




## Materials Declaration Form

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

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	20-02-2019
<b>Company Unique ID</b>	NL 008751171B01		
<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>	MDG MD CHAMPION	<b>Representative Title</b>	MDG MD CHAMPION
<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>		

<b>Uncertainty Statement</b>			
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<b>Legal Statement</b>			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
<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
STR712FR2T6	A35W*401ZZZX	A	1054	20-02-2019
	Amount	UoM	Unit type	ST ECOPACK Grade
	350.00	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
3	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	
QFP	10x10x1.4	64	L Bend	
Comment	Package : 5W LQFP 64 10x10x1.4 1 0051434			

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-27th June 2018				
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 :						Mfr Item Name	A35W*401ZZX				7000000.0	999997.0
note : Substance present with less 0.001mg will not be declared in this document												
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	24.494	mg	supplier	die	Silicon (Si)	7440-21-3		23.829	mg	972850	68083
				supplier	metallization	Aluminium (Al)	7429-90-5		0.096	mg	3919	274
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	82	6
				supplier	metallization	Titanium (Ti)	7440-32-6		0.025	mg	1021	71
				supplier	metallization	Tungsten (W)	7440-33-7		0.018	mg	735	51
				supplier	Passivation	Silicon Nitride	12033-89-5		0.054	mg	2205	154
Lead-frame	M-011 Other inorganic materials	81.308	mg	supplier	alloy	Copper (Cu)	7440-50-8		78.218	mg	962000	223480
				supplier	alloy	Nickel (Ni)	7440-02-0		2.439	mg	30000	6969
				supplier	alloy	Silicium (Si)	7440-21-3		0.528	mg	6500	1510
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.122	mg	1500	348
Lead-frame Coating	M-011 Other inorganic materials	0.660	mg	supplier	coating	Nickel (Ni)	7440-02-0		0.605	mg	916800	1730
				supplier	coating	Palladium (Pd)	7440-05-3		0.039	mg	58700	111
				supplier	coating	Gold (Au)	7440-57-5		0.016	mg	24500	46
Die Attach	M-011 Other inorganic materials	6.112	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		4.706	mg	770000	13445
				supplier	glue or soft solder	epoxy resin	29690-82-2		1.393	mg	228000	3981
				supplier	glue or soft solder	Dibutyl Phthalate	84-74-2		0.012	mg	2000	35
Wires	M-011 Other inorganic materials	1.438	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		1.438	mg	1000000	4110
Encapsulation	M-011 Other inorganic materials	235.982	mg	supplier	Moulding Compound	Silicon Dioxide	60676-86-0		235.168	mg	996554	671909
				supplier	Moulding Compound	Carbon Black	1333-86-4		0.813	mg	3446	2323
Finishing	M-011 Other inorganic materials	0.007	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.006	mg	916800	17
				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