



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-07-03
Company Unique ID	NL 008751171801		
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 *	Floriana SAN BIAGIO	Representative Title	AMS 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
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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 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.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
	KMQ7*MT19AEX	A	Z7GA	2018-07-03
Amount	UoM	Unit type	ST ECOPACK Grade	
150	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	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	9.85x3.9x1.55	16	gull wing	
Comment	Q7 SO 16 .15 TO JEDEC MS-012; MDF valid for VIPER37HDTR			

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	KMQ7*MT19AEX				5000000.0	999978.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
dies	M-011 Other inorganic materials	6.046	mg	supplier	die	Silicon (Si)	7440-21-3		5.792	mg	957989	38613
				supplier	metallization	Aluminium (Al)	7429-90-5		0.104	mg	17201	693
				supplier	metallization	Tungsten (W)	7440-33-7		0.008	mg	1323	53
				supplier	Passivation	Silicon Nitride	12033-89-5		0.025	mg	4135	167
				supplier	Passivation	Silicon Oxide	7631-86-9		0.065	mg	10751	433
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	331	13
				supplier	back side metallization	Gold (Au)	7440-57-5		0.007	mg	1158	47
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.033	mg	5458	220
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.010	mg	1654	67
				Leadframe	M-004 Copper and its alloys	58.239	mg	supplier	Alloy	Copper (Cu)	7440-50-8	
supplier	Alloy	Iron (Fe)	7439-89-6						1.193	mg	20485	7953
supplier	Alloy	Zinc (Zn)	7440-66-6						0.028	mg	481	187
supplier	Alloy	Phosphorus (P)	7723-14-0						0.008	mg	137	53
supplier	coating	Nickel (Ni)	7440-02-0						1.807	mg	31027	12047
supplier	coating	Gold (Au)	7440-57-5						0.056	mg	962	373
supplier	coating	Palladium (Pd)	7440-05-3						0.002	mg	34	13
supplier	glue	Silver (Ag)	7440-22-4						0.559	mg	816058	3727
supplier	glue	[Octahydro-4,7-methano-1 H-indenediyl]bis(m	42594-17-2						0.041	mg	59854	273
Die attach	M-015 Other organic materials	0.685	mg					supplier	glue	exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl met	7534-94-3	
				supplier	glue	Isobornyl acrylate	5888-33-5		0.041	mg	59854	273
				supplier	glue	2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane	3388-04-3		0.003	mg	4380	20
				supplier	wire	Gold (Au)	7440-57-5		0.614	mg	100000	4093
Encapsulation	M-015 Other organic materials	84.413	mg	supplier	Molding compound	Epoxy resin A	29690-82-2		4.221	mg	50004	28140
				supplier	Molding compound	Epoxy resin B	Trade secret		1.688	mg	19997	11253
				supplier	Molding compound	Phenol resin	25068-38-6		1.435	mg	17000	9567
				supplier	Molding compound	Carbon black	1333-86-4		0.253	mg	2997	1687
				supplier	Molding compound	Silica fused	60676-86-0		76.816	mg	910002	512107