916800	14
				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	58700	1
				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	24500	0







